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SYNOPSIS

**ECONOMIC ASPECTS OF THE UK HOUSING
AND HOUSING FINANCE MARKETS**

by

JOSEPH G NELLIS

Submission for PhD under Regulation 14.9

1991

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DECLARATIONS

1. None of the publications contained in this submission for the award of PhD under Regulation 14.9 has been presented for any other academic or professional distinction.
2. Eleven publications, presented in two volumes, are contained in this submission. In each case these have been written jointly with another author. In all publications my contribution has been as an equal co-author at all stages: from the original identification of research projects, the development and application of research methodologies, through to the empirical analyses, interpretation and writing up of results.

ACKNOWLEDGEMENTS

I wish to record my appreciation for the advice and support given to me while preparing this synopsis by my colleague and supervisor, Dr Frank Fishwick. His attention to detail has been of great value in helping me to clarify the presentation and meaning of many aspects of the work reported here. I am also deeply indebted to my close friend and co-author, Professor Michael Fleming of Loughborough University who has been an inspiration to me in my research since I first met him in 1979. Finally, I am forever grateful for the understanding and support of my wife, Helen. I hope she feels that the sacrifices made over the years have not been in vain.

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1. HOUSING MARKET RESEARCH - AN OVERVIEW

1.1 The Significance of Housing in the National Economy

Since the early 1970s there has been a considerable growth in interest amongst academics in housing market research. This growth has reflected the extent to which developments in the housing market have increasingly impacted upon almost every other sector of the economy and on government economic and social policies in general. In the UK, owner-occupation has grown steadily in recent years, currently accounting for around two-thirds of housing stock tenure. At the same time, house prices, on average, have increased significantly in real terms as a result of three major house-price booms (in 1972/73, 1978/79 and 1988). For most people, the purchase of a house represents the single, largest item of expenditure they will make in their lives, while at death, the value of housing is likely to represent a growing proportion of the value of inheritances accruing to the next generation.

The economic significance of housing stems from the fact that the value of home-ownership now accounts for around half the total value of personal sector wealth. Not surprisingly, therefore, changes in property values impact upon a wide range of other economic sectors and variables as personal sector wealth rises and falls in tandem. A number of recent research studies have explored the extent and nature of the interrelationships between the housing market and other markets. For example, Bover *et al* (1989) argue that the growth of house prices in real terms since the early 1970s has put greater pressure on wage demands as workers have sought to become home-owners or as they have attempted to move from relatively low-priced regions to higher-priced regions. At the same time, regional house price/earnings differentials have also exaggerated the so-called "North-South" divide in the UK

which, apart from the implications for wage bargaining, has important implications for labour mobility, unemployment, job vacancies and, ultimately, for the efficiency of the national labour force.

Growth in real personal sector wealth, directly attributable to property values, has also had significant knock-on effects for household consumption and savings decisions. Consumption theory postulates that as wealth increases, consumer spending increases and the savings ratio falls - hence the view that the recent house-price boom of 1988 fuelled a boom in consumer spending via its effect on personal wealth (see *Housing Finance*, February (1991), pp 14-19 for further discussion of this phenomenon). The significance of the relationship between housing and consumer behaviour has led the Bank of England in recent years to express concern about the "structural change in housing finance". In a speech on 15 September, 1986, the Governor of the Bank expressed the view that "some mortgage lending in the UK could give rise to inflationary pressures by accommodating house price increases. Moreover, the leakage of lending secured on a first mortgage, but used for other purposes, may well play a significant role in fuelling the expansion of consumer spending" (*Bank of England Quarterly Bulletin*, December 1986). The problem of "equity withdrawal" from the housing market is seen by the Bank of England as a major source of hard-to-control credit expansion (see Davis and Saville (1982) and Drayson (1985) for further discussion on this). The main ways in which equity withdrawal can occur are the following:

- (i) unmortgaged or little mortgaged privately-owned properties can be sold to persons buying with a mortgage;

- (ii) cash deposits by first-time buyers may fall relative to the total value of the mortgage advanced;
- (iii) the houses of deceased individuals can be sold to those buying with the aid of mortgage finance (this appears to be a major factor in explaining long-term trends in equity withdrawal);
- (iv) current owner-occupiers may increase their debt holdings on existing properties - the extent to which this additional debt is not used for home improvement purposes represents equity withdrawal;
- (v) owner-occupiers moving house may increase their mortgages by more than the change in the value of the housing, or they may trade down to a cheaper house (this is most likely in the case of people nearing retirement).

The scale of equity withdrawal from the UK housing market since the mid-1980s is illustrated in Table 1.1 below, showing that it increased from £7.2 billion in 1985 to £16.8 billion in 1988 before falling back to £8.6 billion in 1990. The peak in 1988 may be attributed to the scale of the house price boom in that year (of around 34% at the national level according to house price reports from the Halifax Building Society). As a consequence, one may argue that since 1988 interest rate policy has been directed as much at attempts by the government to influence house prices as well as to dampen general consumer demand and credit - and, ultimately, the general rate of retail price inflation. This is not a new development - monetary policy (in terms of both the cost and availability of credit) has followed events in the housing market on a number of occasions during the 1970s and 1980s, especially in

**TABLE 1.1 EQUITY WITHDRAWAL FROM THE HOUSING MARKET:
1985-1990 (£ Billion)**

Year	1985	1986	1987	1988	1989	1990
Increase in mortgage balances	<u>19.1</u>	<u>27.0</u>	<u>29.0</u>	<u>40.3</u>	<u>33.7</u>	<u>31.0</u>
<i>less</i> number of private houses completed multiplied by average price of new house = value of new private houses	5.7	7.5	9.1	12.2	13.1	10.1
<i>plus</i> value of council houses transferred to owner-occupation	1.0	1.2	1.6	2.7	3.2	2.0
<i>plus</i> value of improvement less depreciation	5.2	6.4	7.3	8.6	9.6	10.3
	<u>11.9</u>	<u>15.1</u>	<u>18.0</u>	<u>23.5</u>	<u>25.9</u>	<u>22.4</u>
Value of Equity Withdrawal	7.2	11.9	11.0	16.8	7.8	8.6

* Table reproduced from *Housing Finance*, No. 9 February 1991, p. 15.

Sources: Department of the Environment 5% sample survey of building society mortgage completions, *Housing and Construction Statistics* (various issues), CSO, *Blue Book 1990 Edition, United Kingdom National Accounts*, Table 4.7.

the wake of the periods of rapid house price growth. The extent to which the government has imposed a monetary squeeze to dampen down the housing market has therefore had consequences for the national economy, both directly on domestic consumer and investment spending and indirectly via the impact on exchange rates and the balance of payments.

UK taxation policy has also been increasingly concerned with housing in recent years. On this front, there are a number of major debates currently taking place. These are concerned, for example, with the extent to which mortgage tax relief should be retained as a legitimate form of government subsidy, the impact of the introduction of the Community Charge (in 1989 in Scotland and in 1990 in England and Wales) in place of the rate system on future house price inflation, whether or not private sector house-building should remain exempt from value-added tax in the UK and whether or not capital gains tax should be extended to owner-occupied housing. These are only some of the major areas for discussion at present (many of which result from the legislation underlying the development of the Single Market in Europe) but they serve to highlight the importance of the housing market in terms of the wide-ranging effects of government taxation policy.

Given the significance of the housing market as discussed above, it is not surprising that the measurement and determination of house prices has been of particular interest to econometric research. There are a number of reasons for this, quite apart from the potential impact of house prices on the rest of the economy. First, house prices are characterised by a degree of short-run variability which is rarely matched by prices of other durable consumer goods. This arises from the fact that changes in housing supply in any time period as a percentage of the total stock are relatively small and take considerable time to materialise while short-run changes

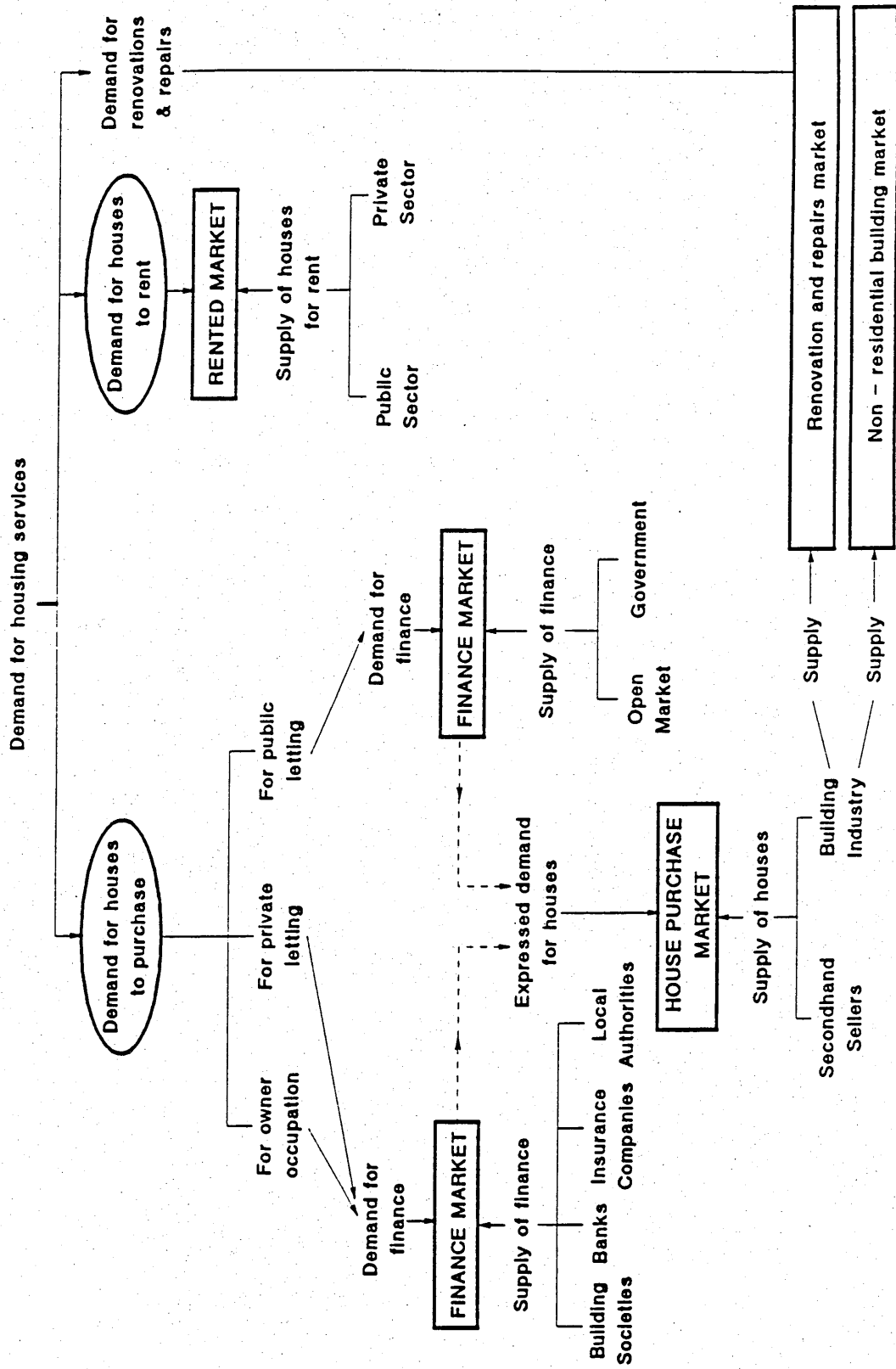
in housing demand can be substantial. The influence of demand factors is, however, not confined to the short-run. House prices are also subject to underlying long-run factors which include, for example, growth in real incomes, demographic changes as well as the long-term availability of land (as opposed to housing supply in the short-term).

The complexity of housing market relationships has meant that a growing body of literature is emerging in this area. The research studies which make up this submission for the award of PhD represent a contribution to this literature by focusing on three interrelated aspects (described more fully below in Section 1.3). Before discussing these contributions, however, it will be useful to take a global view of the demand and supply side interactions within the housing and housing finance markets in order to place the current studies within a conceptual framework.

1.2 Modelling the Housing and Housing Finance Markets

Figure 1.1, which is drawn largely from Charles (1977), shows a schematic summary of the interactions within the housing and housing finance markets. It will be seen that the starting point for an analysis of the housing market in general is the demand for *housing services*. Houses are assets which are demanded for the flow of services they produce over their lifetime in terms of shelter and comfort, independence and privacy, status, security and investment (in the case of house purchase). Therefore, the demands for houses to purchase or to rent are derived demands. It will also be seen that two sub-markets exist: the market for house purchase and the market for rented accommodation. The house purchase market may be further sub-divided according to whether it is to be used for purposes of owner-occupation, private letting or for public letting. It should be noted that all

FIGURE 1.1 A SCHEMATIC OVERVIEW OF THE HOUSING MARKET



of the research studies included in this submission focus exclusively on the *owner-occupied* private sector of the market (in terms of house price measurement and determination and the availability of mortgage finance).

The demand for owner-occupied housing in the UK is, to a large extent, dependent on the availability of mortgage finance (cash purchases representing only an insignificant proportion of all house purchases in the private sector). Financial institutions thus have a major role to play in satisfying this demand. As shown in Figure 1.1, the finance market for house purchase in the UK is made up of four key groups of players: building societies, banks, insurance companies and local authorities. The market shares of these institutions have changed sharply in the last decade following the extensive deregulation of the financial services sector in general and the increased competitive environment that has arisen (see Section 4.3 for further discussion of this changing market structure). However, as shown in Table 1.2 below, building societies have, historically, dominated the housing market, accounting for between 94% (in 1977) and 50% (in 1987) of net mortgage advances for house purchase. This historical dominance is also highlighted by the magnitude of mortgage balances outstanding (ie, the stock of existing mortgages as opposed to the flow of new advances). Figure 1.2 shows the distribution of UK mortgage balances outstanding at the end of 1989. By the end of 1989, the building society sector accounted for almost 60% of the outstanding mortgage stock in the UK (which totalled over £258 billion). This compares with the position of the banking (monetary) sector which accounted for roughly 31.5% (the Abbey National, formerly the second largest society, is now included in this banking sector total. This has had the effect of almost doubling the proportion of the total mortgage stock outstanding accounted for by the banking sector after 1989Q3).

TABLE 1.2 LOANS FOR HOUSE PURCHASE*

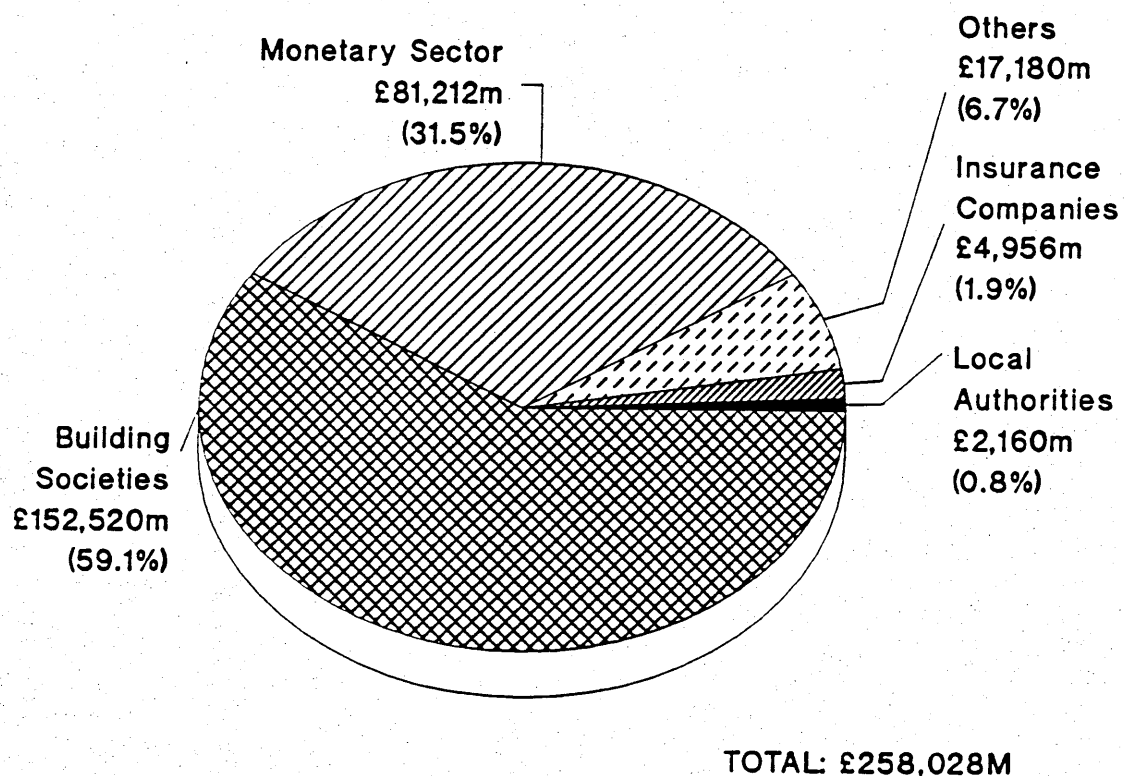
Period	Net Mortgage Advances During Period (£m)					Total
	Building Societies	Local Authorities	Insurance Companies (1)	Monetary Sector (2)	Others (3)	
1973	1999	355	183	310	46	2893
1974	1490	557	189	90	113	2439
1975	2768	619	150	60	133	3730
1976	3618	67	103	80	60	3928
1977	4100	4	119	121	18	4362
1978	5115	143	73	275	17	5437
1979	5271	294	227	597	72	6461
1980	5722	454	264	593	300	7333
1981	6331	269	88	2448	353	9489
1982	8147	555	6	5078	355	14141
1983	10928	-306	126	3531	246	14525
1984	14572	-195	250	2043	402	17072
1985	14711	-502	200	4223	484	19116
1986	19541	-506	435	5196	2460	27016
1987	14588	-433	769	10115	4001	29032
1988	23677	-329	926	10903	5152	40329
1989	24041	-203	40	7187	2675	33740

Notes:

- (1) includes pension funds
- (2) includes banks and trustee savings banks (as well as Abbey National from 1989Q3 which, previously, had been included in building society sector)
- (3) miscellaneous financial institutions and other public sector

* Source: *Financial Statistics*, Table 9.4 (latest issue)

FIGURE 1.2 DISTRIBUTION OF UK MORTGAGE BALANCES OUTSTANDING AT THE END OF 1989*



*See notes to Table 1.1

Source: *Financial Statistics*, Table 9.4 (latest issue)

The discussion above serves to highlight the complex web of relationships that confront modelling of the housing and housing finance markets. It is perhaps to be expected that only a few researchers have attempted to produce comprehensive, econometric studies since the early 1970s. The most notable of these have been by Whitehead (1974), Hadjimatheou (1976) and Mayes (1979). In more recent years, attention has generally been focused on the large-scale national models of the major forecasting organisations (such as the Treasury, The London Business School, The National Institute for Economic and Social Research and The Oxford Economic Forecasting Centre), all of which incorporate a full analysis of the housing sector and its interactions with the rest of the national economy. The studies contained in this submission represent only a sub-section of the interrelationships illustrated in Figure 1.1 but they focus on perhaps some of the most controversial and sensitive issues which stem from these relationships - namely, the measurement and determination of house prices and the role of building societies in the housing finance market.

1.3 The Research Work Submitted for the Award of PhD

As discussed in Section 1.1, the housing market has aroused considerable interest amongst academics in recent years stemming from its impact on the personal sector, the wider economy and government economic policy in general. This submission for the award of PhD focuses on three interrelated aspects of the market dealing with (a) the measurement and interpretation of house prices, (b) the determination of house price inflation and (c) the role of building societies in the housing finance market. A brief summary of the research carried out under each of these headings is presented below, while a full account of each theme is given in Sections 2 to 4 of this synopsis.

(a) *The Measurement and Interpretation of House Prices*

The reporting of house prices month by month in the national press and official and unofficial economic reports seems to attract almost as much attention as the regular publication of the Retail Prices Index (RPI). However, considerable confusion is caused by the fact that, very often, the evidence provided by the various reports is in sharp conflict. This raises important questions about the interpretation, reliability and usefulness of published house price measures (for full analyses see Fleming and Nellis 1981a, 1985a and 1987). These questions are addressed in Section 2 below which also reports on the development of two new UK house price measurement systems, based on the so-called "hedonic" approach. These employ multiple regression analysis to produce estimates of house price changes which make allowance for variations in the underlying mix of houses traded in the market. The research studies which set out the technical bases of these systems are presented in Fleming and Nellis (1985b, 1988, 1989 and 1990). These studies represent extensions of earlier work in this field mainly by American and British researchers in the late 1960s and early 1970s.

(b) *The Determination of House Price Inflation*

While Section 2 specifically deals with the fundamental problem of accurate measurement at a point in time, Section 3 reports on research which seeks to explain variations in house prices over time, both in the short-run and in the long-run. One of the submitted studies involves the determination of house prices at the UK level (Nellis and Longbottom, 1981) which in turn provides

the analytical framework for a second study which examines house price determination in a local market context, namely Northern Ireland (Fleming and Nellis, 1981b). Both of these studies pay particular attention to the role of mortgage finance providers in influencing house price inflation (with the focus on building societies at the UK level and the Housing Executive in the Northern Ireland context). It should be noted that both of these studies pre-date the results of the hedonic studies noted in (a) above. As a consequence the official house-price data employed in these earlier studies are subject to a margin of measurement error (the magnitude of this error is discussed further in Section 2).

(c) *Housing and the Building Society Mortgage Finance Market*

Further aspects of the role of building societies in the UK housing market are presented in Section 4 below based on two studies reported in Nellis and Thom (1983 and 1986). These focus on the modelling of building society lending behaviour during the 1970s in terms of the rationale of rationing mortgage finance in relation to both interest rates and non-interest rate terms. While the studies noted under (b) above focus on the question of causality between mortgage finance and house price inflation, the studies in this section are primarily concerned with the significance and forms of mortgage rationing during the 1970s in clearing the market for mortgage funds.

These three areas of research have been developed over a ten-year period beginning in 1981. Each study reported here has attempted to add to previous knowledge and understanding of the operation of the UK housing market while at the same time providing a platform for future research and debate into this sector of

the economy. The purpose of this synopsis is to put the submission of research into context and, in particular:

- (i) to clarify the purpose of each study;
- (ii) to provide a point of departure for the work and the state of knowledge at the time the research was carried out;
- (iii) to summarise the underlying methodology and conclusions of each study, and
- (iv) to evaluate the advances made in the light of subsequent events and research.

Eleven publications in total are included in the submission. These have been collated, for convenience, into two volumes, 1 and 2, presented as an appendix to this synopsis.

2. THE MEASUREMENT AND INTERPRETATION OF UK HOUSE PRICES

2.1 The Problems of Measuring and Interpreting House Prices

In the context of housing, the problem of measurement of value (ie, price or rental value) is complex and has attracted considerable attention from researchers for many years, especially in the USA and UK. This stems from the fact that a dwelling unit is a composite package of attributes (services) that satisfy various dimensions of household demand. No two houses can be described as being "identical": they may differ according to a wide variety of physical and locational characteristics, both quantitative and qualitative in nature. For example, they may differ by type (bungalow, terraced, flat etc), size (floor area, number of habitable rooms etc), design, amenities, quality of materials and workmanship, state of repair (in the case of non-new houses), the availability and size of a garden, garage(s) etc. At the same time, unlike almost all other consumer goods, every house occupies a fixed location and thus locational attributes must also play an important part in the household demand decision and, consequently, in determining prospective purchasers' valuations. Again, a host of factors may come into play: closeness to towns or town centre, to schools, shops, transport and recreational facilities etc and, not least, the general environmental quality of the immediate neighbourhood and the nature of the wider surrounding area (urban, rural etc).

Until recently only limited attention was paid in the regular reporting of house price statistics to the influence of these physical and locational factors in measuring house prices regionally and nationally: most of the regularly published statistical sources in the UK merely took a *simple* average of the prices of all houses sold in a particular time period and compared these simple averages over time to

derive a house-price inflation series (critical appraisals of all regularly published house price series are given in Fleming and Nellis (1981a, 1985a and 1987)). Simple averages of house prices, however, are not directly comparable unless the houses traded from one period to the next retain the same mix of characteristics over time. Also, information reported by the various suppliers of house price data cannot be compared unless the samples of houses which form the bases of these reports exhibit the same mix of characteristics (see below for further discussion on this aspect of the measurement problem). In other words, comparisons should be made on a "like-for-like" basis.

It is shown in Fleming and Nellis (1987, pp. 2-3) that the mix of properties built and sold from one period to another in the UK has changed markedly since the early 1970s. For example, as shown in Table 2.1 below, over the period covered by the study from 1970 up to 1986 the proportions of different types of dwelling on which building societies have granted mortgage loans have varied significantly: the proportions of terraced houses and flats and maisonettes have increased considerably at the expense of detached and semi-detached houses and bungalows. For new dwellings, however, it is notable that the proportion of detached houses has increased. Likewise, the age distribution of dwellings mortgaged by building societies has also varied over the same period: the proportion of new dwellings has more than halved while among the non-new dwellings those built before 1919 have increased their share of transactions significantly (Table 2.2 refers). Such changes in the mix of these and other housing characteristics affect the reliability and interpretation of simple average prices.

TABLE 2.1 DISTRIBUTION OF DWELLINGS BY TYPE MORTGAGED BY BUILDING SOCIETIES

	Per cent					
Year	Bungalow	Detached	Semi-detached house	Terraced house	Flat or maisonette	Total
New dwellings						
1970	24	24	35	13	4	100
1975	15	35	30	14	6	100
1980	14	41	24	15	5	100
1985	13	31	24	20	12	100
1986	14	37	21	17	11	100
Non-new dwellings						
1970	14	19	40	24	4	100
1975	12	21	36	24	7	100
1980	9	16	33	33	10	100
1985	7	14	31	35	13	100
1986	7	14	31	34	14	100
All dwellings						
1970	17	20	39	21	4	100
1975	12	24	35	22	7	100
1980	9	20	32	30	9	100
1985	8	15	30	34	13	100
1986	8	17	30	32	13	100

Totals may not equal 100 due to rounding

Source: *Housing and Construction Statistics and BSA Bulletin* (DOE Five Per Cent Sample Survey of building society mortgages)

TABLE 2.2: DISTRIBUTION OF DWELLINGS BY AGE, MORTGAGED BY BUILDING SOCIETIES

Year	New dwellings	Built before 1919	Built from 1919 to	Built after 1939	Per cent
					Total
1970	27	17	22	34	100
1975	19	19	19	43	100
1980	15	28	18	39	100
1985	11	28	17	43	100
1986	10	28	17	45	100

Totals may not equal 100 due to rounding

Source: as for Table 2.1

Apart from interpretation problems which arise as a result of differences in the mix of transactions from one time period to the next, problems also emerge in attempting to compare information provided from one house price series with that of another. Problems of comparison arise in this case for other sorts of reasons (in addition to that of mix variability) associated with:

- (i) the coverage of the housing market;
- (ii) measurement timing;
- (iii) the inclusion of transactions at market and non-market prices, and
- (iv) geographical coverage.

A full discussion of the significance of these factors is given in Fleming and Nellis (1987). Only a brief summary of the main issues will, therefore, be given here.

(i) *Coverage of the Housing Market*

Most of the house-price data regularly published in the UK are derived from building society sources, since the societies have traditionally accounted for a major part of total mortgage finance. The question arises, however, with regard to how representative of the total market are data from any one source. Building societies are not the only source of finance: this is also provided by insurance companies, banks and local authorities (as well as by ready money and loans from other sources). From the point of view of measuring and interpreting house prices, the dominance of the market by building societies would be of no consequence if there were no differences between the building society sector of the market and those served by these

other sources of finance. Evidence provided by the Department of the Environment (DOE, 1977), however, suggests that this is not the case; this indicated that during the 1970s house transactions financed by insurance companies and banks tended to be at higher average price levels than building society transactions, and those financed from other sources were generally lower priced. In general, banks and insurance companies tend to concentrate their lending *up-market* (this has especially been the case since the early 1980s when banks were relieved of official lending restrictions following the abolition of the so-called "corset" in 1980) while local authorities traditionally lend down-market. Consequently, divergent movements in the relative importance of financial institutions have had an important influence in distorting the house-price figures based solely on building society sources - first in one direction and then in another as these institutions enter and leave the housing market at different points in time. In recent years the sharp increase in bank mortgage lending in 1981 and 1982 has had an important influence in tending to bias the building society house price figures for those years downwards whilst the partial withdrawal of banks from the market in 1983 and 1984 has tended to exaggerate the size of the price increases suggested by building society data during these years. The bias was to some extent reversed again in 1985 when banks almost regained their 1983 market share. The latest information on the pattern of mortgage lending shows that in 1990Q3, 35 per cent of the mortgages granted by the banking sector were for properties exceeding £70,000 in price while the comparable figure for the building society sector was 28 per cent (for further details see *Housing Finance*, No 9, February 1991, pp. 37 and 40).

It is also important to note that *individual* building societies also differ in their regional coverage of the market and in their lending policies, and in the methods employed to arrive at estimates for house price movements (full technical details corresponding to each data source are given in Fleming and Nellis (1987)). With regard to lending policies, for example, differential mortgage rates offered by some societies at different times may mean that they attract relatively more business at the upper or lower ends of the housing market from time to time, biasing their reported average price levels accordingly and creating the sorts of problems of comparison and interpretation of house price statistics outlined above.

(ii) *Measurement Timing*

Comparison of house-price reports from various organisations and institutions is also frustrated by the fact that information may be obtained at different stages in the mortgage process. For example, some sources base their statistics on information gathered at the mortgage *approval* stage while others base them on information at the mortgage *completion* stage. The gap between these two stages may, on average, be around two to three months, so that data at the approval stage may be said to provide an earlier indication of price movements than completion-stage data. In addition, approval-stage data also record information on a more precisely defined point of time because completion-stage data, by contrast, necessarily refer to prices which will have been agreed at various *earlier* periods of time. On the other hand, all mortgage approvals do not necessarily proceed to completion while some others may proceed at amended prices (though it is thought that the

proportion of mortgage approvals that are cancelled or amended in this way is fairly small).

(iii) *Transactions at Market and Non-Market Prices*

An additional house-price measurement problem stems from the fact that some house purchase transactions take place at "non-market" prices. They are, therefore, not representative and ought to be excluded from all data sources for comparative purposes in order to remove the bias they introduce. The most important category of non-market price sales in recent years has been the sale of council houses to their sitting tenants at heavily discounted prices under the Right-to-Buy (RTB) policy which was introduced in 1980 (by the end of 1990 this policy has resulted in the sale of more than one million council houses to their tenants, sharply reducing the public sector share of the UK housing stock). As these houses are re-sold in later periods at market prices they should, of course, be included in the measurement procedures.

(iv) *Geographical Coverage*

The final general matter worthy of note in relation to the interpretation and comparison of house-price statistics is that the geographical coverage of different sources varies. The main explicit distinction is between the UK, Great Britain or England and Wales. But some sources may be restricted to a smaller area (for example, Wales, Scotland or Northern Ireland, or even local areas) and thus their house-price statistics need to be interpreted accordingly.

The above discussion serves to emphasise the difficulties in comparing and interpreting house-price information reported from different sources. To illustrate these difficulties in practice Table 2.3 below provides a summary comparison of data sources, broken down according to the four characteristics above (ie, market coverage, measurement timing, exclusion of non-market prices and geographic coverage) as well as by whether or not any adjustment has been made to allow for variation in the mix of houses traded from one time period to the next (applied to either average price or index number series). The table is derived from Fleming and Nellis (1987, p9) and applies to information available up to the end of Q1 1987 (since then there have been a number of major developments: for example, as noted earlier, the Abbey National has changed its status from that of a building society to a public limited company, while the Nationwide and Anglia building societies have merged). The table shows at a glance how all the sources compare in terms of the nature of the data they provide. It will be seen that of the seven government sources only two - both provided by the Inland Revenue - give comprehensive coverage of the housing market but, unfortunately, they are limited in other ways. One of them is based not on statistical surveys but on reports of *typical* prices provided by official valuers working in the field. The other is directly based on statistical information but is confined only to England and Wales and to transactions in one week only each year with a considerable time lag before publication. Also, by virtue of covering *all* transactions, it includes some properties which will have been sold at non-market prices. Of the other five government sources, one is confined to Northern Ireland and the other four are confined to particular sources of mortgage finance (building societies, insurance companies or banks).

Among the eleven individual institutional sources shown in Table 2.3, all but two emanate from building societies. One of the two exceptions is the Incorporated

TABLE 2.3 SUMMARY COMPARISON OF HOUSE PRICE DATA SOURCES*

SOURCE	THE DATA BASE				MIX-ADJUSTMENT	
	Market coverage	Measurement timing	Exclusion of non-market	Geographic coverage	Average prices	Index numbers
<i>Government Sources:</i>						
DOE/BSA BS4	Building Socs	A & C	Yes	UK	No	No
DOE 5% Sample	Building Socs	C	No	UK	No	Yes
Banks Survey	Banks	A	No	UK	No	No
DOE/ABI Survey	Insurance Cos	C	No	UK	No	No
Inland Revenue:						
Conveyances	All	C	No	E&W	No	No
Inland Revenue:						
I'OPMR	All	T	Yes	GB	No	No
PPRU (Northern Ireland)	All	C	Yes	NI	No	No
<i>Institutional sources:</i>						
Abbey National BS	Abbey National BS	A	No	UK	Yes	No
Anglia BS	Anglia BS	V	Yes	UK	No	No
Halifax BS	Halifax BS	A	Yes	UK	No	Yes
ISVA	All	T	Yes	E	No	No
Leeds Permanent BS	Leeds Perm BS	A	Yes	UK	Yes	No
NHBC	All	C	Yes	E&W/GB	No	No
Nationwide BS	Nationwide BS	A	Yes	UK	Yes	Yes
Northern Rock BS	Northern Rock BS	A	Yes	N Eng	No	No
Principality BS	Principality BS	C	Yes	W	No	No
Ryden Residential Ltd	Halifax BS	A	Yes	S Cit	No	No
Woolwich Equitable BS	Woolwich Eq BS	T	Yes	UK	No	No

* The analysis in this table refers to the nature of the data as compiled in 1987. Changes that have occurred over time are set out in the technical details for each source given in Fleming and Nellis (1987).

Abbreviations:

DOE = Department of Environment
 VOPMR = Valuation Office Prop Mkt Rep
 ISVA = Inc Soc of Valuers and Auctioneers
 E & W = England and Wales
 NI = Northern Ireland
 T = typical prices (estimated by surveyors and valuers, not based on mortgage data)

BSA = Building Societies Association
 PPRU = Property Prices Research Unit
 A = Mortgage approval stage
 GB = Great Britain
 S = Scotland

ABI = Association of British Insurers
 BS = Building Society
 C = mortgage completion stage
 N Eng = North of England
 S Cit = Scottish Cities

Society of Valuers and Auctioneers (ISVA) which provides data based on valuations of *typical* houses by its members. This source differs from all others in that it is not based on actual transactions. The other exception is the National House-Building Council (NHBC) which provides information about the prices of houses built, or to be built, by housebuilders registered with the Council. It relates solely, therefore, to new houses.

The data compiled by individual building societies are published mainly for publicity purposes. Their main value in comparison with the official DOE surveys of building societies is that they provide data which pre-date official government statistics or supplement them either in providing more timely data or breakdowns not available elsewhere. They are also important in providing alternative mix-adjusted series which are needed for the measurement of price movements.

Since 1989 there has been a major revision of the Nationwide (now Nationwide Anglia) Building Society house-price methodology. This has resulted in a more comprehensive and sophisticated mix-adjustment process based on the "hedonic" approach to measurement referred to earlier (and described fully later in this section). The methodology is essentially the same as that used by the Halifax Building Society though a number of refinements have been added (discussed below).

So far we have been concerned with the problems of measurement and interpretation of house price statistics. We turn now to examine some of the possible solutions that have been put forward. Particular attention is given to the so-called "hedonic" approach to measurement which forms the basis of four of the studies included in this submission (Fleming and Nellis 1985b, 1988, 1989 and 1990).

2.2 Solutions to House Price Measurement Problems

As discussed above, the primary statistical challenge presented by house price information is the need to measure and compare prices (and hence inflation rates) on a "like-for-like" basis in order to allow for changes in the mix of houses traded.

Three possible solutions to this problem may be identified:

- (a) the "weighted-average" approach;
- (b) the "subjective" approach, and
- (c) the "hedonic" approach.

An overview of all three approaches is given below while a detailed discussion of the hedonic approach is given in Section 2.3.

(a) *The "Weighted-Average" Approach to House Price Measurement*

This approach is based on the calculation of average prices for broadly homogeneous groups of houses (for example, by type, by size, by age etc) which may then be combined in fixed proportions into a grand or "weighted" average. This average is then useful for measuring price changes over time because it relates to a standard set of houses and thus is not influenced by changes in the mix. This method was used by the (former) Nationwide Building Society up until the launch of its new house price series in 1989. It is also the method which is currently being used by the DOE following a major adjustment to the official house price series which led to the establishment of a new index of average house prices in 1982.

The significance of mix-adjustment in the official DOE house price statistics has been recognised since the mid-1970s. Since 1975, a house price series making some allowance for mix changes has been used in calculating the owner-occupiers' mortgage and interest component introduced into the RPI in that year. This house price series has been available separately in its own right since October 1982 and has been carried back by the DOE to 1968 Q2. A full account of the methodology and the actual series are given in DOE (1982) and Fleming and Nellis (1987).

The recognition of the need to produce a new official house price series was largely spurred on by the growth of bank lending for house purchase on a large scale in the early 1980s (see Table 1.2 in Section 1.2 for details). Prior to this, most house price statistics regularly published by the DOE were based on the average price of dwellings bought with a building society mortgage. As long as building societies dominated the mortgage market, these series were thought by the DOE to provide a reasonable guide to house price trends generally. However, with the growing market share being taken by banks, houses on which building society mortgages were granted could no longer be taken to reflect the general trend in house prices. The need for mix-adjustment in the official series does not rest on this fact alone. It also stems from the fact that, over time, the mix of houses being mortgaged changes, partly through long-term trends - for example, post-war housing becoming a larger part of the stock - and partly through short-term variations in the housing market (see Tables 2.1 and 2.2 for illustrations).

As noted earlier, the new mix-adjusted house price series produced by the DOE is based on the weighted-average approach to price measurement. Allowance is made for the influences in the mix of three specific house characteristics (type, size and age, where age represents a distinction between new and non-new dwellings)

and changes in the regional distribution of house purchase transactions. The procedural steps involve the generation of a matrix consisting of 156 cells, each representing a cross-classification of these characteristics. For each cell a mean price is calculated in each successive time period. An overall weighted average is then calculated, the weights being the number of transactions in each cell over the period mid-1968 to mid-1974 up to 1982 and since then an annually updated set of weights based on mortgages in the previous three years.

The only data available for the production of the DOE's weighted-average price series are from its own five per cent sample survey of building society mortgage completions, compiled in association with the Building Societies Association. Nevertheless, the production and regular publication of this new series marks a major step forward in the estimation of "true" house price movements. As the time series expands, its use in econometric research will also expand (see the recent applications in Giussani and Hadjimatheou (1990a and 1990b)).

To highlight the significance of mix-adjustment to the official house-price series, it is useful to compare the DOE's weighted indices with its indices based on simple average prices. It will be appreciated that it is only possible to show this for the period 1969 to 1981 (after which publication of the simple average price index series was terminated). Table 2.4 below reports these two series (reproduced from DOE (1982), p 135). It will be seen from the table that for new dwellings over the period 1969 to 1981, the weighted-average price has increased *less* than the simple average price, but for second-hand dwellings the converse is true. The relative movements over the period suggest an "upmarket" shift in new dwelling transactions (ie, towards high-priced properties). This might have been expected from the increase in the size of new dwellings completed over this period. Between 1970 and

TABLE 2.4 COMPARISON OF DOE WEIGHTED AND SIMPLE AVERAGE PRICES: 1969-1981

Indices 1975 = 100

Year	New Dwellings		Secondhand Dwellings	
	Weighted average	Simple average	Weighted average	Simple average
1969	42	39	40	39
1970	44	42	42	42
1971	48	47	48	48
1972	61	58	65	64
1973	83	81	89	86
1974	94	93	95	93
1975	100	100	100	100
1976	110	109	109	108
1977	119	119	117	115
1978	138	141	135	131
1979	171	176	177	168
1980	211	219	214	197
1981	226	234	224	202

Source: *Economic Trends*, No 348, October 1982, p 135.

1980 houses with four or more bedrooms increased from nine per cent of all private sector new dwellings completed to 22 per cent. At the same time, the "downmarket" shift in second-hand housing since the mid-1970s reflects a growing proportion of older terraced housing coming onto the market, possibly as a result of a large volume of sales of private-rented property for owner-occupation. Also the decline in local authority lending over the period (see Table 1.2 for details) probably resulted in building societies increasing their downmarket lending (reinforced later by the advent of banks at the higher end of the market as noted earlier). Between 1970 and 1980 mix changes, according to DOE estimates, accounted for an 8 per cent rise in the simple average price index of new dwellings and a 7 per cent fall in the index for second-hand properties.

The discussion above serves to highlight the significance and importance of mix-adjustment of house prices in order to arrive at more accurate measures of house price trends. However, the weighted-average methodology adopted by the DOE is limited in that it only adjusts for up to four variables (namely, house type, size, age and region) in arriving at an overall weighted-average price index and does not allow for interactions.

(b) The "Subjective" Approach to House Price Measurement

A second solution to the problem of measurement is to obtain opinions of experts working in the housing market as valuers, auctioneers, etc, about "typical" prices and price changes. This method is based, therefore, on subjective estimates but it has the virtue of attempting to deal with the problem of mix variability directly. The Royal Institution of Chartered Surveyors (RICS) and the Incorporated Society of Valuers and Auctioneers (ISVA) publish house price information on this

basis and some building societies make similar assessments. The approach, however, has only limited usefulness in that, by definition, subjective valuations of house characteristics will vary from one valuer to the next and it is difficult to arrive at nationally representative prices or price series which may be used in further statistical analyses.

(c) *The "Hedonic" Approach to House Price Measurement*

A more sophisticated and comprehensive method for dealing with the problem of measuring house prices and house-price inflation rates on a "like-with-like" (ie, mix-adjusted) basis is to employ statistical techniques to estimate the influence that each individual house characteristic, for which information is available, has on price - for example, the price difference made by an extra bedroom, the existence of a garage or garage space etc. These measurements may be referred to as "characteristics-prices". It is then possible to remove the influence of a varying mix of characteristics (and so to measure price changes for a standardised set of houses) by adding up these characteristics-prices in fixed proportions according to the mix of characteristics possessed by houses traded in some base period (the base period can, of course, be changed from time to time in the light of any significant changes in the mix). This method, commonly referred to as the "hedonic" approach, is the basis of the research studies reported in Fleming and Nellis (1985b, 1988, 1989 and 1990). A full account of the methodology underlying this approach and its application to the derivation of mix-adjusted house price indices is given below.

2.3 Methodology of the Hedonic Approach to Measurement

To deal with the problem of measurement in the context of houses Olsen (1969) argues that one can define a unit of "housing service" as a homogeneous commodity which, in an equilibrium market, has a constant price across the market. The total market price (or rent per period of time) is the product of the service units times the price per unit. While this simplifying approach is appealing, it does not provide an analytic capability for meaningful and systematic analysis of housing markets in which the goods in question (ie, the houses) are, in fact, inherently heterogeneous in nature. The reduction to a single measure of all the services provided by a dwelling unit suggests that at long-run equilibrium all houses being sold or rented for the same price produce equal service flows and are, by implication, perfect substitutes among which consumers are indifferent, regardless of compensating differences in dwelling size, physical quality, neighbourhood, and locational characteristics. It is not likely, however, that a household is indifferent between a high-quality, two-room dwelling and a low-quality, five-room dwelling, even if both contain an equal number of conceptually pure, but arbitrarily defined, units of housing service. Similarly, the supply costs associated with producing or altering the amount of space and quality will differ considerably.

In an attempt to account for the inherent heterogeneity of the housing good as described above, many analyses of housing markets since the early 1970s have viewed the housing commodity in *hedonic* or *characteristic* terms as the basis for the development of so-called "mix-adjusted" or "quality-adjusted" prices. The hedonic method involves searching for variables or attributes that account for quality differences among varieties of a product available in any single time period. Its application, therefore, is not confined to housing - indeed, it is appropriate in the

context of the valuation of any multi-attribute commodity. Some of the applications include the development of quality-adjusted prices in the case of cars, computers, power transformers, household appliances to name only a few (for further details, see Triplett (1971, 1975, 1983, 1989), Freeman (1979) and Follain and Jimenez (1985)).

Within the framework of the hedonic methodology two broad approaches to the quality-adjustment of prices have been distinguished. The first stems from the work of researchers such as Fisher and Shell (1971), Hall (1971) and Muellbauer (1974) in which quality change is modelled as a form of "repackaging". This model assumes that any quality improvement is equivalent to getting either more of the "old" good at the same price or the same amount at a lower price. It assumes that each market good (such as housing) has a quality index which is a linear function of physical characteristics. This relationship is the same for all market goods of a general type (say, houses or some grouping of houses) and being a question of tastes, is independent of market variables. Under this assumption, *market* goods of a given type can be aggregated; the aggregate is simply the sum of the quality indices weighted by the number of units of each good purchased. Formally, the utility function can be expressed as:

$$U = U[X_0(\sum_{i=1}^m a_i \cdot x_i), X_1 \dots\dots\dots X_n]$$

where $X_0 ()$ is the category utility function for the group (x_1, \dots, x_m) and $X_1 \dots\dots X_n$, are other market goods or category functions for groups of other market goods. The a_i coefficients are quality indices and may be made a function of the characteristics of the goods in question.

As Muellbauer (1974) points out, "since the a_i are parameters of the utility function, they must be permitted to be stable over the medium term at least, or else made stable functions of utility or lagged consumption or income" (p. 989). It should be noted that this is quite different to the continuous changes from period to period which are implied by the second approach to quality adjustment discussed later (as recommended by Griliches (1971) and which forms the basis of the approach taken in the studies included in this submission).

Under the repackaging approach, if everyone has similar tastes then it is assumed that competition will force relative prices to be approximately equal to relative quantity indices at each point in time. The values of the a_i quality indices can be estimated from an appropriate regression model based on pooled time-series/cross-section data and, theoretically, have the interpretation of market-equivalent "shadow prices" which in the competitive framework of neoclassical economics represent both the marginal cost and the marginal value of the characteristics. These hedonic coefficients, therefore, give a consumer evaluation of characteristics. Over time, as the general level of prices changes, the constant of proportionality can be interpreted as a price index (for full technical detail of how the price index is derived see Muellbauer (1974), p. 989).

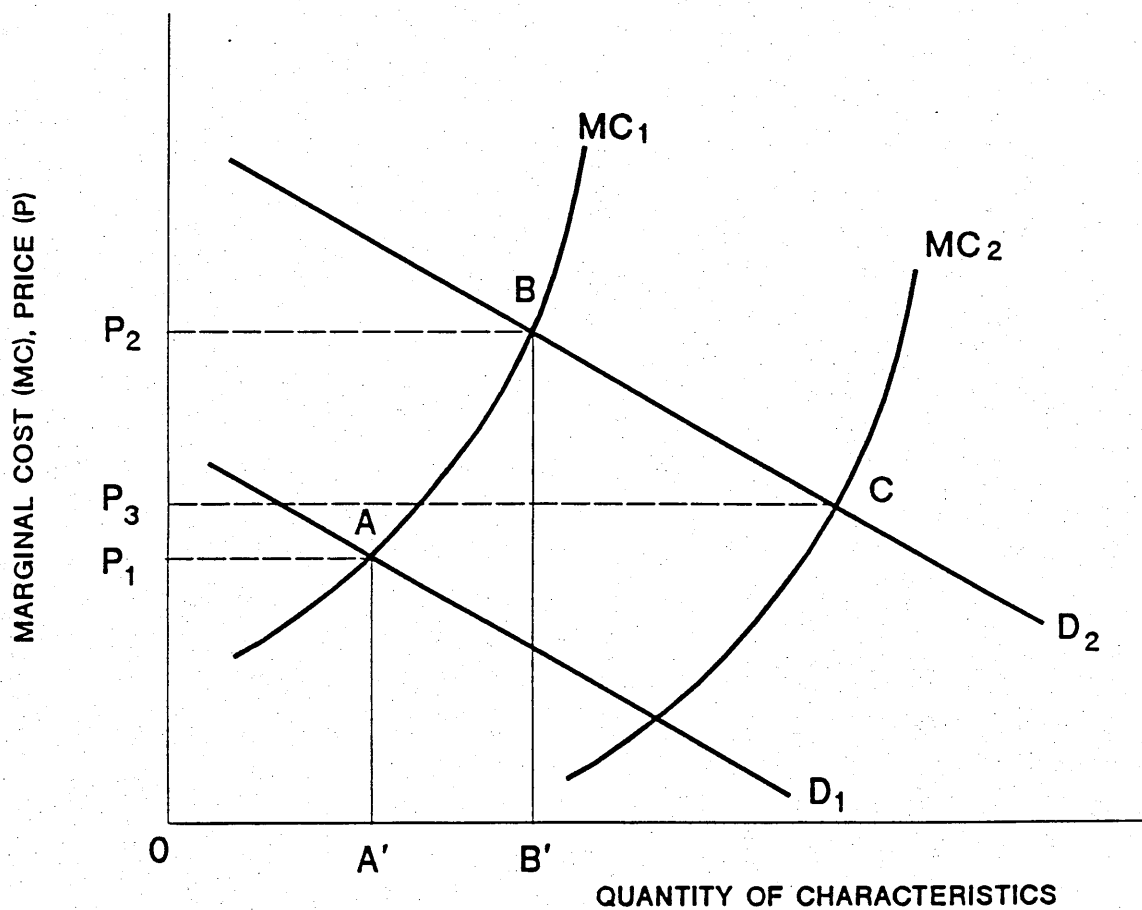
This "repackaging" form of the hedonic approach to measurement, as briefly outlined above, suffers from a number of shortcomings. For example, it is unlikely that the restrictive conditions imposed by the model will be present in the real world. As Muellbauer (1974) argues, in practice the marginal rate of substitution will vary according to different income levels and, ideally, hedonic regressions should be estimated using disaggregated data; ie, there will be different market segments with different shadow prices for characteristics. For example, a millionaire is likely to

place a different value on the availability of a swimming pool in a property than someone of average earnings. A second problem with the "repackaging" model of measurement is caused by the existence of monopoly, since this implies that prices may diverge from costs. Rosen (1974) argues that the a_i coefficients above will represent both the household's marginal rate of substitution and the firm's marginal rates of transformation between varieties.

The second approach to quality-adjusted prices, and the one which has attracted most attention in the academic literature since the early 1970s, is more pragmatic. The work of Griliches (1971) recognises the problems addressed by Rosen (1974) above and does not treat the hedonic regression coefficients as "consumer evaluations". No theoretical restrictions are imposed on consumer behaviour: instead the regression of price against "qualities" is designed to determine the marginal prices of each characteristic. These "shadow prices" are effectively the average market prices of each quality - the aim is to see what price is charged for each characteristic, though it is recognised that this will represent a mixture of demand and supply side influences. A simple diagram will illustrate why these coefficients may not be thought of as "consumer valuations".

Consider Figure 2.1 below which may be interpreted as the supply/demand relationship for a particular characteristic (in the case of housing, let us assume this characteristic is the availability of a garage). As car ownership expands it is likely that there will be an increased demand for properties with garages, shown as a shift in the demand schedule for garages from D_1 to D_2 - and thus the price of garages rises from P_1 to P_2 (ie, reflecting a movement along the existing marginal cost curve for garages, MC_1 , from A to B). If housebuilders respond by building more houses with garages, it is likely that the marginal cost/supply curve will shift to the right

FIGURE 2.1 SUPPLY AND DEMAND FOR CHARACTERISTICS



(MC₂) as shown. Thus, price will fall to P₃ (given by intersection of D₂ and MC₂ at point C) - but this does *not* imply that consumers willing to pay P₂ now value the garage any less at C. Consequently, the individual coefficients cannot reveal the differing values which are placed upon different characteristics. The hedonic-based regressions, therefore, are useful primarily for their information on the overall quality-adjusted (ie, mix-adjusted) price index. In the context of housing, this gives the relative price of each house, after allowing for the average market price of each characteristic that each house possesses. We are not able to identify the demand and supply functions separately in the hedonic regression.

We now turn to the application of the hedonic technique, following the approach of Griliches (1971), in the development of so-called "standardised" (ie, quality or mix-adjusted) indices of house prices for the UK. The objective here is to set out the procedural steps of the hedonic technique. It will be useful in this context, therefore, to present more formally the underlying methodology before describing its application.

The hedonic methodology, as discussed above, approaches price measurement in such a way that goods are valued not for themselves as such but for the set of attributes which they possess (see Lancaster, 1966). Thus, in the case of housing, prices will reflect the market valuation (determined by demand and supply) on the particular set of locational and physical attributes (or characteristics) possessed by each house. The difficulty facing the analyst is that the implicit "price" of each characteristic is not observed because transactions take place in terms of a single total price. In order to remove that part of price variation due to changes in the mix of house characteristics over time, and so to measure the variation caused by inflationary factors, it is necessary to disaggregate prices into their constituents

statistically. This is done using multivariate regression analysis. On this basis it is possible, given data on the prices and the attributes of the houses sold in different time periods, to estimate the change in average price, from one time period to another, on a standardised basis (that is, keeping the mix of housing attributes or characteristics constant). An obvious analogy is with the standard "basket" of goods in the RPI. It is of interest to note that the technique is currently employed by the United States Bureau of the Census in generating a price index of new one-family houses sold each quarter in the USA (see US Department of Commerce, Bureau of the Census, 1981).

Thus, a set of house prices, P_i ($i=1,2,\dots,n$), may be observed in any time period (t) in which each house (i) is sold. Given the supply and demand conditions in the housing market, such houses may be priced differently due to differences in qualitative characteristics (such as the type of property, the availability of certain amenities, the regional location of the property etc), and to differences in quantitative characteristics (such as the age of the property, the number of habitable rooms, garages, bathrooms etc). For each house i , we can write P_i as some function of these various characteristics, denoted X_j , together with a group of unmeasured factors (assumed to be randomly distributed) which are specific to each house but for which data are not available, e_i . In general terms the relationship may be expressed as follows:

$$P_i = b_0 + b_1X_{1i} + b_2X_{2i} + \dots + b_jX_{ji} + e_i$$

where b_1, b_2, \dots, b_j are the regression coefficients corresponding to the qualitative and quantitative variables (X_j). The technique of ordinary least squares allows us to estimate the coefficients b_j pertaining to each of the explanatory variables X_j for any set of houses. These coefficients indicate the relative importance of the variables in explaining the differences in house prices in any one single period t .

Having obtained estimates of the coefficients, b_j , it will be appreciated that the average price for any set or sub-set of houses in any period depends on the number of observations on each characteristic in that period. Therefore, standardisation to allow for the varying mix of characteristics between one time period and another may be accomplished by applying a standard "representative" set of weights corresponding to the frequency with which each characteristic is observed in a chosen reference period. For example, it is common to adopt as a standard the set of characteristics that pertained in some base period (as in Fleming and Nellis (1985b) where the year 1983 is chosen). Alternatively, the weights may be "rolled" forward over time, giving rise to an "average" set of weights (say over a 6-year period as reported in Fleming and Nellis (1988 and 1989)). The index numbers based on the former method are thus of a Laspeyres' type, representing the movement in average prices for houses possessing the same characteristics as those bought in the base period. As time passes it may be necessary to re-base to reflect significant changes in the underlying mix of characteristics. The latter method, in contrast, has the advantage that there is no need to re-base the series since, by rolling weights forward, changes in the underlying (base) mix of characteristics are being incorporated on a continuous basis. This "chained-Paasche" form has the further advantage of direct comparability with the RPI which is calculated with annually updated weights.

Apart from the mechanical aspects of computing the final price index numbers, there are several important technical considerations relating to the nature of the underlying statistical analysis of the hedonic approach to measurement. These are issues of general concern in regression analysis and are particularly important in the context of deriving a hedonic-based house price model. These relate to:

- (i) the choice of functional form for the estimating equation;
- (ii) the degree of correlation between the explanatory variables themselves (ie, the problem of *multicollinearity*), and
- (ii) the possibility of the error term, e_j , exhibiting a non-constant variance (ie, the presence of *heteroskedasticity*).

Detailed analyses of these problems are given in Fleming and Nellis (1985b and 1990) while further analysis of the problem of multicollinearity in this context is given in Wilkinson and Archer (1973). We only comment briefly, therefore, on each of these issues here.

(i) *Functional Form for the Estimating Equation*

The first step in regression analysis is to determine an appropriate functional form for the estimating equation. A potentially serious source of bias in hedonic-price and other regression-based studies may be associated with functional form mis-specification. In principle, many functional forms are possible, but unfortunately there is no theoretical guidance as to which form is the most appropriate to particular models. The solution to this problem, therefore, reduces to an empirical one and is largely a matter of experiment. Box and Cox (1964) have developed a statistical test for the functional form providing the "best fit" based on likelihood ratio tests and the procedure they suggest is adopted here. The results in Fleming and Nellis (1985b, 1988, 1989 and 1990) show that the semi-logarithmic functional form

(with the dependent variable P_i measured in natural logarithms) is to be preferred in the context of the reported studies.

(ii) *The Problem of Multicollinearity*

Multicollinearity refers to the situation in which some or all of the explanatory variables in the regression model are highly correlated and are therefore not independently distributed. The existence of marked interrelationships between explanatory variables can cause problems with respect to the following aspects of regression analysis:

- (a) estimated regression coefficients may not be uniquely determined;
- (b) estimates of the coefficients from sample to sample may fluctuate markedly, and
- (c) less reliability may be placed on the relative importance of variables as indicated by the partial regression coefficients.

The presence of multicollinearity therefore raises doubts as to the correct interpretation of individual measurable attributes. It should be appreciated that multicollinearity is inevitably present to some degree in nearly all multiple regression analyses. It can rarely be eliminated completely and the aim of the researcher is to minimise its influence as much as possible. The classic way of dealing with the problem is to discard variables from the regression analysis. If two variables are very highly correlated, use of either one in the regression (rather than both) can capture

the effect of both. The normal procedure for identifying such interrelated variables is partly by examination of the correlation matrix for the explanatory variables but mainly by a stepwise regression procedure in which the relative explanatory power of each variable is determined in turn. At each step of the procedure the interdependence between each variable being considered as a candidate for inclusion is compared against the group of variables already selected. The measure used in this procedure is referred to as the "tolerance" level of a variable, measured by $(1-R_j^2)$ where R_j^2 is the squared multiple correlation when the j th explanatory variable is considered as the dependent variable and the regression equation between it and the other independent variables is calculated. If the variable has a large R^2 - or equivalently a small tolerance level - when it is predicted from the other independent variables, then the presence of multicollinearity (to a degree) can be assumed. As a consequence, the variance of the estimators will be inflated and computational problems can occur. By setting tolerance limits at an acceptable level, as well as gleaning the evidence from the relevant correlation matrix, it is therefore possible to identify the most significant interrelationships between variables. Three alternative variable-selection procedures may be employed: "forward selection", "backward elimination" and "stepwise selection". These are described below:

(a) *Forward Selection*

In forward selection, the variables are entered in turn. The first variable entered into the equation is the one with the largest positive or negative correlation with the dependent variable. The F-test for the hypothesis that the coefficient of the entered variable is zero is

then calculated. In order to judge whether this variable (and each succeeding variable) is important, a criterion must be established specifying the actual value of the F-statistic that a variable must achieve in order to enter the model - called *F-to-enter*. If the first variable selected for entry meets the criterion for inclusion, forward selection continues. Once one variable is entered, the statistics for variables not in the equation are used to select the next one (and so on).

(b) *Backward Elimination*

In backward elimination, *all* variables are initially entered into the regression equation. In contrast to the above procedure which allows the researcher to specify "entry criteria", backward elimination permits "removal criteria" to be employed, based as before on the F-test. Variables having F-values less than a specified *F-to-remove* are therefore sequentially rejected from the regression.

(c) *Stepwise Selection*

Stepwise selection of independent variables is probably the most commonly used procedure in regression analysis; it is really a combination of the backward and forward procedures. The first variable is selected in the same manner as in forward selection. If the variable fails to meet entry requirements (*F-to-enter* value), the procedure terminates with no independent variables in the equation. If it passes the criterion, the second variable is selected based on the

highest partial correlation and, if it also passes entry criteria, it enters the equation. From this point, stepwise selection differs from forward selection since the F-value of the first variable is examined to see whether it is small enough for the variable to be removed according to the removal criterion (F-to-remove) as in backward elimination. The next step is to examine the variables not in the equation for entry, followed by examination of the variables already in the equation for removal. Variables are removed until none remain that meet the removal criterion. To prevent the same variable from being repeatedly entered and removed, F-to-enter must be greater than F-to-remove. Variable selection terminates when no more variables meet entry and removal criteria.

A detailed discussion of the computational procedures described above is given in Nie *et al* (1975), pp 345-347 and Norusis (1982), pp 118-121. Each procedure will not necessarily give identical results. In the submitted studies, however, all three methods were employed and they were consistent in leading to particular conclusions concerning the variables that should be included in the final regression specifications.

(iii) *The Presence of Heteroskedasticity*

In regression analysis, the error term, e_j , is assumed to be normally and independently distributed with a mean of 0 and a constant variance of σ^2 . However, when dealing with data of the kind used in Fleming and Nellis (1985b, 1988, 1989 and 1990), the constant-variance assumption may be violated, and the appropriate model may in fact be one with a so-called

"heteroskedastic" error term (for a detailed discussion of this problem see Kmenta (1971), pp 249-269).

A simple and direct method of detection of the presence of heteroskedasticity is by visual inspection of the residuals (ie, deviations of observed prices from those estimated from the regression equation) plotted against the estimated values of the dependent variable or against the independent variables. As most of the latter in the submitted studies are dichotomous, attention is focused on the former. If the spread of the residuals increases or decreases with estimated values, it may be taken as an indicator of heteroskedasticity in the data set. Based on this procedure it is concluded in the relevant studies contained in this submission that the constant-variance assumption appears not to be seriously violated. It should be appreciated, however, that even if heteroskedasticity had been found to exist, it would only increase the confidence intervals of the final house price indexes; it would not affect their unbiasedness (see Kmenta (1971), p 250-254).

2.4 The Development of Hedonic Price Indexes for the UK

- Results and Conclusions

Fleming and Nellis (1985b, 1988, 1989 and 1990) report on the development of hedonic house price indexes series for the UK. These studies are based on two large-scale research projects carried out on behalf of the two largest UK building societies, the Halifax and Nationwide Anglia. These projects have resulted in the

development of two new house price measurement systems which are regularly reported in their respective publications as

- *The Halifax House Price Index,*
- and
- *The Nationwide Anglia House Price Index*

The Halifax system represents the first full-scale hedonic system to be developed and published on a *regular* basis in the UK. Several other hedonic house price studies have been conducted previously in the UK but these have not been maintained on a regular and national basis. Wilkinson (1976), for example, provides an application of the hedonic approach to produce long-run series of house price indexes for two towns (Halifax and Doncaster). These series are exceptional in that they have been constructed for the period 1885 - 1970 and in addition to extending the hedonic approach to measurement over such a long time-span, the research has provided "the basis for a more thorough analysis of the mechanism of house price determination" (p. 281). These series have not, however, been reported on a regular basis since the study was carried out. Similarly, other analyses have tended to be *ad hoc* localised studies though they have made significant contributions to the methodology debate.

The main distinction between the systems developed for the Halifax and Nationwide Anglia building societies is in terms of their data bases and the weighting of individual regional regression coefficients to arrive at national series of prices. With regard to data, it is particularly important to note that while both systems incorporate information about a wide range of *physical* house characteristics, the Nationwide Anglia system also includes information about the *location* of properties.

The Nationwide Anglia database is therefore the most extensive, covering a range of characteristic and location variables which may be grouped as follows:

House Characteristics:

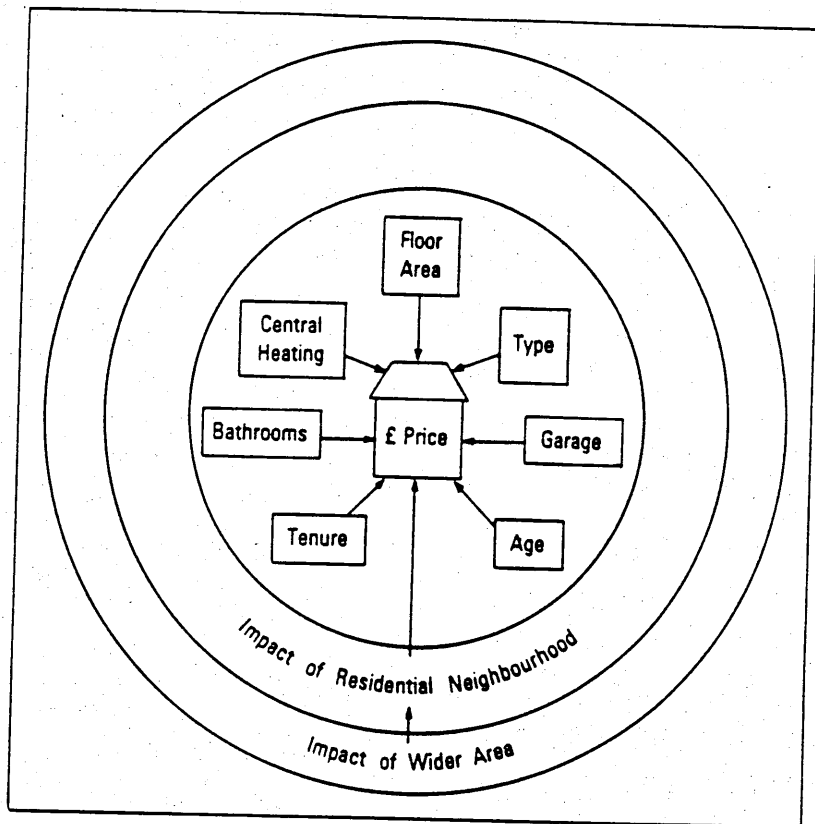
type (whether semi-detached, terraced, etc);
size (floor area);
number of bathrooms;
garage (double, single, none or simply a parking space);
central heating (full, partial or none);
age of property (in years);
tenure (freehold or leasehold).

House Location:

classification according to one of 13 broad regions across the UK;
classification of the type of local residential neighbourhood;
classification of the type of the wider surrounding area (recorded for convenience at the parliamentary constituency level).

The influence of all of these characteristics on house prices may be most readily appreciated with reference to Figure 2.2. It will be seen that the house is positioned at the centre of the diagram with the variables listed above affecting it. We show the most immediate impact in terms of the physical characteristics themselves - the inner circle - and the impact of locational factors at two further levels indicated in the two outer circles of the diagram. Note that the broad regional classification of location is not explicitly illustrated here. This is because in the Halifax and Nationwide Anglia systems the hedonic methodology is applied to each region *separately* - hence Figure 2.2 *implicitly* incorporates this broader regional dimension.

FIGURE 2.2 THE IMPACT OF HOUSE AND LOCATIONAL CHARACTERISTICS ON PRICE



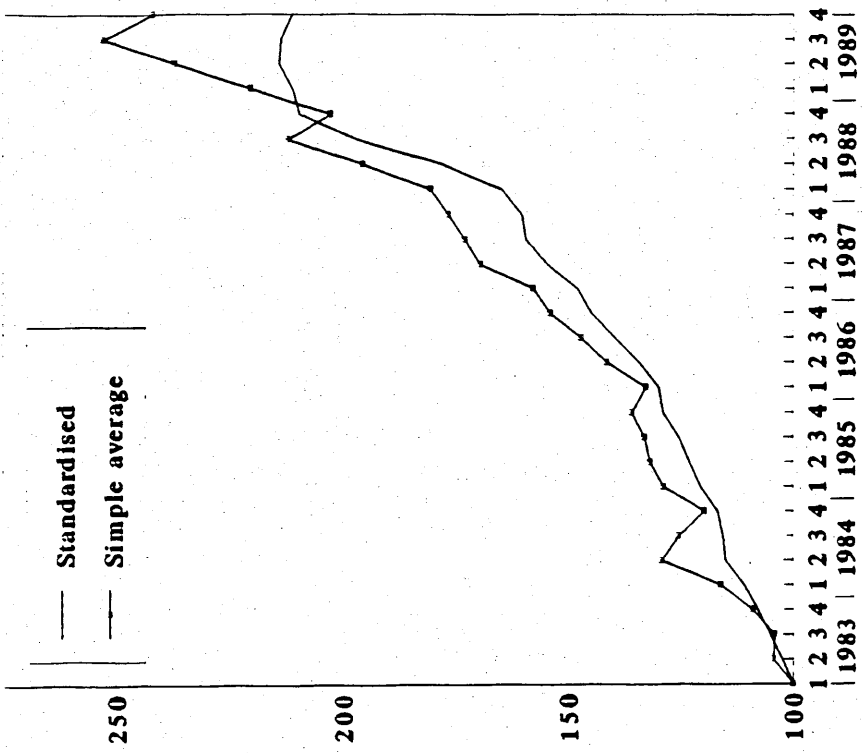
An important feature among the physical characteristics listed above is the incorporation in the Nationwide Anglia system of a variable for house size measured by floor area. No other regularly published house-price series (including that of the Halifax Building Society) employs such a measure but the research reported in Fleming and Nellis (1988 and 1990) confirms that it is by far the most important determinant of cross-sectional differences between the prices of individual houses.

As illustrated in Figure 2.2, the system developed for the Nationwide Anglia Building Society incorporates information about the location of each property at two sub-regional levels. The two location factors reflect both the quality of the environment and the degree of economic prosperity of the area. These factors are incorporated by assigning to each individual property two "indexes", one representing the type of neighbourhood and the other the type of wider surrounding area. Again, no other regularly reported house price series embodies factors of this nature.

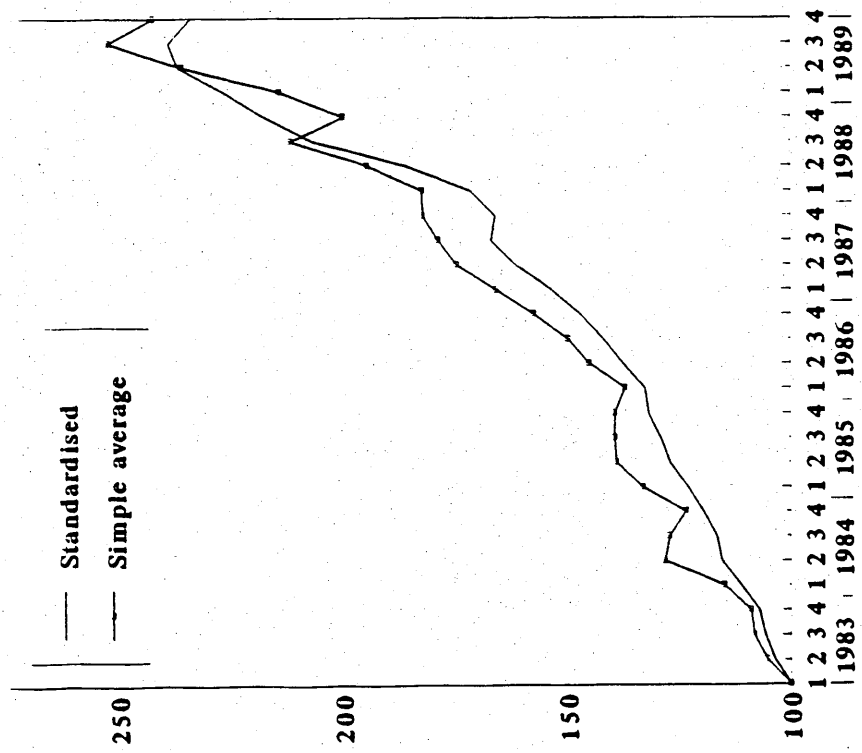
The other major difference between the Halifax and Nationwide Anglia systems is in terms of their derivations of hedonic prices at the UK level (for each house and buyer group). The former is based on estimated regression coefficients for the UK database as a whole while the latter is derived from separate regional regression coefficients which are then used to construct a weighted average index for the UK (the weights being the distribution of building society lending across the UK regions as reported by the official DOE Five Per Cent Sample Survey of Building Society Mortgage Completions). This difference in the derivation of UK series for both systems raises the question of the national representativeness of the underlying data (as discussed in Section 2.1). It is likely, therefore, that in this context the Nationwide Anglia national house price series is to be preferred, given its use of a national weighting system (though this depends on the representativeness of the

official DOE information itself which is based only on the building society sector of the market).

The significance of standardisation is highlighted in Figures 2.3 - 2.5 below. These compare indices of standardised (hedonic-based) and simple average house prices for six house and buyer groups for which the Nationwide Anglia provided mortgages for the period 1983Q1 - 1989Q4 (1983Q1 is the earliest date from which comparisons can be made as the standardised indices have not been estimated and carried back for earlier periods). The groups are: *all houses*, *new houses*, *pre-1945 houses*, *post-1944 (but non-new) houses*, houses bought by *first-time buyers (FTBs)* and houses bought by *former owner-occupiers (FOOs)*. The relative price increases over the period 1983 Q1 to 1989 Q4 for the UK as a whole for each of the six house and buyer groups are reported in Table 2.5 below. As shown by this table there are a number of notable features about the comparisons made in Figures 2.3 - 2.5. First, taking the period from 1983 Q1 to 1989 Q4 as a whole, prices for all houses on a standardised basis are shown to have risen somewhat less than simple average prices - 133.8 per cent as against 142.3 per cent - and this was a consistent tendency over the whole period except for two quarters (1988 Q4 and 1989 Q1). This is also true for most of the five sub-categories of house type and buyer type; only two out of the five (post-1944 houses and houses bought by former owner-occupiers) showed a greater rise on a standardised basis. But even for these two categories, the general tendency was for the standardised series to run below the simple average series over most of the period. A second notable feature is that the simple average price series is more volatile than the standardised series. Thirdly, the simple average series shows reversals of trend which are not mirrored in the standardised series. For example, taking the series for all houses at the UK level, the evidence for the following three periods is notable:

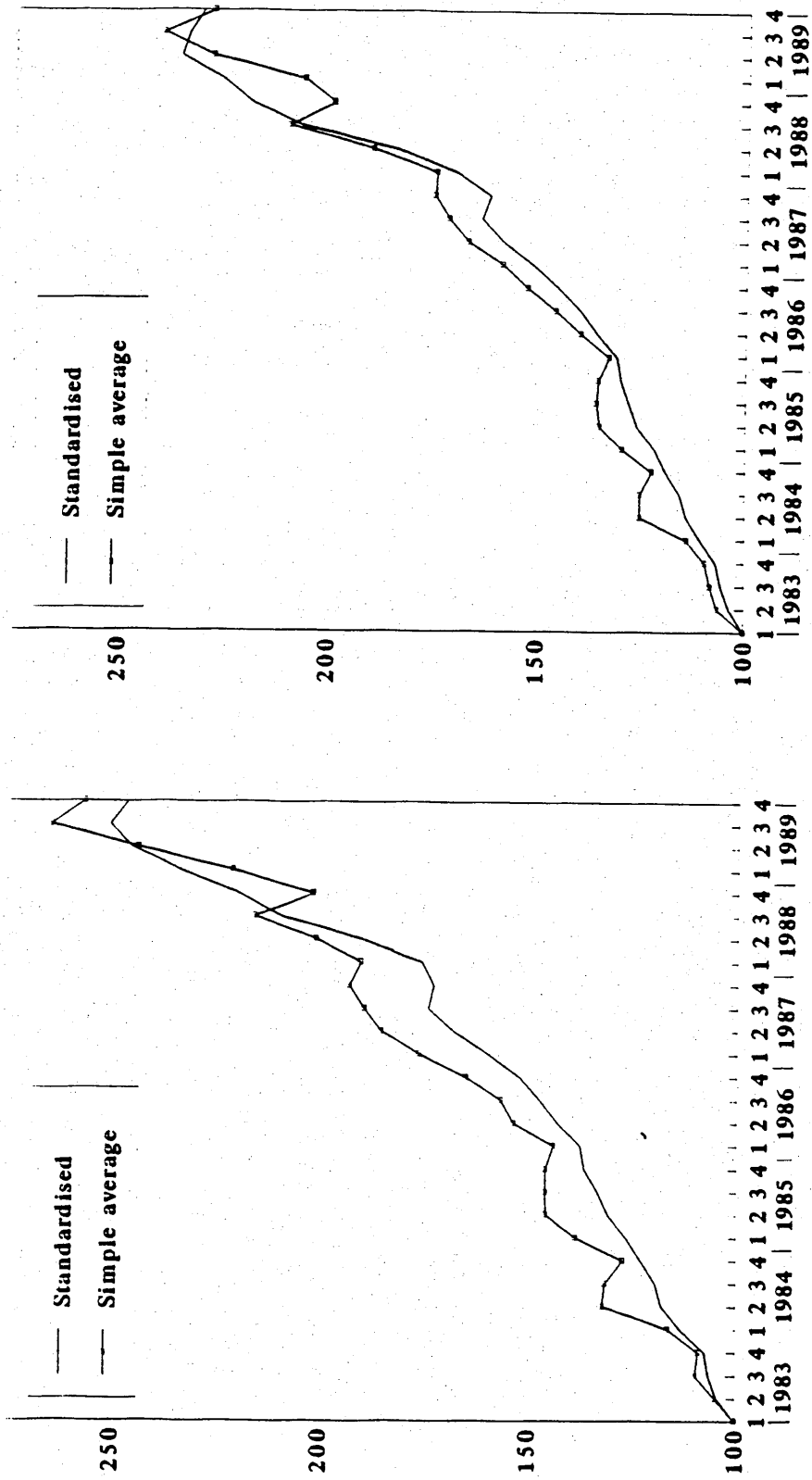


(a) All houses



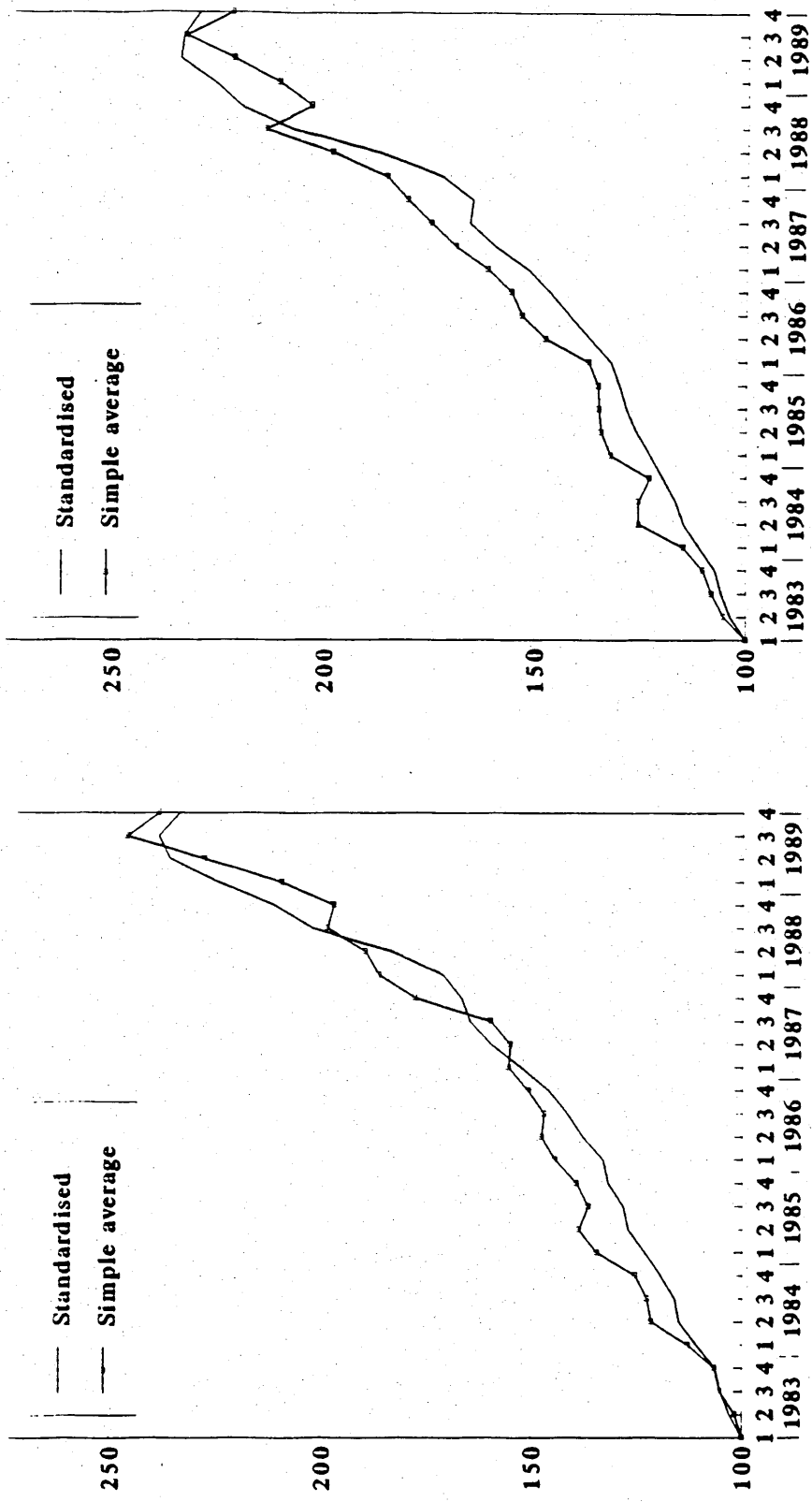
(b) New houses

FIGURE 2.3 PRICE INDICES FOR ALL HOUSES AND NEW HOUSES, UK (1983 Q1 = 100)



(a) Pre-1945 houses
(b) Post-1944 houses

FIGURE 2.4 PRICE INDICES FOR SECONDHAND HOUSES, UK (1983 Q1 = 100)



(a) First-time buyers
(b) Former owner-occupiers

FIGURE 2.5 PRICE INDICES FOR HOUSES BOUGHT BY FTBs AND FOOs, UK (1983 Q1 = 100)

TABLE 2.5

COMPARISON OF STANDARDISED AND SIMPLE AVERAGE
PRICE MOVEMENTS: 1983Q1 - 1989Q4

Percentage Change in Prices Based on

House and Buyer Group	Standardised Series	Simple Average Series
All houses	133.8%	142.3%
New houses	111.2%	141.8%
Non-new houses:		
pre-1945	146.3%	156.6%
post-1944	130.4%	127.8%
First-time buyers	133.4%	138.3%
Former owner-occupiers	129.6%	121.9%

<i>Period</i>	<i>Simple average price change</i>	<i>Standardised price change</i>
1984Q2-1984Q4	-3.6%	+3.7%
1985Q2-1986Q1	-1.3%	+4.4%
1988Q3-1988Q4	-5.6%	+5.3%

The series for the sub-categories of house and buyer type show similar divergent movements between the standardised and non-standardised series (see Figures 2.3 - 2.5).

Differences in the estimates of house price inflation based on the series illustrated by Figure 2.3 - 2.5 arise because of variations in the underlying mix of properties traded from one time period to the next. The magnitude of the disparities is significant and reinforces the need for standardisation and thus more reliable measurement of price movements. The analysis reported in this section has indicated that while simple average prices may be of interest in their own right as measures of contemporary price *levels*, they are undoubtedly biased as a measure of price *movements*. In terms of its methodological approach, the hedonic method of standardisation has the virtue of being able to accommodate information about a wide range of housing characteristics effectively. This is achieved, using multiple regression analysis, in a way which it would be difficult to encompass in a system based on the weighted average approach described above. Its effective use, however, imposes large data requirements in order to capture adequate evidence for a wide range of housing attributes across regionally-differentiated markets. Fortunately, the transactions financed by the Halifax Building Society and the Nationwide Anglia Building Society do provide sufficiently large data bases to satisfy this condition. The question of national representativeness is still subject to debate, given that the lending pattern of any single institution may not reflect the total

market. Despite this reservation, the studies included in this submission show that both of these data bases yield highly significant estimates of the regression parameters and are thus able to produce reliable standardised price indices.

By way of conclusion to this section, it is important to point out that, despite the extensive nature of the data employed in the Halifax and Nationwide Anglia systems, there is still room for improvement - neither of the data bases identify *all* relevant house characteristics. Those that are employed are able to "explain" a very high proportion of the observed variation in prices. Nonetheless, a quarter to a third of the variation remains unexplained in some cases. It is in this area that the main source of improvement in the hedonic approach to price measurement is likely to be found in subsequent research.

3. THE DETERMINATION OF HOUSE PRICE INFLATION IN THE UK

3.1 The Significance of Modelling House Price Inflation

The analysis in Section 2 has focused on the problems and solutions associated with the *measurement* of house price levels at a point in time and the derivation of hedonic-based price indexes over time which allow for the changing mix of house characteristics. This area of research constitutes the largest proportion of the studies contained in this submission. Alongside this area of housing research, there has also been a growing interest in the analysis of the *determination* of house prices over time - ie, the study of the causes of house price inflation. This interest stems from the fact that the "prices at which housing transactions take place have major impacts on the wealth holdings of individuals, the composition of their portfolios and the interpersonal distribution of wealth, as well as on the costs of obtaining any given flow of housing services, and on the level of activity in the new-construction sector, thus influencing several major industries which supply construction materials" (Hendry, 1984, p. 213). The political importance attached to house prices is not surprising given the volatility of the past two decades in which the UK has witnessed massive fluctuations in both the nominal and real values of houses: it is estimated that house prices, in real terms, rose by nearly 50% during 1972-73, fell in real terms by around 25% in 1974-75, rose again by 14% in real terms during 1978-79 only to fall by one-eighth in real terms during 1981-83 (see *Housing Finance*, No 7, August 1990, Table 1). During the latest boom of 1988, real house prices for the UK as a whole rose, on average, by well over 30% on an annual basis but since then it is estimated that there has been a drop in real values of around 20% on average (though with considerable regional variations around the national picture).

The major impacts of rapidly rising house prices noted above may be considered from several perspectives. For example, increases in house prices lead to a rise in the value of personal sector wealth which may be used directly to finance consumers' expenditure or act as collateral for a loan. The potential impact of this can be judged by the fact that in 1987 the value of residential buildings accounted for approximately 40% of total personal sector gross wealth. As Meen (1989) points out "considerable attention has been paid to the likely effects on consumers' expenditure of the Stock Market crash in October 1987 although ordinary shares held *directly* by persons only account[ed] for 6% of wealth (a much larger proportion is held indirectly through equity in insurance and pension funds)" (p. 3). It is perhaps surprising therefore that much less empirical analysis has been conducted in recent years to determine the effects of rapidly rising (and falling) house prices on consumer behaviour.

Differences in regional house price inflation rates and levels are also likely to be a factor contributing to the failure of wage settlements to respond to high levels of unemployment. As Bover *et al* (1989) argue, regionally dispersed house prices can cause a segmentation of labour markets, provide a disincentive to migration and in areas of high house price levels lead to higher than average wage demands as cost of living adjustments. Muellbauer and Murphy (1988) further argue that a higher national house price/earnings ratio may also "result in increased net outmigration from the UK particularly at the upper echelons of the labour market" with consequent knock-on effects reflected in the national house price/wage ratio for these "upper echelons".

Finally, a rapid acceleration of house prices may also give impetus to the process of equity withdrawal with its consequent effect on consumer demand as the

householder's equity share in a property increases. Estimates for the magnitude of equity withdrawal were presented earlier in Table 1.1 showing for example that in 1988 it reached almost £17 billion. In recent years the Bank of England has expressed concern at the upward trend of this leakage from the housing sector recognising that in the presence of a deregulated mortgage market the proliferation of high loan-to-value/income ratios is likely to encourage equity withdrawal. Since mortgage debt currently accounts for roughly 65% of total personal sector liabilities, any policies aimed at reducing total credit outstanding will need to be directed at the mortgage market. This contrasts with periods in the past when mortgages were often rationed by lenders setting maximum loan-to-income multiples and/or loan-to-value ratios and restricted below levels that would have been desired in a free market, thus constraining households' consumption/saving behaviour.

Apart from the impact of rapid movements in house prices on the behaviour of individual buyers and sellers, consumers, the financial sector, government etc, there are also intrinsic interests in modelling the determination of house price inflation. In academic terms the volatility of house prices makes their study a challenging one for econometric methods. As Hendry (1984) asks: "can we only model simple phenomena whose systematic determinants are relatively obvious, or are dynamic modelling methods sufficiently powerful to allow "good" explanations of rapidly changing variables? If so, can house price changes be predicted *ex ante* with sufficient degree of precision to sustain profitable "speculation"? Will the reactions of buyers and sellers and other players in the market change in the light of such information to arbitrage away any excess profit?"

In this section, we turn our attention to some of these and related questions. It is important to appreciate that the two research studies contained within this

submission which contribute to this theme were carried out in the early 1980s prior to the establishment of the hedonic house-price series reported above. Some other recent studies have, however, utilised hedonic price series in place of the unadjusted data employed in virtually all time-series studies during the 1970s and the first half of the 1980s (see for example Giussani and Hadjimatheou (1990a and 1990b) for applications at both national and regional levels).

3.2 Methodology of Modelling House Price Inflation

As in any similar market, house prices are determined by the interaction of supply and demand side factors. The housing market, however, has a number of distinguishing characteristics which sets it apart from other markets. Firstly, housing is exceptionally durable which means that changes in the level of new housebuilding represent only a very small proportion of the total housing stock. The market is therefore largely dominated by the transactions which involve the purchase and sale of existing (ie, second-hand) properties. Second, supply is relatively inelastic in following a rise in demand. It is estimated that the housing stock probably has a maximum possible growth rate of about 2% and thus, in the short-run, it is almost fixed (see *Housing Finance*, August 1990, p.8). Demand, on the other hand, may be extremely volatile (as witnessed during the recent 1988 boom when a combination of income tax cuts and an early warning by the government of the abolition of multiple mortgage tax relief produced a surge on the demand side of the market). Third, nearly everyone is housed in one way or another so that, for most people, the decision to buy for the first time is discretionary and can be varied according to individual circumstances.

As discussed above, house prices are determined by the interaction of demand for and supply of houses. Thus, in the long-run, prices will adjust to their market clearing level. One approach to modelling the determination of house prices, therefore, is to derive an estimating equation as a reduced form relationship from the specified arguments of demand and supply functions for housing, reflecting the influence of the main economic agents that operate in the housing market. This involves allowing for the influence of potential buyers, sellers and financial intermediaries. This is the approach taken in Nellis and Longbottom (1981) and Fleming and Nellis (1981b) in studies of the UK and Northern Ireland housing markets respectively. The need to consider financial intermediaries in modelling house prices over time arises from the fact that the vast majority of house buyers rely on mortgage finance. Hence, the cost of this finance is an additional factor which enters the potential buyer's decision calculus, and is thus a variable to be included on the demand side of the housing market model. It is important to appreciate that the two studies included in this section of the submission relate to the determination of house prices principally during the 1970s.

During the 1970s, the mortgage rate in the UK was typically set at below its market-clearing level. The consequence of this is that the mortgage market was often characterised by excess demand for funds and, consequently, these funds had to be rationed (see Nellis and Thom (1983 and 1986) for further analysis of mortgage rationing). This is a quantity constraint, largely outside the house purchasers' decision calculus, but nevertheless it is a factor which must be considered when specifying the housing demand function for the time period under investigation.

The demand for housing services in time period t (H_t^d) is likely to

depend particularly on the price of housing (PH_t), real household disposable income (RYD_t), demographic factors (ie, the number of potential house buyers, denoted PTB_t), the cost of mortgage finance (ie, the mortgage rate denoted MR_t), the availability of mortgage finance (M_t) and the general price of other goods, denoted PC_t . Thus, the demand function for housing may be specified as follows:

$$H_t^d = a_1 + a_2PH_t + a_3RYD_t + a_4PTB_t + a_5MR_t + a_6M_t + a_7PC_t \quad (1)$$

The demand side of the market is also likely to be affected by the extent to which capital gains are to be expected. This introduces a speculative element in the house buyer's decision-making which may be captured by the inclusion of terms such as:

$$\left(\Delta PH_t^{expected} \right) - \left(\Delta PH_t^{actual} \right)$$

The supply side of the housing market may be modelled simply in terms of changes to the stock of housing units in any time period. This change is identically equal to the existing stock of houses carried over from the previous period and units completed during that period, plus conversions and renovations minus demolitions. Since the last three factors can largely be regarded as being dependent on past stock, it may be postulated that the supply of houses in time period t depends on the price of houses in period t and the existing stock of houses. House completions, in other words, do not determine the desired stock of houses. In equilibrium, the existing stock is just sufficient to satisfy the demand for housing, and there is no incentive for builders to complete further new units. Thus, the supply function (H_t^S) may be expressed as:

$$H_t^s = b_1 + b_2PH_t + b_3H_t \quad (2)$$

where H_t represents the existing stock of houses. In equilibrium,

$$H^s = H^d \quad (3)$$

such that the equilibrium price of housing (PH_t^*) which ensures market clearing is determined by the expression:

$$PH_t^* = c_1 + c_2RYD_t + c_3PTB_t + c_4MR_t + c_5M_t + c_6PC_t + c_7H_t \quad (4)$$

Equation 4 is the estimating equation. It is an equilibrium (ie, long-run) relationship which will not hold at every point in time, reflecting the cost of instantaneous adjustment towards equilibrium and modifications to the basic relationship caused by short-term influences. The relationship is thus intended to be a *steady-state* hypothesis. Hence, it is assumed that house prices, in the long-run, adjust towards their equilibrium level PH_t^* on the basis of an *error-correction hypothesis*, such as

$$\Delta PH_t = - \lambda (PH_t/PH_t^*)_{t-1}$$

where $0 < \lambda \leq 1$

The estimation methodology developed by Davidson *et al* (1978) may be applied which enables the development of a framework in which to model the short-run dynamic behaviour of agents around a long-term trend (this is achieved in the Davidson *et al* approach by including residuals from the long-run equation into the short-run equation).

3.3 The Determination of House Price Inflation - Results and Conclusions

The methodological approach to modelling house price inflation described above is applied in the context of the UK housing market in Nellis and Longbottom (1981) and in the context of the Northern Ireland housing market in Fleming and Nellis (1981b). The results and conclusions of each study are summarised briefly here.

(a) *United Kingdom Study*

During the 1970s the average price of new houses in the UK increased by roughly five-fold in nominal terms representing an increase in real terms of nearly 50 per cent (see Holmans (1990) for a comprehensive analysis of changes in house prices over time). Over the same period the role of building societies as part of the financial system increased dramatically, to the extent that by the end of the decade they attracted almost 50 per cent of the personal sector's holdings of liquid assets. At the same time they maintained their dominant position in the home-loans market, providing more than 90 per cent of house purchase finance in the UK (see Table 1.2). As the building society movement has expanded so too the role of building societies has come under scrutiny because of apparent association between the growth in their mortgage lending and house price inflation. This issue is addressed in Nellis and Longbottom (1981) by examining the interrelationships between house price movements, the lending behaviour of building societies, changes in real income levels and the response of the house-building industry to changing economic circumstances.

It is concluded on the basis of the econometric research included in this submission that the blame for the rapid inflation of UK house price during the 1970s cannot be attributed solely to the lending policies of the building society movement. It is argued that to do so would be to ignore several other key factors and that the behaviour of the societies is but one element in the matrix. Furthermore, it is concluded that the behaviour of the building societies during the period under examination was not abnormal in the context of previous experience.

On the question of future government policy and attempts to avoid the type of inflationary house price booms seen in the 1970s, it is argued in Nellis and Longbottom (1981) that a radically different approach must be adopted by the authorities to the building society industry and to their role as financial intermediaries. In addition, the government is encouraged to free the housing market of restrictions, mainly by ensuring that builders can obtain an adequate supply of land and by introducing more discretionary fiscal incentives to encourage new house building. Emphasis is also placed on the need for government to adopt a longer-term planning horizon with regard to the provision of housing.

(b) *Northern Ireland Study*

The study of Northern Ireland house prices reported in Fleming and Nellis (1981b), in addition to modelling house price inflation in the region, provides a critical analysis of official statistics for the Province published by the Department of the Environment. These suggested that, during the 1970s, Northern Ireland changed from being the cheapest housing region in the UK

to being the most expensive but one. The inflation of house prices in the region during this period was by far the fastest among all the regions in the UK. As a consequence, average reported prices in the Province rose to a level above the UK average for the first time in 1976, moving from a low of 38 per cent *below* the national mean in 1973 to a peak of 18 per cent *above* in 1978. The research seeks to provide an explanation for this remarkable change. It is argued that to some extent the apparent differences in regional house price trends are the result of statistical distortions within official reports at that time.

These distortions mainly involve the problems of measurement discussed earlier in Section 2 of this synopsis. Firstly, official house price reports in the 1970s were based on simple averages with no allowance made for variations in the mix of houses being traded. Second, official information was confined to only one sector of the market, namely those houses purchased with the aid of a loan from a building society. This was a particularly important limitation in the context of Northern Ireland because of a considerable expansion in mortgage lending by the Housing Executive. Consequently, it has been shown in Fleming and Nellis (1981b) that the building society data were distorted and as a consequence they were not representative of all transactions in the region, affecting both the measurement of price levels and price trends.

Despite the existence of statistical distortions in the underlying data, it is found that Northern Ireland did experience a more rapid rate of house price inflation than the rest of the UK during the 1970s. To examine the causes of this phenomenon, the research is extended to include the

development of an econometric model of house price inflation in Northern Ireland based on the theoretical framework set out above. In addition, causality tests are also employed to test whether or not increased availability of mortgage finance in Northern Ireland had been a primary cause of the inflationary pressures or whether demand for such finance is a derived demand, dependent on house price inflation itself. The analysis suggests that increased demand for housing in Northern Ireland during the period under investigation, unmatched by an increase in housing supply, offers the most plausible explanation for the unexpected surge of house price inflation there. In this respect, key importance is attached to the increased availability of mortgage finance after 1973 via the Northern Ireland Housing Executive.

3.4 Recent Research on Modelling House Price Inflation

The research work reported in this section was conducted in the early part of the 1980s based on data for the 1970s. Since then a large number of studies on the determination of UK house price inflation have been carried out. Some of these employ a similar methodology to that reported in Nellis and Longbottom (1981) and use the results reported in this paper as a benchmark for comparative purposes. The most recent of these studies are reported in Dicks (1989), Meen (1989) and Giussani and Hadjimatheou (1990a).

Dicks (1989) focuses on developments in the housing market over the 1970s and 1980s. Not surprisingly, it is concluded that short-run fluctuations in the demand for housing are largely responsible for changes in house prices. Growth in the number of households and in real incomes explains much of the long-run trend in house prices, with housing starts responding only very slowly to changes in the

profitability of house building. The long-run elasticity of UK housing starts to house prices is estimated at around 0.5. This is considerably smaller than comparable estimates for the United States which have been as high as 3.0 (see Topel and Rosen (1988) for further details). According to Dicks "this probably reflects the comparative shortage of residential land in this country, particularly in the South East, which has resulted in land prices rising even faster than house prices in boom periods" (p.73).

The significance of mortgage rationing in the determination of house prices is a focal point of the study by Meen (1989a). In particular, the paper attempts to examine empirically the effect on house prices of moving from a system of rationed to unrationed mortgage supplies, a change that took place in the early 1980s in the UK. This work therefore represents a useful extension of the research included in this submission. A model of house price determination, incorporating direct estimates of mortgage rationing, allows us to examine for the first time the effect of the regime switch. It is found that the existence of rationing has important effects both in theory and empirically. In theory, credit market constraints can negate the usual conclusion that inflation leads to an increase in real house prices. Empirically, the model put forward suggests that rationing in the 1970s has had quantitatively large effects on house prices, so that it is crucial to examine both the direct effect of any exogenous shock and the indirect effect that arises through changed mortgage market conditions. Under conditions of rationing, it is argued that inflation will have its largest effects on the length of mortgage queues, rather than on real house prices or the housing capital stock.

Finally, the recent paper by Giussani and Hadjimatheou (1990a) suggests that the number of households, personal disposable income per capita, housebuilding costs

and the total housing stock are the driving forces behind increases in house prices in the long-run. The cost and availability of mortgage finance do not enter into the long-run relationship, in contrast to the Nellis and Longbottom (1981) and Fleming and Nellis (1981b) studies. It is also suggested that house prices increase more than proportionately to increases in income and the number of households, but less than proportionately to changes in housebuilding costs. On the other hand, increases in the housing stock reduce house prices more than proportionately. In the short-run, Giussani and Hadjimatheou argue that house prices are also affected by recent movements in house prices (an adaptive expectations effect), changes in general house price inflation, the stock and flow of building society mortgages, bank lending, the number of housing completions, and the ratio of households to housing stock as a measure of the tightness of the housing market. They conclude that fiscal and monetary policy have a direct impact on house prices, both in the short and long-run, through changes in personal disposable income, interest rates and the tax allowance on mortgage interest payments.

These three recent studies represent only a small sample of the research on house price determination that has been conducted since the early 1980s. In general, these studies have applied more sophisticated estimation methodologies than those described earlier. On the whole the results are broadly in agreement in terms of identifying the key determinants of house price inflation in the UK.

Controversy remains, however, surrounding the speculation that changes in bank and building society deposits and mortgage lending can lead to changes in the rate of increase in house prices. As reported in *Housing Finance* (No 7, August 1990), "there have, of course, been rapid changes in the level of mortgage lending but this does not seem to have had a direct effect on house prices" (p. 12). It is

argued that a change in lending can feed through to the housing market in several ways rather than being reflected in a change in the rate of increase of house prices. Some of these ways are through:

- (a) a change in the number of transactions;
- (b) an increase in the lending for improvements rather than house purchase, and
- (c) an increase in the percentage advance.

These factors help to explain why the attempt by the government in the late 1970s to influence the rate of house price inflation by the manipulation of building society lending failed. As part of the so-called "Guideline System" (under which representatives of the BSA and interested government departments assessed the level of lending supposedly consistent with reducing the rate of house price inflation), a sharp reduction in building society lending was implemented at the request of the government from April 1978. This reduction was not successful, however, in moderating the rate of house-price inflation at that time. The reason for this failure is that the reduction was not significant enough to offset the effect of the strong economic forces that were present (such as a strong growth in real incomes). This conclusion, on the whole, is empirically supported by the analysis presented in Nellis and Longbottom (1981). The cutback in building society lending did, however, bring about a marked reduction in the average percentage advance made by building societies as well as a sharp fall in the number of transactions in the market (at the same time, lending by other institutions increased).

To conclude this section it may be useful to take stock of the position reached in this area of research and to look ahead to future developments. Given the penetration of home-ownership as the dominant form of tenure that has now been reached and the removal of housing shortages which persisted for so many years after the Second World War, an important need now is for further research concerning the future role of demographic factors in the determination of house prices. While all the studies referred to above (including those contained in this submission) incorporate some form of demographic variable, more attention will need to be given to those factors which influence the actions of potential first-time buyers. Demographic factors are of key importance in determining the number of potential first-time buyers in the medium term. In the late 1970s and 1980s there was a bulge in the number of people in their twenties. This was the result of the baby boom in the 1950s and early 1960s. After 1964 the birth rate declined sharply and this is now resulting in a reduction in the number of twenty year-olds. Other long-term demographic trends include the growth in the number of single-person households which is itself influenced by the divorce rate, the increasing number of elderly households remaining in owner-occupation and the increase in the number of young people who live alone between leaving home and marrying. These factors, to varying degrees, will affect the long-term trend of house prices. In the short-run, however, fluctuations in economic conditions will continue to play an important role in the determination of house prices.

4. HOUSING AND THE UK BUILDING SOCIETY MORTGAGE FINANCE MARKET

4.1 The Significance of Building Societies in the UK Housing Market

The studies which have been reported in the previous sections and which are contained in the submission of research papers have so far been concerned with the measurement and determination of house prices. In the latter case, particular attention was paid in Section 3 above to the extent to which building society lending behaviour may have been a causal factor in the inflationary house price booms of the 1970s. It was concluded in Nellis and Longbottom (1981), however, that the key influence has been the level of real income, not the willingness of building societies to lend. Certainly, restrictions on lending policy may hold back housing inflation, and any sudden loosening of lending restrictions is likely to release a short-lived price boom as in the period from 1971 to 1973 (Boddy, 1980 p.99). But liberalisation of lending can hardly be said to *cause* a long-term rise in prices since people will not borrow what they cannot afford to repay. The lending institutions are the means by which rising real incomes are transmitted into rising real house prices, but they are not the cause of it (BSA, 1976).

In this section of the synopsis the changing role of the building society movement since the early 1970s is examined in more detail in conjunction with the likely impact on the housing market and the wider economy in the future. Building societies have been transformed in recent years in terms of the range and scope of the services which they are able to offer as a result of the 1986 Building Societies Act (see Nellis and Litt (1990) and Drake (1989) for a full account of these changes). However, the current climate in which building societies have now become very close

substitutes for the clearing banks in many respects is in sharp contrast to the environment which prevailed throughout most of the 1970s. Then, building societies were constrained in their lending policies by both government control and the inflexibility of interest rates (the building societies had adhered to a cartel on interest-rate fixing up until the mid-1980s). To appreciate fully the behaviour of building societies today it is important to understand the background to the current framework of operation. Thus, two final studies are included in this submission which attempt to model the lending behaviour of building societies in the 1970s and to shed light on the significance of mortgage rationing (see Nellis and Thom, (1983 and 1986)). These papers represent only a small contribution to an understanding of the changing role of building societies but they nevertheless provide a platform for further research and debate (for further discussion of this changing role within the context of deregulation and future implications see Llewellyn (1986 and 1988)).

4.2 Studies of Building Society Behaviour - An Overview

The growing importance of building societies in the financial services sector in recent years is highlighted by the fact that a new monetary aggregate, M4, was introduced in 1987 which treats building societies in an analogous way to the treatment of clearing banks in the M3 aggregate. The numerical importance of building societies' behaviour in the monetary sector is enormous - for example, in the second quarter of 1987, the building society contribution to the M4 total of £281 billion was £124 billion, representing almost half of the total M4 aggregate. However, despite this growing importance there has only been a relatively small number of studies in recent years which have focused on the behaviour of building societies (in addition to Nellis and Thom (1983 and 1986), see for example Pratt (1980), Anderson and Hendry (1984), Wilcox (1985), Meen (1989a and 1989b) and

Dicks (1989)). One reason for this may be that "building societies' behaviour does not easily fit into the market-clearing framework of much textbook economics and econometrics" (Hall and Urwin, 1987). Much of the research has focused on the identification of variables which proxy rationing effects in the mortgage market though there is little consensus as to the type of disequilibrium which is in operation.

Anderson and Hendry (1984) model the determination of mortgage lending on the assumption that it is entirely supply determined. They model the determination of building society deposits and mortgages separately but both are supply determined. The societies are then seen as simple intermediaries passing on deposits to borrowers and so the supply of mortgages is mainly determined by the supply of deposits. Wilcox (1985), on the other hand, approaches the problem differently in that he uses a demand function for mortgage lending. The argument made is that mortgages are often rationed and so various variables which proxy the degree of rationing should enter the mortgage demand function. Earlier pioneering work in the UK by O'Herlihy and Spencer (1972) followed a similar, if somewhat primitive, approach in that it estimated a demand function which included dummy variables to proxy various forms of rationing.

The most recent studies by Meen (1989a and 1989b) and Dicks (1989) have been primarily concerned with assessing the impact of mortgage rationing during the 1960s and 1970s on the determination of house prices. Dicks (1989) concludes that the existence of rationing has had quantitatively large effects on house prices, so that it is crucial to examine both the direct effect of any exogeneous shock to the housing market and the indirect effect that arises through changed mortgage market conditions. Within a rationed market, Meen (1989a) argues that inflationary pressures are more likely to result in longer mortgage queues and may not be

significant in pushing up real house prices or stimulating further expansion of the housing stock. Therefore, historically when rationing was common, the model he provides does not suggest that inflation has led to over-investment in dwellings. However, with the ending of rationing from the mid-1980s house prices may be potentially more responsive to exogeneous shocks.

Before presenting the methodology of mortgage rationing and the results of Nellis and Thom (1983 and 1986), it may be useful to place the current situation of building societies in an historical context. In particular, the changing mortgage market structure and the behaviour of building societies including the significance of the former interest-rate cartel and its subsequent abolition are examined below.

4.3 The Changing Structure of the UK Mortgage Market

Up until the early 1980s the institutional structure of the UK mortgage market was dominated by the building society movement with the societies, at times, virtually representing the sole source of mortgage provision (see Table 1.2). The behaviour of the banking sector was severely restricted by the imposition of direct controls on bank lending through the supplementary special deposits scheme (the so-called "corset") which impinged most directly on the personal sector. Competition between societies was also restricted as a result of cartel arrangements, the most notable being the Building Societies Association recommended interest rates which all the larger societies followed. In practice, these rates were not changed very often and were frequently set below market-clearing levels. Thus, the UK mortgage market during the 1970s provides a good example of the segmentation of financial markets which characterised the UK financial system. Societies provided the bulk of mortgage lending to persons as well as, increasingly, an outlet for personal sector

savings whilst banks operated the payments mechanism through the cheque-clearing facility. The area of direct competition between banks and building societies was extremely limited (see Drake (1989) and Llewellyn (1986) for further details).

Given their historically established mutual status, societies were not profit maximisers. Rather they attempted to reconcile the conflicting demands between borrowers for low interest rates and savers for high interest rates by maintaining a relatively stable path for interest rates over time (centred on the cartel agreement noted above). The fact that the mortgage rate was frequently set out below the market-clearing level meant that there were periods of excess demand with borrowers having to queue for mortgages. This situation was sustainable owing to the dominance of the societies in the mortgage market at that time. On the savings side, when the general level of market interest rates rose, building societies' rates to shareholders tended to lag behind, thereby diminishing the societies' competitive position in the retail deposit market. Their inflow declined accordingly - reinforcing the need for mortgage rationing.

The establishment of mortgage queues was the most obvious form of non-market mechanism for allocating the supply of funds to demand. Other mechanisms, however, included changes in lending terms - for example, lowering loan-to-income or price-to-income ratios for all borrowers or particular sub-groups of borrowers. Equally, at times when interest rates were generally falling, the societies' competitive position in retail markets generally strengthened (since interest rate falls, like rises, tended to lag behind), and the buoyancy of their inflows allowed rationing of mortgages to become less pervasive, lending to expand and liquidity to be rebuilt.

The market structure described above did not survive much beyond the start of the 1980s. The removal of UK exchange controls in October 1979 meant that the direct controls on banks' balance sheet activities via the corset were made redundant since banks could now by-pass such restrictions by channelling lending activity abroad. In mid-1980, the corset was inevitably abolished, giving the banks far greater freedom to develop areas of business in which the scale of their activity had been minimal. This they did immediately and vigorously, focusing in particular on the mortgage market which was seen, historically, as profitable and low risk. This occurred at a time when the recession, both in the UK and world-wide, meant that corporate business was risky and, chastened by the Third World debt problems, the banks were looking for safer ways to boost margins and strengthen or diversify their balance sheets (see Callen and Lomax (1990) and Drake (1989) for a full account of these changes). The banks' initial success in meeting new mortgage demand, as well as that which had been frustrated by the societies' rationing, was considerable: by 1982 they had attained a market share of net new lending which at one stage exceeded 40% - see Table 1.2 in Section 1.2. As noted earlier, this lending was, generally, concentrated at the "top" end of the housing market on the higher-priced properties.

Following this initial assault, banks' mortgage lending subsequently grew more slowly for a period from 1983, in part because their initial lending targets had been met, while remaining significant. However, it began to accelerate once again in mid-1985 once the relative attraction of lending to the personal sector had been enhanced further by the heightened risk associated with the emerging world debt crisis and the increasing use by large corporations of the securities market. Competition within the financial services sector was increased still further from the

mid-1980s by the arrival of a number of foreign banks and other institutions on the UK mortgage scene (such as The Mortgage Corporation).

The greater intensity of competition in the mortgage market in the 1980s, which occurred in tandem with greater competition in the retail market, induced a fundamental shift in building societies' behaviour. Increasingly, the societies' attempted to satisfy the demand for mortgages in full at the prevailing level of interest rates and eschewed the array of rationing devices previously utilised. This resulted in a greater sensitivity to changes in market interest rates as well as, on occasions, the acceptance of higher interest rates than would otherwise have been the case. In these circumstances fewer societies implemented the rates recommended by the BSA. The pressure on the cartel arrangements had been building up steadily during the 1970s and by September 1981, the BSA decided it would recommend only ordinary share and base mortgage rates. In October 1983 (after the Abbey National Building Society announced its intention to withdraw from the cartel), the BSA further announced that it would only advise, rather than recommend, rates. From November 1984, the BSA merely coordinated the timing of interest rate changes and indicated their approximate magnitude. In 1986, even this limited role was abandoned and the remaining threads of the arrangements at that point became redundant.

The building societies' ability to fund mortgage demand in the 1980s has been facilitated by their entry into the wholesale money and capital markets. Access to these markets was significantly improved by changes in tax arrangements in 1983, enabling the societies to pay interest gross, rather than net of tax. Also, in 1983 they began to issue time deposits and certificates of deposit as well as borrowing from banks on a significant scale, and their first issues in the eurosterling market

were made at the end of 1985. Such receipts have increased in their significance since then and access to these markets has helped societies to reduce their normal levels of liquidity, allowing a further expansion of mortgage lending (though the decline in liquidity also reflects the imposition of corporation tax on societies' gilts in 1984, which lowered the post-tax rate of return). Prior to their use of wholesale markets, societies had typically been asset-managers, altering their mortgage lending in the light of the strength of their retail inflows and the level of liquidity; since that time they have increasingly managed their liabilities in order to fund fully the demand for mortgages.

Still more radical change in the structure of the UK mortgage market resulted from the introduction of The Building Societies Act (1986) which came into effect on 1 January 1987 (see BSA (1986) for a summary and analysis of the Act and Nellis and Litt (1990) for an assessment of its impact in terms of the challenges faced by building societies, especially at branch level). The Act has allowed for a progressive deregulation of the products which societies are able to offer on both sides of their balance sheets and extends the range of other activities which societies are permitted to undertake. The Act, however, contains certain absolute limits to deregulation in order to ensure that the societies retain their "distinctive" nature. This was defined in the Act as follows:

"The principal purpose of building societies remains that of raising, primarily from their members, funds for making advances to members secured upon land for their residential use" (Part 1, Section 1(4)).

Without further government legislation, fundamental changes to building societies' powers cannot be implemented, although there has been some secondary

legislation since 1986 in response to changes in market conditions (recently, concerns have been expressed from within the building society movement that the regulatory constraints within the 1986 Act could severely restrict societies in the future).

Thus, to conclude this brief overview of the changing structure of the UK mortgage market in recent years, the 1980s has been a decade in which competitive forces have been allowed to play a far greater role. Potential borrowers who were frequently frustrated in the past now find that loans are more freely available, provided that lenders' prudential criteria are met. In the light of the house price boom of 1988 and the subsequent sharp downturn in the housing market, there have, however, been suggestions that these lending criteria have been "too easy". Societies, as in the 1970s (only this time in conjunction with banks), have come under the spotlight again in terms of the possible impact of their lending behaviour in fuelling house price inflation to the extent that the Governor of the Bank of England has raised the question of introducing credit limits for house purchase.

The importance of mortgage rationing by building societies has been discussed at some length above. We turn now, therefore, to examine this phenomenon in more detail in terms of econometric modelling. As noted earlier, it is perhaps surprising that only a small number of studies have been reported on this theme by UK researchers in recent years, reflecting perhaps the difficulty in adequately capturing the disequilibrium features of the mortgage finance system. The following discussion identifies some of the main methodological and empirical challenges of modelling disequilibrium rationing behaviour in general while the research studies and results of Nellis and Thom (1983 and 1986) are addressed later in Section 4.5.

4.4 The Estimation of Markets in Disequilibrium

The estimation of supply and demand functions for markets which may be characterised by disequilibrium poses several problems. The main problem is that in the absence of an equilibrium condition the observed quantity traded in the market may not satisfy both the demand and supply schedules. One general approach to this problem is to try to separate the sample into demand and supply regimes such that each schedule may be appropriately fitted against the observed quantity for the sample points falling within its regime. Another approach is to try to adjust the observed quantity for the effects of rationing and then fit both schedules over the entire sample period using the adjusted quantity.

Fair and Jaffee (1972) provide a comprehensive discussion of the estimation methodologies which may be applied following each of these approaches. Their work has provided the foundation for much of the subsequent literature on disequilibrium and, hence, it will be useful to summarise their research here as a basis for our later discussion of modelling rationing behaviour in the UK mortgage market. Four methods of estimating supply and demand schedules in disequilibrium markets are presented in their study. The first method - referred to as the Maximum Likelihood Method - is aimed at finding the optimal separation of the sample into demand and supply regimes. The other three methods use price setting information to reduce computational difficulties and to make use of the available data. These three methods are also based on the assumption that the observed quantity is equal to the minimum of *ex ante* demand and supply quantities (this is also the assumption made in Nellis and Thom (1983), p. 525).

The general model to be estimated is assumed to consist of one demand and one supply equation:

$$D_t = a_0 X_t^D + a_1 P_t + e_t^D \quad (t = 1, 2, \dots, T) \quad (1)$$

$$S_t = b_0 X_t^S + b_1 P_t + e_t^S \quad (t = 1, 2, \dots, T) \quad (2)$$

where D_t and S_t denote the quantity demanded and the quantity supplied during period t respectively, and P_t the price of the good during period t . X_t^D and X_t^S denote the variables, in addition to P_t and the error terms e_t^D and e_t^S , which influence D_t and S_t respectively. Equations (1) and (2) are standard demand and supply equations such that price is assumed to have a negative effect on demand ($a_1 < 0$) and a positive effect on supply ($b_1 > 0$). These equations are generalised expressions. In more rigorous terms, P_t is meant to refer to the price of the good relative to some general price index (eg, the RPI). In addition, P may appear in the equations in lagged form to reflect that D_t and S_t may respond to prices in previous periods (the lag may even be different in the two equations). The distinguishing feature of the model, giving rise to disequilibrium, is that P_t is *not* assumed to adjust each period to equate D_t and S_t . The four alternative methods proposed by Fair and Jaffee to estimate this model are summarised as follows.

(a) *Estimation Method 1: The Maximum Likelihood Method*

Let Q_t denote the actual quantity observed during period t . For the maximum likelihood method it is assumed that Q_t satisfies either the demand schedule or the supply schedule. Thus, combining (1) and (2) above gives:

$$Q_t = k_t (a_0 X_t^D + a_1 P_t + e_t^D) + (1 - k_t) (b_0 X_t^S + b_1 P_t + e_t^S) \quad (3)$$

(t = 1, 2, \dots, T)

where

$$k_t = \begin{cases} 0 & \text{if } Q_t = S_t \\ 1 & \text{if } Q_t = D_t \end{cases}$$

Thus, under this method the problem reduces to one of solving (3) for the values of parameters a_0 , a_1 , b_0 and b_1 and the T values of k_t (one for each time period) given observations on X_t^D , X_t^S , P_t and Q_t ($t = 1, 2, \dots, T$). The problem of estimation can be looked at, in other words, as one of choosing those observations (sample points) for which $Q_t = D_t$ ($k_t = 1$) and those for which $Q_t = S_t$ ($k_t = 0$) and then estimating the parameters of each equation by some standard technique, such as ordinary least squares, over the relevant sample points. It should be noted that this technique assumes that any given sample point can be classified either as a demand observation or as a supply observation, but not both. It is not possible, therefore, to specify using prior information the existence of periods of equilibrium. If this should occur for some value of t , Fair and Jaffee (1972) note that k_t must be arbitrarily assumed equal to zero or one.

An appropriate method of estimation of (3) is the maximum likelihood technique (in a generalised form to that of Quandt (1958)). This allows us to determine a "switching point" in a linear regression system and reduces to the problem of choosing the sample separation and corresponding estimated parameters (a_0 , a_1 , b_0 , b_1) that maximise the value of the log-likelihood function L whereby

$$\log L = -(m + n) \log \sqrt{2\pi} - m \log \hat{\sigma}_D - n \log \hat{\sigma}_S - (m + n)/2 \quad (4)$$

where m is the number of observations for which $Q_t = D_t$ (ie, $k_t = 1$) and n is the number of observations for which $Q_t = S_t$ (ie, $k_t = 0$). The terms $\hat{\sigma}_D$ and $\hat{\sigma}_S$ are the estimated standard deviations of e_t^D and e_t^S respectively (note that this function is similar in structure to that used in the Box-Cox test for functional form, full details of which are presented in Fleming and Nellis (1990) and included in the submitted material).

Thus, the procedure is to calculate $\log L$ for all possible pairs of supply and demand sample periods and to choose that pair for which $\log L$ is at a maximum. The estimates for a_0, a_1, b_0, b_1 , would then be the least squares estimates over the respective sample periods.

The above method of estimation in the context of disequilibrium between demand and supply is based on fairly weak assumptions. However, it may well arise that more information about market behaviour is available, thereby opening up the possibility of alternative estimating procedures. For example, it seems reasonable to expect that if the observed quantity (Q_t) is equal to either the quantity demanded or the quantity supplied, it will be equal to the *minimum* of these two quantities, ie:

$$Q_t = \min \{D_t, S_t\} \quad (t = 1, 2, \dots, T) \quad (5)$$

In other words, either demanders will go on unsatisfied ($D_t > S_t$) or suppliers will go unsatisfied ($S_t > D_t$).

Further information to aid estimation may derive from the assumption that the change in price is some function of excess demand existing in the market such

that ΔP_t may be used as an indicator of the *amount* of excess demand (or supply). That is, it may be possible to postulate the price-adjustment equation as follows:

$$\Delta P_t = f[D_t - S_t] \quad (6)$$

where the price change is assumed to be a positive function of the excess demand in the market (again, as noted earlier, P_t is to be interpreted as the price of the good in question deflated by the general level of prices). More specifically, it may be possible to postulate that

$$\Delta P_t \begin{matrix} > \\ < \end{matrix} 0 \text{ as } (D_t - S_t) \begin{matrix} > \\ < \end{matrix} 0 \quad (7)$$

or to postulate that

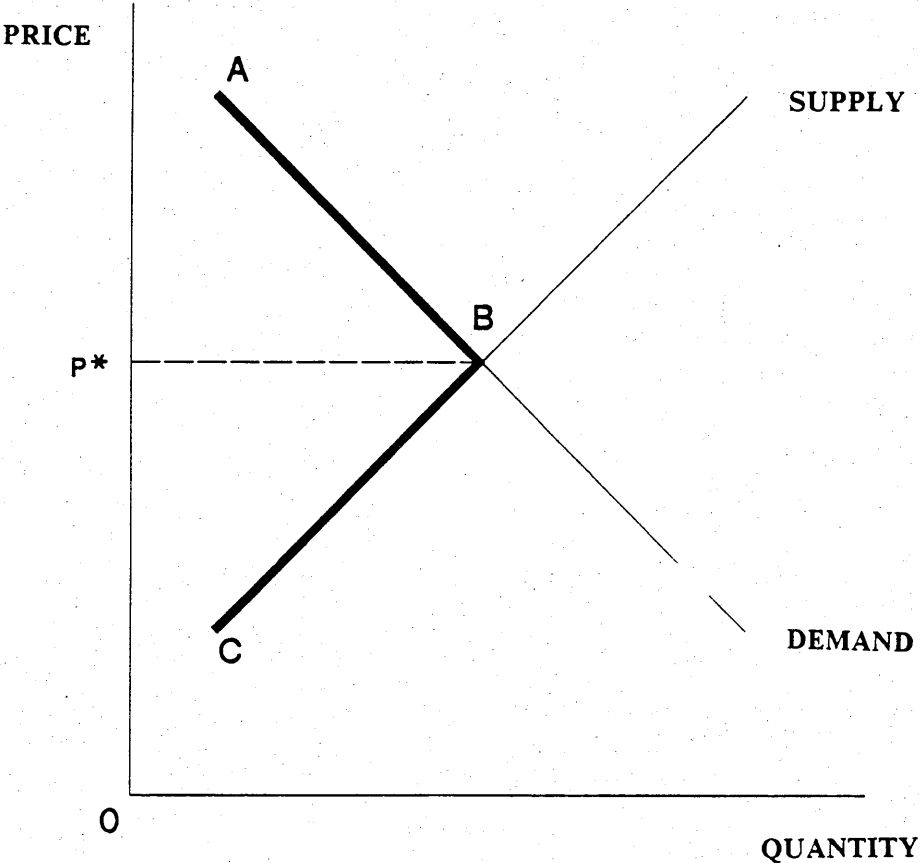
$$\Delta P_t = \gamma (D_t - S_t), \text{ with } 0 \leq \gamma \leq \infty \quad (8)$$

Equation (7) implies that the *direction* of ΔP_t is an indicator of excess demand while equation (8) implies that the *amount* of the price change is directly proportional to the *amount* of the excess demand. Below, equation (7) forms the basis for two further estimation methods (Directional Methods I and II) while equation (8) forms the basis for the last method to be discussed (The Quantitative Method).

(b) *Directional Method I*

This method of estimating markets in disequilibrium may be illustrated with reference to Figure 4.1 below where P^* represents the market clearing price. When

FIGURE 4.1 DEMAND AND SUPPLY RELATIONSHIPS IN THE PRESENCE OF DISEQUILIBRIUM



the quoted price $P < P^*$, there is excess demand which, from (7) above, implies that price must be rising. Furthermore, from (5) above, it is known that when $D_t > S_t$, supply will equal the observed quantity, and demand will be unobserved. Conversely, when $P > P^*$, $S_t > D_t$ which means that price must be falling and that demand will equal the observed quantity. Hence, in periods of rising prices only the supply schedule will be observed while in the periods of falling prices only the demand schedule will be observed (as shown by the bold lines mapped out by ABC in Figure 4.1).

Estimation using Directional Method I is, therefore, based on the separation of the sample observations into periods of excess demand and excess supply on the basis of the observed price changes. The supply function can be estimated over periods of excess demand and the demand function can be estimated over periods of excess supply. Hence, only the portions AB and CB of the demand and supply schedules respectively will be directly estimated with this method. Periods of temporary equilibrium ($\Delta P_t = 0$) will be included in both samples since both schedules are observed at such times.

(c) *Directional Method II*

The third method proposed by Fair and Jaffee is less dependent on ΔP_t as an indicator of excess demand or supply. It operates instead by postulating a number of different sample separations corresponding to alternative assumptions about the excess demand status of the market during the "doubtful" periods. The supply and demand equations are then fitted to each set of sample separations and the likelihood function described by (4) above evaluated for each case. The preferred sample separation is then taken to be the one that maximises (4). This

method is therefore a version of the maximum likelihood technique. Note, however, that since it relies on the evaluation of the likelihood function, demand and supply sample periods cannot overlap - sample points must be identified as belonging to the demand or the supply regime, but not both. This contrasts with the first directional method which assumes that points where $\Delta P_t = 0$ are equilibrium points and thus belong in both regimes.

(d) *The Quantitative Method*

The final estimation procedure considered by Fair and Jaffee (1972) stems from the postulation in (8) above that the adjustment process in the presence of disequilibrium takes the form

$$\Delta P_t = \gamma(D_t - S_t), \text{ with } 0 \leq \gamma \leq \infty \quad (8)$$

Solving this equation for the excess demand gives

$$(D_t - S_t) = 1/\gamma (\Delta P_t) \quad (9)$$

If γ can be estimated, then the actual amount of excess demand can be directly determined from the change in price and thus both the demand and supply schedules can be estimated over the entire sample period. The procedure thus involves the estimation of γ and the parameters of the demand and supply schedules simultaneously. Fair and Jaffee set out the steps of this procedure in full (pp. 505-507). These reduce to a single demand and a single supply equation, each to be estimated over the entire sample period, by making the appropriate adjustment for the change in price as follows:

$$Q_t = D_t - \frac{1}{\gamma} \left\{ \Delta P_t \right\} = a_0 X_t^D + a_1 P_t - \frac{1}{\gamma} \left\{ \Delta P_t \right\} + e_t^D \quad (10)$$

$$\text{where } \left\{ \Delta P_t \right\} = \begin{cases} \Delta P_t & \text{if } \Delta P_t > 0; \\ 0 & \text{otherwise} \end{cases}$$

and

$$Q_t = S_t - \frac{1}{\gamma} \left[\Delta P_t \right] = b_1 X_t^S + b_1 P_t - \frac{1}{\gamma} \left[\Delta P_t \right] + e_t^S \quad (11)$$

$$\text{where } \left[\Delta P_t \right] = \begin{cases} -\Delta P_t & \text{if } \Delta P_t < 0; \\ 0 & \text{otherwise} \end{cases}$$

4.5 Modelling Mortgage Rationing in the UK - Results and Conclusions

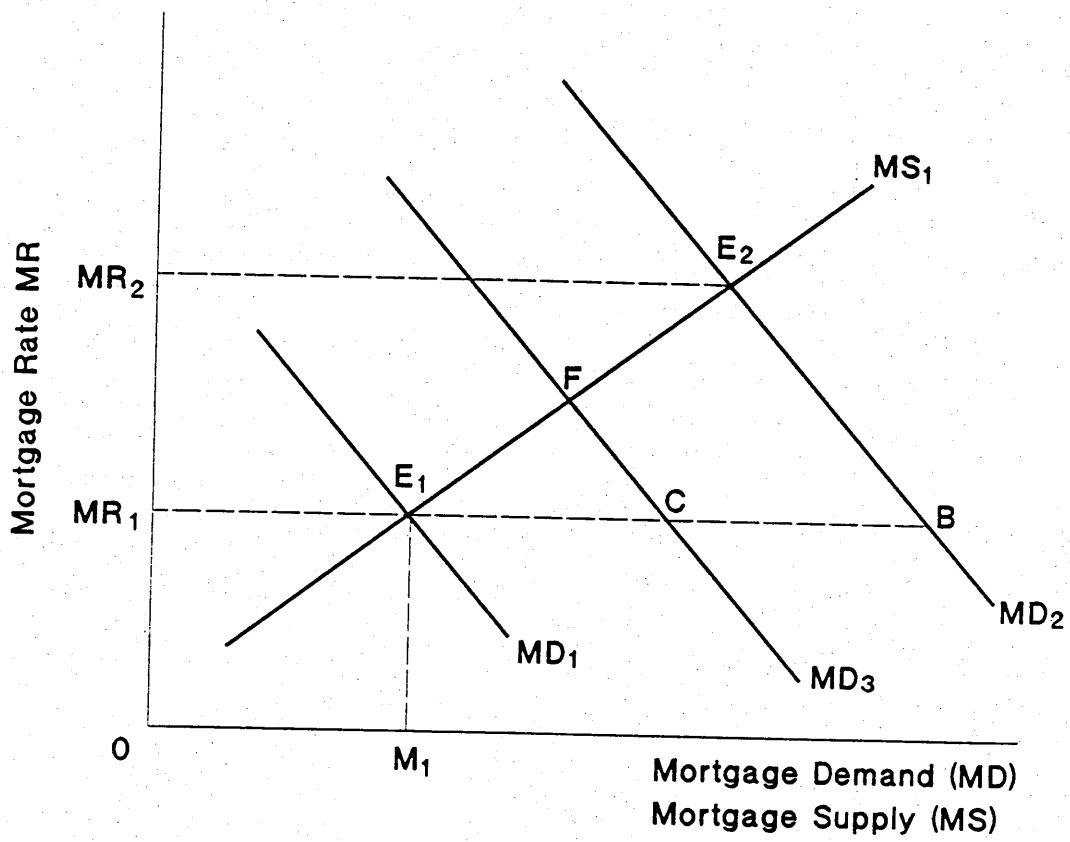
The pioneering work of Fair and Jaffee (1972), summarised above, has established a comprehensive framework for the study of disequilibrium market situations. Two of the studies presented in this submission have been based on this work (as well as other subsequent studies by Oztas and Zahn (1975) and Kent (1980)). These are reported in Nellis and Thom (1983 and 1986) and focus on modelling the disequilibrium nature of the UK housing market, in the presence of the rationing behaviour of UK building societies during the 1970s.

At the outset it may be useful to clarify some of the terminology used in the literature dealing with mortgage rationing. Kent (1980), for example, defines *equilibrium rationing* as a situation in which the adjustment of non-interest rate terms is sufficient to equate mortgage demand and supply when the mortgage rate is below its market-clearing level. In contrast, he defines *disequilibrium rationing* as a situation in which changes in these terms are *not* sufficient to clear the market. Oztas and Zahn (1975) also use the terms equilibrium and disequilibrium rationing

but, in contrast to Kent's approach, they define the latter as a situation in which the market is cleared by the adjustment of non-interest rate terms (when the actual mortgage rate differs from its equilibrium level) and equilibrium rationing as a situation in which rationing is by price (ie, by changes in the mortgage rate). Thus, while the terminology of Kent (1980) and Oztas and Zahn (1975) are the same, their meanings are quite different.

Nellis and Thom (1983), while following the approach of Kent, avoid the use of the terms "equilibrium" and "disequilibrium" altogether; instead they use the terms *market clearing* and *non-market clearing rationing*. The former exists when non-interest rate terms (such as loan-to-value ratios) adjust sufficiently to clear the market while the latter exists when these terms fail to clear the market. This distinction is illustrated with the aid of Figure 4.2 below. Consider an initial equilibrium, E_1 , where the mortgage rate (MR_1) is set a level at which mortgage demand (MD_1) equals mortgage supply (MS_1). If the market is competitive in the sense that the mortgage rate continuously adjusts to equate demand and supply, then MR would rise to MR_2 if the demand schedule shifts, say, to MD_2 , giving a new market equilibrium at E_2 . It is argued in Nellis and Thom (1983), however, that the UK mortgage market (during the 1970s) is not competitive in the way described and that MR does not necessarily respond to excess demand or excess supply. In other words, in the presence of excess demand E_1B , caused by a shift of the demand schedule MD_1 to MD_2 , the mortgage rate may be sluggish to adjust and may in fact remain at MR_1 . Market clearing rationing is said to take place, therefore, whenever other, non-interest rate terms (such as the loan-to-value ratio) are adjusted sufficiently to shift MD_2 back to MD_1 , regaining the initial equilibrium at E_1 . On the other hand, non-market clearing rationing exists when the adjustment of these non-interest rate terms is not sufficient to shift MD_2 back to MD_1 . For example, if

FIGURE 4.2 MARKET CLEARING AND NON-MARKET CLEARING
MORTGAGE RATIONING



demand is only shifted back to MD_3 in Figure 4.2, then non-interest rate lending terms will have succeeded in rationing CB out of the market, leaving an excess demand of E_1C . It should be noted that the term "market clearing rationing" as defined in Nellis and Thom (1983) is equivalent to the term "equilibrium rationing" as used in Nellis and Thom (1986). Both terms are used in the two separate studies to identify the same situations in which the market for funds is continually cleared by non-interest rate terms at each level of the mortgage interest rate (with hindsight it would have been more appropriate perhaps to have adopted the same terminology in both studies rather than use the separate terms "marketing clearing" and "equilibrium rationing").

The above discussion is intended to clarify and resolve some of the confusion that is likely to emerge concerning the use of different terminology in different studies of mortgage rationing. We turn now to examine in more detail the research reported in Nellis and Thom (1983 and 1986), providing a summary of the results and conclusions for each study. Both studies investigate the rationing behaviour of building societies in the UK during the 1970s and examine the extent to which changes in the mortgage rate and/or changes in non-interest rate terms have been sufficient to clear the market for mortgage funds during the period.

Several other studies of mortgage rationing have assumed that the mortgage rate fully describes the market price of credit for house purchase (see O'Herlihy and Spencer (1972) and Pratt (1980)). However, the approach taken in Nellis and Thom (1983 and 1986) is to treat the "price-vector" as multi-dimensional, including non-interest rate terms as well as the mortgage rate. Non-interest rate terms may involve varying loan-income ratios and loan-value ratios as well as giving consideration to the characteristics of the borrower (first-time buyer or existing

owner-occupier), length of savings record with the lending institution, etc. This approach is justified on the basis that in a rationed market the mortgage rate does not always adjust to its market-clearing or equilibrium level and, consequently, available funds have to be allocated by other means.

It is important to note that the two studies included in this submission differ, however, in several respects, the most important one being that in the 1983 study the demand side of the mortgage market is disaggregated between first-time buyers (FTBs) and existing owner-occupiers (EOOs) while the 1986 study examines the aggregate market. In addition, the former paper focuses only on the demand side of the market while the latter models both demand and supply separately. Consequently, the results of the two studies are not directly comparable. Both studies, however, take a common approach to the inclusion of non-interest rate terms in the estimation procedures. Obvious candidates to be included are the loan-income ratio, loan-value ratio and the period to maturity of the mortgage loan. It is assumed that all such terms change in the same direction (as argued in Vernon (1965) and Oztas and Zahn (1975)) and may be proxied, therefore, by a single variable. In the 1983 study the variable selected is the loan-income ratio. The main reason for choosing this is the belief that building societies are primarily concerned with the borrower's ability to finance periodic mortgage repayments. Given that mortgage rationing may be intensified during periods when the mortgage rate is high, in absolute if not relative terms, building societies may favour borrowers with relatively low loan-income ratios in an attempt to minimise the problem of front-end loading.

In Nellis and Thom (1983) non-interest rate terms, denoted by V , are proxied by the imposed loan-income ratio, L/Y , so that

$$V^i = L^i/Y^i \quad (1)$$

where $i = \text{FTB, EOO}$, L^i is the average loan granted to each buyer group and Y^i is the corresponding average nominal income. V^i is assumed to adjust to the degree of excess mortgage demand or supply in the market at any point in time so that

$$V_t^i / V_{t-1}^i = (MD_t^i / MS_t^i)^k ; \quad k < 0 \quad (2)$$

where MD and MS represent the desired nominal flow demand and supply of mortgages. If the market is always characterised by market clearing rationing (as defined earlier), then V^i adjusts to give

$$MD_t^i = MS_t^i = L_t^i , \text{ for all } t \quad (3)$$

In contrast, if there is non-market clearing rationing, then the change in V^i is not sufficient to clear the market and, as suggested by Fair and Jaffee (1972),

$$L_t^i = \text{MINIMUM} \left[MD_t^i , MS_t^i \right] \quad (4)$$

Consider the case illustrated by Figure 4.2 when MD_1 shifts to MD_2 giving excess demand of E_1B . V_t^i will fall relative to V_{t-1}^i and $L_t^i = MS_t^i$. From (1) above, taking logs of both sides, we have:

$$\ln MS_t^i = \ln L_t^i = \ln MD_t^i - (1/k) \Delta \ln V_t^i \quad (-) \quad (5)$$

where $\Delta \ln V_t^i (-) = \Delta \ln V_t^i$ when $\Delta \ln V_t^i$ is negative and zero otherwise. For illustrative purposes, if we assume that the demand for mortgage finance from FTBs or EOOs is a function of an income variable (Y^{FTB} or Y^{EOO}), the loan-income ratio applied to FTBs (V^{FTB}) or to EOOs (V^{EOO}) and the mortgage rate, then substituting for demand in equation (5) gives the following:

$$\ln L_t^{FTB} = a_0 + a_1 \ln Y_t^{FTB} + a_2 \ln V_t^{FTB} + a_3 \ln MR_t - (1/k) \Delta \ln V_t^{FTB} (-) \quad (6a)$$

$$\ln L_t^{EOO} = b_0 + b_1 \ln Y_t^{EOO} + b_2 \ln V_t^{EOO} + b_3 \ln MR_t - (1/k) \Delta \ln V_t^{EOO} (-) \quad (6b)$$

Equations (6a) and (6b) may then be estimated by standard regression techniques to test for the significance of $\Delta \ln V_t^i(-)$ in both cases. If this variable is found to be significant then we can conclude that mortgage demand (for FTBs or EOOs) is greater than mortgage supply when V_t is falling, and rationing is of the non-market clearing type. Alternatively, if $\Delta \ln V_t^i(-)$ proves insignificant, then the non-market clearing rationing hypothesis cannot be accepted. If the market is characterised by market clearing rationing then $V_t = V_t^*$, where V_t^* is that level of V_t (in either the FTB or EOO case) which will equate demand and supply, at a given mortgage rate.

In Nellis and Thom (1983), the final estimating equations for mortgage demand for each borrower category are expressed in general functional form as follows:

$$L^{FTB} = F(RY^{FTB}, MRT, V^{FTB}, PH, IPH) \quad (7a)$$

$$L^{EOO} = E(RY^{EOO}, MRT, V^{EOO}, PH, IPH) \quad (7b)$$

where L is average mortgage advance, RY is average real income, MRT is the mortgage rate adjusted for tax relief, V is the loan-income ratio, PH is a house price index and IPH is the percentage change in PH from one time period to the next (included to test the hypothesis that mortgage demand contains a speculative element).

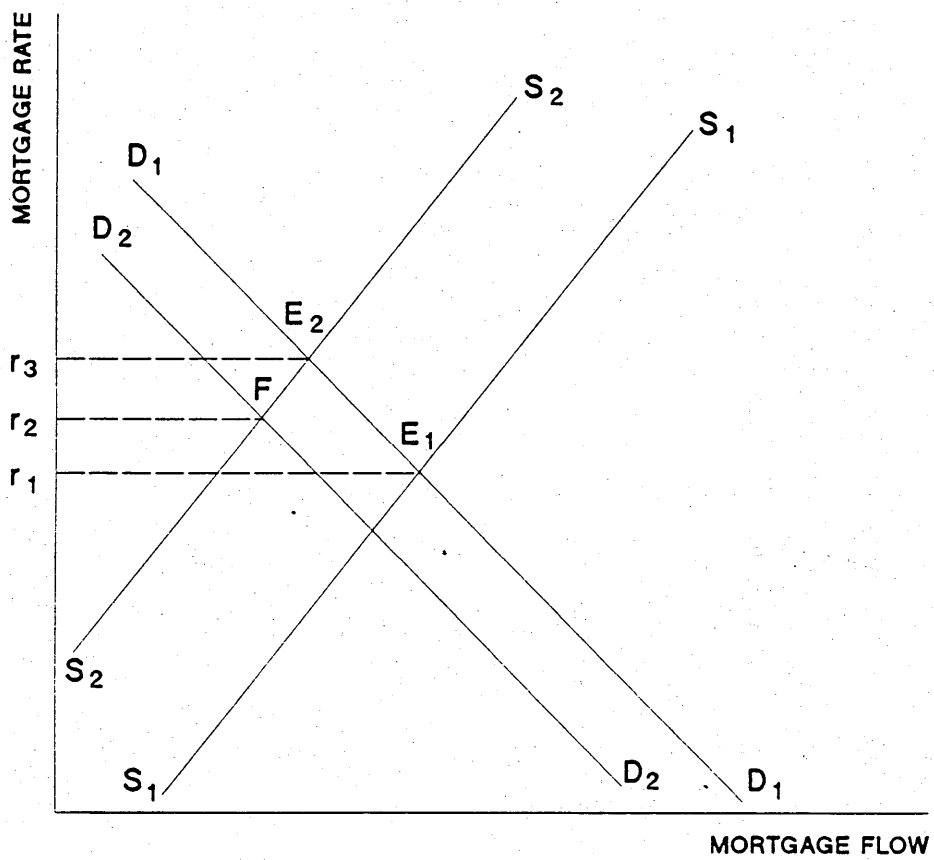
The results of estimating equations (7a) and (7b) by the method of ordinary least squares are reported in Nellis and Thom (1983), pp. 526-7. These indicate that the hypothesis that market clearing rationing exists cannot be rejected in both cases, and especially with regard to the first-time buyer group. The results also indicate that while the rationing variables V^{FTB} and V^{EOO} significantly influence L^{FTB} and L^{EOO} , respectively, the corresponding elasticities are relatively low. Nevertheless, it is important to note that the elasticity with respect to the loan-income ratio (V) is consistently greater than the elasticity with respect to the mortgage rate (expressed in real or nominal terms). Hence, mortgage demand is generally found to be more responsive to changes in non-interest rate terms than to changes in the mortgage rate. This finding is also confirmed in Nellis and Thom (1986). The relative inelasticity of mortgage demand with respect to the mortgage rate suggests that relatively large changes in the cost of borrowing may be required to clear the market in times of excess demand. Given the public and political concern that surrounds the cost of mortgage finance, it is concluded that "building societies may have a preference to allocate available funds on a non-price basis, rather than intensifying financing problems, for existing mortgage holders" (p. 528).

The analysis reported in Nellis and Thom (1983) is extended further in Nellis and Thom (1986). The more recent study, however, does not disaggregate the market in terms of first-time buyers and existing owner-occupiers and an alternative

view of the adjustment process in the context of disequilibrium is proposed. Figure 4.2, therefore, is modified as in Figure 4.3 showing a flow model of the equilibrium (ie, marketing-clearing) rationing hypothesis. Consider an initial equilibrium in the market at E_1 with $MR = r_1$, which is disturbed by a shock originating from the supply side, shifting the supply curve from S_1 to S_2 . Sluggish interest-rate adjustment implies that the mortgage rate may be initially raised to a level such as $MR = r_2$ which is below the new market-clearing level, r_3 . As discussed above, under the market clearing hypothesis rationing by lending institutions will tighten non-interest rate terms and force the demand curve for funds to shift from D_1 to D_2 , resulting in a short-run equilibrium at F. As the mortgage is subsequently adjusted towards r_3 , these non-interest rate terms are gradually relaxed so as to induce a rightward shift in the demand curve until the new long-run equilibrium is achieved at E_2 . Under this hypothesis it is therefore possible to estimate, simultaneously, demand and supply functions, even though the mortgage rate may differ from its long-run equilibrium level.

The adjustment hypothesis described above is tested in Nellis and Thom (1986) in the UK context with market demand specified as a function of real disposable income, YD, the tax-adjusted mortgage rate, $MR(1-\nu)$ where ν represents the marginal tax rate, lagged housing starts, HST, the relative real tax advantage of owner occupation, Z, and non-price terms. The vector of non-price terms are proxied by a single variable, namely the loan-value ratio, LV, defined as L/PH where L is the average mortgage approval and PH represents the price of housing. By definition, LV also equals 1 minus the average down payment ratio. Note that in Nellis and Thom (1983) the loan-income ratio was employed, rather than the loan-value ratio. However, since the common assumption in these models (as well as those by Kent (1980) and Oztas and Zahn (1975)) is that all non-price terms change

FIGURE 4.3 FLOW MODEL OF EQUILIBRIUM RATIONING HYPOTHESIS



in the same direction, this difference is not significant. The relative real tax advantage of owner-occupation is approximated by $Z = v.R.PH/P$ where R is a representative return on non-housing assets so that $R.PH$ equals the sum which PH would yield in non-housing assets (R is proxied by the yield on 20-year government bonds). P is a generalised price index (proxied by the price deflator for disposable income).

The results of testing the market-clearing hypothesis reported in Nellis and Thom (1986) contrast those presented in the 1983 paper and in the other studies of mortgage rationing cited above. It is found that a rise in the mortgage rate towards its market-clearing level (r_3 in Figure 4.3) is associated with a *tightening*, rather than a relaxation, of non-interest rate terms (proxied by the loan-value ratio). In addition, earlier research suggests that "since the mortgage rate is sluggish in adjusting to its market equilibrating rate the down-payment ratio will increase [loan-value ratio falls] to clear the market for excess demand in the short run" (Oztas and Zahn (1975), p. 193). The present results suggest, however, that the loan-value ratio is a *positive* function of real income.

This apparent contradiction between results suggests the need for an alternative mechanism for modelling the mortgage market. This alternative forms the basis for additional analysis reported in Nellis and Thom (1986). The basis for this is that "during periods of excess demand for funds, institutions discriminate in favour of borrowers whose preferences indicate that they are willing to accept some stringent non-price terms such as relatively low loan-value ratios. This implies that successful applicants are on their desired demand curves but the market may remain uncleared" (Nellis and Thom (1986), p.45). There are a number of key differences to note between this alternative approach and that reported in earlier studies. First,

it is not assumed that the market demand curve shifts in response to variations in non-price terms. This is the assumption employed in Oztas and Zahn (1975) and Nellis and Thom (1983) but it is now disputed in the more recent study. The rationale which has underpinned earlier studies of the market-clearing (equilibrium rationing) hypothesis is that tightening non-interest rate terms raises the marginal cost of equity in housing capital such that increasing the down-payment ratio leads to higher marginal costs of equity resulting in a decline in mortgage demand. The problem with this approach is that it confuses the concepts of total cost and marginal cost of housing equity. As argued in Nellis and Thom (1986):

"The total cost of housing equity is the income foregone by holding wealth in housing as opposed to non-housing assets. The marginal cost is the change in total cost from reallocating an additional unit of wealth. Marginal cost may therefore be interpreted as the average yield on non-housing assets, or the opportunity cost of the marginal unit of housing equity. Rising capital market yields may therefore induce individuals to reduce housing equity and to increase mortgage demand. That is, rising marginal cost may reduce the demand for housing services, but does not imply that the planned portion of any given purchase financed by a mortgage will be reduced. On the contrary, we expect desired loan-to-value ratios to be an increasing function of marginal cost." (p.46)

A second point of contrast between the original market-clearing hypothesis and the approach taken in Nellis and Thom (1986) is that the latter attempts to explain the equilibrium behaviour of non-price terms whereas the former assumes that the long-run value for this variable is constant. For example, in Figure 4.3 as MR is gradually raised towards r_3 , non-interest rate terms are steadily relaxed to

induce accommodating shifts in the demand curve. However, once equilibrium is attained at E_2 , then non-interest rate terms must have reverted back to the initial values at E_1 (since both points lie on the same demand curve). The former market-clearing hypothesis, therefore, implies that equilibrium values of non-price terms are independent of MR and, given mortgage supply, of the exogeneous variables in the demand function.

The alternative approach to modelling rationing behaviour in the UK market distinguishes two types of rationing - "borrower specific" and "loan specific". Borrower-specific rationing is defined as a process by which lending institutions discriminate in favour of certain borrowers (eg, first-time buyers) while loan-specific rationing means that institutions adjust the terms on which any given loan is offered. During periods of rationing it is assumed that institutions use the former type of rationing to determine priority. Variations in non-interest rate (loan-specific) terms are viewed as the method for determining which borrowers are satisfied but not as a means of inducing shifts in the aggregate flow demand curve.

In Nellis and Thom (1986) the demand side and supply side of the mortgage market are modelled separately (in contrast to the 1983 study which focuses only on the demand side). Demand is expressed in terms of the average loan-value ratio. This is modelled in nominal terms (L_t) as well as real terms, relative to house prices $(L/PH)_t$ and is assumed to depend on real per capital income of borrowers (Y_t), the mortgage rate (MR_t), the relative real tax advantage of holding wealth in housing capital (defined earlier, denoted Z_t) and the number of mortgage approvals (N_t). That is:

(a) *The Demand Side:*

$$L_t = F_1(PH_t, Y_t, MR_t, Z_t, N_t)$$

or $(L/PH)_t = F_2(Y_t, MR_t, Z_t, N_t)$

On the supply side, mortgage availability is measured by the number of mortgage approvals (N_t) which is assumed to depend on the average loan approval (L_t), changes in the stock of share and deposit liabilities (DSK_t), repayment of principal (REP_t), the mortgage rate relative to the return on non-mortgage assets (denoted $(MR/CR)_t$ and the liquidity ratio of building societies (LR_t). That is:

(b) *The Supply Side:*

$$N_t = F_3(L_t, DSK_t, REP_t, (MR/CR)_t, LR_t)$$

In contrast with the earlier market-rationing hypothesis, the results reported in Nellis and Thom (1986) suggest that the loan-value ratio is a negative function of the mortgage rate. In the approach used by Oztas and Zahn (1975) and Nellis and Thom (1983), for example, increasing the mortgage rate requires that institutions ease non-interest rate terms under the assumption that the market for funds is continuously cleared; ie, increasing the mortgage rate generates excess supply at any given loan-value ratio, with the consequence that L/PH must be increased simultaneously to shift the market demand curve to the right in Figure 4.3. The approach taken in the more recent study reported above suggests, on the other hand, that increasing the mortgage rate permits a decline in the loan-value ratio because individuals will, on average, seek smaller loans (accept greater equity) as the mortgage rate rises.

Finally, the results also indicate that the mortgage rate is a significant determinant of loan size but that the elasticity is relatively small. This conclusion is consistent in both studies included in this submission and suggests again that a relatively large mortgage rate increase may be required to eliminate any given level of excess demand. This provides a rationale for mortgage rationing - ie, in the 1970s, UK building societies apparently preferred "to accept the problems of extending the mortgage queue in order to avoid the generally unpopular and politically sensitive alternative of imposing "hardship" on a relatively large number of households" (Nellis and Thom (1986), p. 52).

It is clear from the analysis and results reported in the two studies included in this submission that the modelling of mortgage rationing poses considerable methodological and estimation challenges. The apparent contradiction in the papers concerning the testing of the market-clearing hypothesis highlights the instability of the underlying relationships when the market is disaggregated. At a more general level, the two studies point to the need for further research into credit rationing. At the same time they throw light on approaches to estimation in an important area of the economy where credit rationing has been (and may in the future be) extensively practised.

5. GENERAL SUMMARY AND CONCLUSIONS

This synopsis has reported on 11 research studies which form the submission of publications for the award of PhD under Regulation 14.9 of the Cranfield Institute of Technology. These studies focus on three interrelated aspects of the UK housing market dealing with (a) the measurement and interpretation of house prices, (b) the determination of house price inflation and (c) the role of building societies in the housing finance market. Each study has attempted to add to previous knowledge and understanding of the operation of the UK housing market while at the same time providing a platform for future research and debate. The purpose of this synopsis has been to place these studies in the context of other related research and in the context of developments in the wider economy. The periods covered by the statistical analysis presented here run from 1969 to 1980 in the case of the modelling of housing price determination and the role of building societies (in terms of their impact on house price inflation and the rationing of mortgage finance) and from 1983 to 1989 in the case of house price measurement and interpretation. This 20-year span has been a turbulent period for the UK housing market - for example, house prices have risen and fallen dramatically (both in nominal and real terms) at various times, owner-occupation has increased sharply from around two-fifths at the start of the period to roughly two-thirds by the end, the so-called "North-South divide" in terms of house price differentials has widened and, towards the end of the period, the cost of mortgage finance had reached record levels in real terms.

At the same time, building societies have seen their share of the mortgage finance market in terms of new commitments rise to well over 90 per cent in one year (1977) only to fall back to around 50 per cent ten years later in 1987. This dramatic swing in market share has been primarily due to the extensive deregulation

of the UK financial services sector in general since the advent of a Conservative government in 1979. With the abolition of exchange controls in that year and the removal of restrictions on bank lending in 1980 (the so-called "corset"), the financial services sector came under increasing pressure from foreign competition as the 1980s progressed. The Financial Services and Building Societies Acts of 1986 pushed forward still further and faster the policy of deregulation to the extent that today building society services are, for most purposes, direct substitutes to those provided by the traditional banking sector.

It is against this dynamic background that the studies included in this submission have been carried out. Particular attention is given to tackling the problems involved in the measurement and interpretation of house prices, involving seven of the submitted papers. The work in this area has resulted in the development of two new house-price measurement systems, based on the hedonic approach, which form the basis of the regular reporting of prices by the Halifax and Nationwide Anglia building societies respectively. The research has demonstrated the importance of standardising the mix of houses traded from one time period to the next and across regions in order to make comparisons on a "like-for-like" basis. Given that price indices play such an important part in the economy, it is important they should be constructed with as much accuracy and reliability as possible. The results of the research reported in the submitted papers highlight the extent to which the use of prices based on simple averages may give a misleading picture of true house price movements. It should be noted that the Halifax and Nationwide Anglia building society systems are the only sources which currently employ the hedonic technique in the UK. Their development, therefore, marks a major advance in this area.

The second area of research reported in this synopsis deals with the determination of house price inflation over time and examines in particular the extent to which the expansion of mortgage lending has been responsible for the rapid acceleration of house prices in the 1970s. Two studies are included, the first dealing with the UK housing market and the other with the Northern Ireland housing market. House price models are developed for both areas and employ the estimation methodology developed by Davidson *et al* (1978) which enables the development of a framework in which to model the short-run dynamic behaviour of agents around a long-term trend. The results of the UK study suggest that while building society lending expanded sharply in the 1970s this should not be regarded as the primary cause of the rapid inflation of house prices during that period. It is argued that to do so would be to ignore other important explanatory variables, namely the parallel growth in real incomes. This area of research has attracted considerable attention over the years and, as the behaviour and structure of building societies has changed, it is likely that this will continue to be an important area for future academic research.

The study of Northern Ireland house prices largely stems from the research carried out at the UK level and seeks to explain why house price inflation in Northern Ireland during the 1970s was the largest of all regions in the UK (with the exception of the South East). It is concluded that increased demand for housing in Northern Ireland during the period, unmatched by an increase in housing supply, offers the most plausible explanation for the unexpected surge of house price inflation there. In this respect key significance is attached to the increased availability of mortgage finance after 1973 following the establishment of the Northern Ireland Housing Executive.

The final section of the synopsis reports on two research studies which examine the rationing behaviour of building societies during the 1970s. A detailed methodological overview of the estimation of markets in disequilibrium is presented, drawing on the earlier work by Fair and Jaffee (1972). The studies examine the extent to which market clearing of mortgage finance is achieved through changes in the mortgage rate or through changes in non-interest rate lending terms. "Market clearing" ("equilibrium") rationing is defined as a situation in which the market for funds is continually cleared by non-interest rate terms at each level of the mortgage interest rate. On the other hand, non-market clearing (disequilibrium) rationing is defined when the adjustment of the non-interest rate terms is not sufficient to equate mortgage demand with mortgage supply. Both of the studies conclude that the mortgage rate is a significant determination of loan size but that the elasticity is relatively small. This suggests that a relatively large mortgage rate increase may be required to eliminate any given level of excess demand. This provides a rationale for mortgage rationing in the 1970s when UK building societies apparently preferred to accept the problems of extending mortgage queues rather than to take the generally unpopular and politically sensitive alternative of raising the mortgage rate to clear the market.

The studies of mortgage rationing included in this submission, however, are contradictory in one respect. One paper concludes that the hypothesis that market clearing rationing exists cannot be rejected while the other reaches the opposite conclusion. This contradiction is discussed in this synopsis and suggests that the main explanation is in terms of the disaggregation of the market examined in the earlier paper. The later paper also examines the supply side of the market. It is recognised, however, that much research still needs to be carried out to provide a more complete analysis and understanding of mortgage rationing. It is clear that

considerable instability of the underlying relationships arises when the market is disaggregated though the studies represented here have been useful in emphasising some of the estimation problems.

Finally, while the synopsis has brought together the background, theoretical frameworks and results of the submitted studies, it should also be pointed out that considerable attention has been given to surveying more recent studies by other researchers in these areas. A detailed list of references is therefore attached which, in conjunction with the references cited in the submitted papers, provides a relatively comprehensive source of information on the relevant areas of the UK housing market.

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The reference list below refers only to those articles which have been cited in this synopsis, including those which comprise the collection of research papers contained in this submission for the award of PhD. Further references relating to each of the research themes are contained within each of the submitted publications.

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APPENDIX

VOLUME I

SUBMITTED PUBLICATIONS

**ECONOMIC ASPECTS OF THE UK HOUSING
AND HOUSING FINANCE MARKETS**

by

JOSEPH G NELLIS

Submission for PhD under Regulation 14.9

1991

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The interpretation of house price statistics for the United Kingdom

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Received 1 September 1980, in revised form 17 December 1980

Abstract. A survey is made of all official and unofficial sources of statistics on house prices in the UK. This is followed by a critical appraisal of the evidence they provide about national and regional price levels and about house price inflation. Attention is focused on two crucial factors: the representativeness of the data and the heterogeneity of houses. It is concluded that incomplete coverage of all house transactions means that most series tend to overstate price levels and that intertemporal and interregional comparisons are sensitive to the composition by type of houses traded.

1 Introduction

Most statistical surveys of house prices in the United Kingdom are limited in scope to houses purchased with the aid of loans from building societies. The official statistics compiled by the Department of the Environment (DoE), are based on two such surveys: a large-scale survey (referred to here as the 'DoE/BSA survey') for the collection of aggregate data and a small-scale ('five per cent sample') survey for the collection of data in more detail. Unofficial sources are provided by individual building societies which make analyses of the houses on which they themselves have given loans; these are useful inasmuch as they predate or supplement the official statistics.

The data are used mainly to measure average prices, changes in prices over time, and differences in the price level between one region and another. The latter reveal marked disparities in interregional price levels and, over the last few years, have indicated considerable differences in regional rates of inflation. For instance over the period 1975-1979 the DoE data indicate that regional price increases varied from 12% per annum (East Anglia) to 22% per annum (Northern Ireland) with the average price in Northern Ireland rising from a level of 15% below the UK average in 1975 to a level of 10% above in 1979.

The explanation of these differences rests in part upon the nature of the statistics themselves: not all houses are purchased with the aid of building society mortgages and houses themselves do not constitute a homogeneous product. These facts, therefore, raise some important questions about the use and interpretation of the available data and they form the focus of attention in this paper. Both the official and unofficial sources are considered, but particular attention is directed towards the official data which naturally constitute the principal source of information. The available sources are first described in section 2. Section 3 proceeds to an appraisal of the evidence they provide, and section 4 summarises the salient features of the discussion and draws some conclusions.

2 The sources

Statistics are available currently from eight main sources, four official and four unofficial; a ninth source provides data for the postwar period up to 1970 only. All but three of these are based on building society data. For convenience and succinctness a tabular summary of these sources is provided in table 1. We provide here only brief supplementary notes on the nature of these sources and draw attention to their distinguishing characteristics.

Table 1. Summary of published sources of price statistics—occasional ad hoc analyses and surveys are excluded.

Source and form of data	Mortgage timing ^a	Period covered and frequency	Coverage		Breakdowns by			Publication (see appendix)	
			country	dwelling	region	dwelling characteristic			cross classifications
						new	other		
<i>DoE/BSA survey</i> ^b									
Index and average prices	hybrid	1956-1975	GB	x				<i>HS and HCS</i>	
Index	approved	1970-	UK	x				<i>HCS and BSA Bulletin</i>	
Average prices	approved/completed	1975-	UK	x	x			<i>HCS and BSA Bulletin</i>	
<i>DoE five per cent sample</i> ^c									
Average prices	completed	1968-	UK	x	x		FTB:O/O	<i>HCS and BSA Bulletin</i>	
<i>Inland Revenue</i> ^d									
Average price	completed	1973-	E&W	x	x		FH/LLH	<i>Economic Trends</i>	
<i>Nationwide</i> ^e									
Index	approved	1946-	UK	x	x		FTB:O/O	<i>Nationwide Bulletin</i>	
Average prices		then Q		x	x		(x)		
<i>Abbey National</i> ^f									
Average prices	completed	1976-1978 ⁽²⁾	UK	x	x			<i>Homes</i>	
	approved	1978 ⁽³⁾ -		x	x				
<i>Times/Halifax</i> ^g									
Index	approved	June 1975-	GB	(x)	x			<i>The Times newspaper</i>	
Average prices									
<i>ISVA/FW</i> ^h									
Housing index and average price	see footnote	April 1978-	E	x	x			<i>Valuer</i>	
<i>Survey of Insurance Company Mortgages</i> ⁱ									
Average prices	completed	1968-	UK	x	x			<i>HCS</i>	
<i>LCES</i> ^j									
Index of vacant possession prices	completed	1900-1970	GB/UK	x				<i>Key Statistics 1900-1970</i>	
		1950 ⁽³⁾ -1962 ⁽⁴⁾	GB/UK	x				<i>LCEB</i>	

Key: A ≡ annual; BA ≡ biannual; E ≡ England; E&W ≡ England and Wales; FH ≡ freehold; FTB ≡ first-time buyer; LH ≡ leasehold; M ≡ monthly; O/O ≡ previous owner occupier; Q ≡ quarterly, and a superscript on a date denotes the appropriate quarter for that year. A cross (x) signifies the availability of data in current regular analyses.

- ^a Approved, completed, or hybrid of these two.
- ^b For *HS* and *HCS*—average prices from 1963 only, and covered building societies with 75% of assets. For *HCS* and *BSA*—covers building societies with 90% of assets from 1975, with pre-1975 figures estimated.
- ^c 5% sample of mortgages. Survey commenced in late 1965, but present analyses run from 1968⁽²⁾. Dwellings for owner occupation only. Various unpublished analyses are available on request (see Evans, 1975).
- ^d Surveys of conveyancing in one week each year. Average values may be calculated from number and value of sales. Earlier analyses for three bedroom semidetached houses alone classified by age, by region, by conurbation/other urban/rural for the period 1966-1973 were published in *HS* and *HCS*.
- ^e The cross classifications are type x region x (age) and FTB:O/O x region. Dwellings for owner occupation based on all the Society's mortgages less: those at the extreme ends of the price range, exceptionally large dwellings, sales to sitting tenants and other sales below market price, dwellings built before 1800. Currently, indices are calculated from average price per square foot of superficial floor space weighted by region and property type (see text). Secondhand dwellings are subdivided currently into 'modern' and 'older' categories (formerly by price bracket).
- ^f The cross classifications are type x age x region and type x age x FTB:O/O. The survey covers all the Society's mortgages.
- ^g Based on mortgages approved by the Halifax Building Society. New house price data published irregularly.
- ^h Based on valuations of 'typical' houses by members of the Incorporated Society of Valuers and Auctioneers—currently (January 1980), 80 estate agents provide 474 quotations for 6 house types.
- ⁱ Based on returns from a sample of insurance companies which generally account for about 50% of insurance company advances for house purchase.
- ^j Based on crude average prices using data from Co-operative Permanent Building Society (now Nationwide) and the Halifax Building Society for dwellings sold with vacant possession and for owner occupation. Houses with shops and sales to sitting tenants excluded. (Note: the index from 1900 to 1945 is based on indices of building costs.)

It should be noted at the outset that prices may be recorded at more than one point in time during the house-buying process. Two stages can be distinguished: the mortgage approval stage (that is, commitment to advance) and the mortgage completion stage. Approval-stage data provide the more up-to-date indicators of price movements. House prices at this stage reflect agreed selling prices at that time. The completion stage is when the house actually changes hands. This transfer generally takes place two or three months after the mortgage has been approved. Thus, prices at the completion stage will reflect agreed selling prices two or three months earlier. On the other hand, completions data are, in a sense, more accurate in that they represent only those dwellings that are actually purchased (a number of mortgages approved do not result in completed transactions).

2.1 DoE/BSA survey

This is a large-scale survey in which information is currently obtained from a panel of about fifty building societies, including most of the larger ones, whose combined assets represent about 90% of the total assets of the movement. A return is obtained of the total number of mortgage loans made in each period (currently monthly) and the total value of houses covered. It thus provides the basis for measuring average prices only and on a national basis only: no subdivision according to dwelling characteristics (other than between new and second-hand) or region is possible. Initially coverage was confined to Great Britain and no distinction was made about the timing of the mortgage data—that is, whether it referred to mortgages at the approval or at the subsequent completion stage. Such a distinction is now made and the coverage has been widened to the UK. These data are published in the form of average prices for new and secondhand dwellings separately at both the approval and completion stages, together with an index for new dwellings at the approval stage (see table 1).

2.2 DoE five per cent sample survey

This survey, commenced in late 1965, is again based on returns from building societies (selected societies stratified by size) from which is drawn a sample of approximately 5% of mortgages completed in respect of dwellings intended for owner-occupation. A full description of the survey has been provided by Evans (1975). It is this source which is used as the basis of the official series of average regional house prices. Information is also collected about the characteristics of the dwellings mortgaged (as well as about the mortgage advances and applicants), but of necessity only a limited number of analyses are published.

2.3 Inland Revenue—surveys of conveyancing

These surveys have been conducted annually since 1973 on the basis of the 'particulars deposited' on the transfer of interest in real property (land and buildings). They are not intended to provide information about house prices as such, but information about the number of transactions and their total value enables average values to be calculated. With regard to the housing market, they are a particularly valuable source of information in that they cover all transactions, not simply those financed by building societies, and they allow a distinction to be made between freehold and leasehold property. On the other hand, the survey is confined to England and Wales and to transactions in one week each year (some transactions are multiple transactions).

2.4 Nationwide Building Society

This society, formerly the Co-operative Permanent Building Society, has made analyses of the houses on which it itself has provided mortgages (timed at the approval stage) for the whole of the period since the end of the Second World War. Thus it predates the official DoE series and for this reason provides a particularly valuable source.

The index numbers which the society calculates are also especially useful in that the index of new house prices is not based simply on average prices per dwelling but makes certain allowances for the influence of particular house characteristics and regional factors. The effect of house size has been allowed for from the last quarter of 1959 by using prices per square foot of floor space (however, this raises problems of its own—see section 3 below). In addition, separate analyses according to house type have been made since the fourth quarter of 1973. Regional factors have been allowed for by adopting a retrospective system of regional weights. Analyses of secondhand house prices also differentiate between 'modern' and 'older' type properties.

The society is one of the country's largest, and the number of houses covered in the analyses is greater than the number included in the DoE five per cent sample. On the other hand, it has to be borne in mind that the transactions of one society may not be representative of all transactions. For instance, societies may differ with regard to their lending practices either with respect to the categories of property on which they are prepared to lend and the categories of purchaser to whom they are disposed to make advances. Further, regional bias may be present if the regional distribution of one society's activities is not coincident with that of all societies.

2.5 *Abbey National Building Society*

This society has made analyses of the houses on which it provides mortgages only since 1976. It provides in the main, therefore, a supplementary source of information, although occasional additional analyses provide data not available elsewhere (see table 1). As in the case of the Nationwide, the society is one of the country's largest and the number of dwellings included in the analyses is greater than in the DoE five per cent sample; again, however, it may not provide a sample that is representative of all transactions.

2.6 *Times/Halifax*

This source provides monthly series for secondhand houses (data for new houses are only published irregularly) based on mortgages approved by the Halifax Building Society (the largest society in the UK). Analyses are confined to national and regional figures and, as in other building society data (except the Nationwide), are based on crude averages. It represents, therefore, a further supplementary source (rather than a source of new information) though at a greater frequency than other individual societies.

2.7 *ISVA/FW housing index*

This source, based on valuations of 'typical houses' (see table 1) by members of the Incorporated Society of Valuers and Auctioneers in conjunction with the *Financial Weekly*, differs from all others in that it is not based on actual transactions. It contains, therefore, an important subjective element and is difficult to evaluate. From the point of view of measuring price trends unobscured by changes in standards and the mix of houses etc, it may possess some advantages, but from the point of view of measuring average price levels it would seem to have little to offer over other sources. As yet it covers a period of less than two years and it has not been included in the analyses made below.

2.8 *Survey of insurance company mortgages*

This survey has been made regularly since 1968 and is based on returns from a sample of insurance companies which generally account for about 50% of insurance company advances for house purchase in the United Kingdom (see table 1). It will be appreciated that this source is not comparable with the others surveyed in this review because it covers a very small fraction of total house transactions in a somewhat unrepresentative section of the market (namely transactions at the upper end of the price range). For further details see DoE (annually).

2.9 LCES index of vacant possession prices

This index was compiled by the London and Cambridge Economic Service on the basis of data supplied by the former Co-operative Permanent Building Society (now Nationwide) and the Halifax Building Society. It is now of historic interest only but it usefully provides an index of house prices as such, back to the end of the Second World War. It should be noted that the index is also carried back to 1900, but on the basis of indices of building costs, rather than actual house prices [for details see Adams (1954) and LCES (1971) and for a discussion of the indices used see Fleming (1966; 1980)]. Again, it was based upon crude averages and covered secondhand houses only—for further details see table 1.

3 Appraisal—the evidence and its interpretation

We concentrate attention in this section on the three principal uses of the data:

- (1) the measurement of national price levels;
- (2) the measurement of price changes over time;
- (3) the measurement of regional price differentials.

The measurement of price levels is particularly dependent on the representativeness of the data. Since most of the data derive from building society sources, the first issue concerns the representativeness of building society transactions in the context of the total housing market.

3.1 Price levels—building societies and the housing market

Building societies are the major source of loans for house purchase in the UK, but they are not the only source: finance is also provided by insurance companies, banks, and local authorities as well as by ready money and loans from other sources. Comprehensive statistics of the relative importance of these sources are not available, but estimates drawn from the 'National Movers Survey' carried out by the DoE in 1973 suggest that at that time building societies were responsible for financing only two-thirds of house purchases (DoE, 1977, page 83). From the point of view of measuring house prices this would be of no consequence if there were no difference between the building society sector of the housing market and those served by the other sources of finance. There is evidence, however, to suggest that this is not the case. The survey referred to above (DoE, 1977, page 83) showed that house transactions financed by insurance companies and banks were at higher average price levels than building society transactions, and those financed from other sources were generally lower priced. Subsequent data from a 20% sample of sales of dwellings in 1975, particulars of which were returned to the Inland Revenue, indicate that both mean and median prices drawn from the official building society surveys were generally higher than for all transactions (table 2). It will be seen that this was particularly the case with secondhand dwellings, a major explanation being that building societies financed a relatively small proportion of such dwellings at the lower end of the price range. There would appear to be no reason to believe that these surveys refer to atypical years. Our conclusion is, therefore, that the official statistics should be regarded as tending to overstate the true average price level.

Whether or not the same is true of the unofficial sources is difficult to say with any assurance since it must depend in part upon the particular lending practices of particular societies. Table 3 compares the evidence available from each survey for each year from 1975. Comparing individual societies with the official DoE data it will be seen that there are some notable differences. The general tendency is for the Nationwide average price to be below the DoE price and for the other societies to vary around it. The reasons for this may rest on regional biases, the lending practices of the societies, or differences in calculation methods. In the case of the Nationwide

data, specific allowance is made to eliminate regional bias, but there are differences in calculation methods: the DoE data represent crude averages whereas the Nationwide data are weighted according to region, size, and type of property (table 1 refers) and it is possible that this accounts for at least some of the difference. No obvious explanation can be offered for the price levels produced by other societies which vary inconsistently around the DoE figures.

Table 2. 1975 house prices (in £s) for building societies and total market^a. (Sources: DoE, 1977, chapter 6, appendix E; DoE, 1978, table 38.)

	Mean	Median
<i>New dwellings</i>		
Building Societies—DoE/BSA survey	12 234	—
Building Societies—DoE 5% sample	12 013	10 300
Total market (all sales)	11 860	10 350
<i>Secondhand dwellings</i>		
Building Societies—DoE/BSA survey	11 880	—
Building Societies—DoE 5% sample	11 734	10 460
Total market (all sales)	10 949	10 000

^a The data on 'all sales' refer to England and Wales whereas for building societies they refer to the UK. Adjustment of the latter to exclude Scotland and Northern Ireland (where average prices at this time were lower) would tend to raise the figures still further over those for all sales.

Table 3. Average UK house prices (in £s), 1975–1979: comparison of sources. (Sources: see table 1 and appendix.)

Date (fourth quarter)	Nationwide		DoE/BSA survey		DoE 5% sample	Inland Revenue ^b	Abbey National	Times/ Halifax
	approved ^a		approved	completed	completed	completed	completed ^c	approved
<i>Secondhand houses</i>								
1975	11 900	10 210	12 291	12 189	11 917	na		12 533 ^d
1976	12 810	10 990	13 170	12 996	13 029	na		13 413 ^d
1977	13 710	11 760	14 153	13 970	13 968	na	14 252	14 580 ^e
1978	17 720	14 940	17 765	17 046	16 890	na	18 119	17 691 ^e
1979	22 680	19 670	22 725	21 749	21 474	na	23 656	22 339 ^e
<i>New houses</i>								
1975	11 950		12 746	12 566	12 500	na		13 311
1976	13 190		13 831	13 522	13 498	na	13 274	14 417
1977	14 660		15 442	14 900	15 004	na	14 601	14 406
1978	18 300		19 550	18 343	18 638	na	19 476	20 699
1979	23 420		25 037	23 590	23 355	na	25 052	25 496
<i>All houses</i>								
1975	11 280		12 367	12 255	12 024	9 767		12 678
1976	12 200		13 280	13 091	13 114	10 418	13 170	13 592
1977	13 140		14 343	14 115	14 139	11 798	14 092	14 794
1978	16 720		18 049	17 207	17 208	13 963	18 387	17 993
1979	21 540		23 066	22 049	21 807		23 894	22 597

^a For secondhand houses the figures are for modern and older houses, respectively.

^b Coverage confined to England and Wales and to conveyances in one week in October or November each year.

^c Abbey National figures are based on mortgage approvals from 1978 onwards.

^d December figures.

^e November figures (seasonally adjusted from 1978).

na ≡ not available.

3.2 Price changes over time

The measurement of changes in the average price of housing over time raises conventional index number problems in an acute form. House prices are determined, given supply and demand conditions in the market [for discussion see Mayes (1979), Nellis and Longbottom (1981)], by a multiplicity of factors relating either to the physical characteristics of the house itself (type, size, age, condition, and other qualitative variables) or to the place in which the house is situated (including the social and physical characteristics of the environment, the neighbourhood, and the region). The average house price at any point of time will naturally reflect the combined influence of these factors at that time. Similarly, changes in average prices over time will reflect changes in the incidence of these factors on the houses traded as well as price movements as such. A true price index must take account of these other determinants of prices. The official index of house prices is not a true index in this sense, but is based simply on changes in average prices (for new houses). Interpretation of the official figures, therefore, needs to be made in the context of the influence exerted by changes in the composition of the mix of houses being traded. Attention is turned here to the influence of the physical characteristics of the houses themselves; the influence of regional factors is considered in section 3.3. Attention is focused again mainly on the official statistics followed by a consideration of the methodology used in the unofficial sources.

(a) Price trends of new and secondhand houses

As noted above, the official index is based on average prices in the UK for new houses only. It may not necessarily be representative of all houses being traded (including secondhand houses which constitute, indeed, the major part of transactions—over 80% of building society advances in recent years). To the extent that secondhand and new houses are fairly close substitutes one would expect a fairly close correspondence in price movements. In fact, over the period since 1975, the official data show new house prices regularly moved ahead at a faster rate than secondhand prices (table 4): in actual price terms a differential of £455 in the fourth quarter of 1975 had widened to £2300 by the fourth quarter of 1979—see table 3. This tendency for new house prices to move ahead faster is confirmed by the Nationwide data (table 3). The official index of house prices—based on new houses alone—cannot, therefore, be regarded as a representative index for all houses (a measure which would be dominated by the, smaller, movement for secondhand houses). It should be appreciated, however, that a similar index for secondhand houses may be calculated as average price data for new and secondhand houses are published separately by the DoE (table 1 refers).

Table 4. Average percentage change in average price—mortgages approved, fourth quarter each year. (Source: DoE/BSA survey—see table 1 and appendix.)

	1976	1977	1978	1979	Average 1975-1979
New houses	8.5	11.7	26.6	28.1	18.4
Secondhand houses	7.2	7.5	25.5	27.9	16.6

(b) The effect of house type on price

Substantial differences exist in the price of different types of dwelling: in 1979, for instance, detached houses, at one extreme, were over 50% more expensive than all dwellings, whereas terraced houses, at the other extreme, were 25% cheaper (table 5). Changes over time in the mix of dwellings by type, therefore, may have an important influence on the overall average price and thus obscure the true price movement. In fact, notable changes have taken place in the composition by type of traded dwellings: there have been marked increases in the proportion of detached and terraced houses,

flats, and maisonettes, but a decline in the proportion of bungalows and semidetached houses—a change which has been occurring gradually, but fairly consistently, over a number of years (summary details are given in table 6). We now proceed, therefore, to examine the effect of these changes on average prices over time.

Table 7 shows price indices for each type of dwelling using unpublished data drawn from the DoE's five per cent sample survey from 1975 (earlier data are not readily available). It also shows two series for all types of dwelling combined: the first, based on the actual average price each year, reflects the combined effect of price movements for each type and changing composition by type ('variable weights'); the second series removes the composition effect by holding it constant through the use of fixed (1975) weights. It will be seen, first, that there are some notable differences in the rate of price increase for different types of dwelling and, secondly, that by holding the composition by type constant, the index for all types combined shows a greater rate of increase than the index based on the crude average price each year. This finding is accounted for by the fact that the house types increasing least in price

Table 5. Price differentials by type of dwelling, UK 1979—average price expressed as a percentage of UK average. [Source: DoE 5% sample survey (unpublished data).]

Bungalows	Detached houses	Semidetached houses	Terraced houses	Flats and maisonettes	All types
109	151	90	75	82	100

Table 6. Composition of building society mortgages by type of dwelling (UK) as a percentage of all mortgages. [Source: DoE 5% sample survey (DoE, 1972-1980).]

Year	Bungalows	Detached houses	Semidetached houses	Terraced houses	Flats and maisonettes	Others
<i>New dwellings</i>						
1969	26.6	22.3	35.4	12.6	3.2	—
1975	15.2	34.6	29.7	14.4	6.0	—
1979	15.2	38.8	25.6	15.1	5.2	0.1
<i>Secondhand dwellings</i>						
1969	13.1	17.4	40.6	24.9	4.1	—
1975	12.0	21.0	35.9	23.6	7.4	0.1
1979	8.8	17.6	34.3	30.4	8.8	0.1
<i>All dwellings</i>						
1969	17.2	18.9	39.0	21.1	3.8	—
1975	12.6	23.6	34.7	21.8	7.1	0.1
1979	9.9	21.2	32.8	27.8	8.2	0.1

Table 7. Prices indices by type of dwelling (UK): 1975 = 100. [Source: DoE 5% sample survey (unpublished data).]

Year	Bungalows	Detached houses	Semi-detached houses	Terraced houses	Flats and maisonettes	All types ^a	
						variable (current) weights	fixed (1975) weights
1976	112.0	110.1	109.8	104.3	106.3	107.8	108.9
1977	120.3	120.4	118.5	112.0	112.2	115.8	117.0
1978	141.3	138.7	135.0	127.3	130.5	132.3	135.3
1979	182.2	178.3	174.4	162.2	164.3	169.0	173.8

^a Including 'other' (unspecified) types.

(flats, maisonettes, and terraced houses) have increased proportionately in importance whereas those increasing most in price (bungalows in particular) have declined proportionately.

The implication is, therefore, that failure to eliminate the influence of changes in the composition of traded dwellings by type appears to have had the effect of understating the extent of price increases. This conclusion is put somewhat tentatively for it requires the assumption that the incidence of factors bearing on price, other than type of dwelling—that is, regional factors, age and size of dwelling, etc—are not also acting to produce the result obtained above.

(c) *Time trends and the unofficial sources*

We now turn to examine briefly the unofficial sources in the context of measuring price changes over time. One of these—the Nationwide—is particularly notable for it does attempt to produce a standardised index. Other societies use crude average prices, as in the official index.

The Nationwide index is calculated from average prices per square foot of superficial floor space (after the exclusion of certain categories of property—see table 1) weighted by region and property type. The weights are derived from the pattern of mortgages approved by the society (apart from one exception noted below) over a period of eight quarters (these are 'rolled forward' each quarter in order to maintain a 'realistic' pattern of weights). The possibility of regional bias in the pattern of Nationwide lending is allowed for by using regional weights corresponding to DoE estimates of the number of owner-occupied dwellings. There is an implicit assumption, therefore, that the volume of house transactions in each region corresponds to the size of regional house stocks. In fact, judging by the evidence obtained in Inland Revenue surveys of conveyancing, this does appear to be a reasonable assumption (Dunn and White, 1979, page 109).

The use of prices per square foot of superficial space rather than actual prices is designed, of course, to allow for the effect of differences in the size of dwellings. It is possible, however, that this practice may introduce bias for it is likely that prices increase less than proportionately with size [this has been demonstrated in the case of local authority houses by Reiners (1957)]. The consequence would be, therefore, the introduction of a downward bias through the use of prices per square foot when areas rise (and vice versa) and, equally, an upward bias through the use of average prices per dwelling (and vice versa). A simple example will illustrate the point. Assume that price (in £s) is related to area (in ft²) as follows:

$$\text{calculated price} = 1000 + 1.5 \times \text{area} .$$

Assume also that between period one and period two the size of dwellings has changed, but the price level has not. The effect would be as follows:

	area (ft ²)	calculated price (£)	price per ft ² (£)
period 1	1000	2500	2.50
period 2	1200	2800	2.33
change (%)	+20	+12	-6.8

Thus, although the price level has remained unchanged, using average prices or prices per square foot indicates an increase and a decrease in price respectively when area is increased (and vice versa). Reiners (1957) showed that only 19% of the cost (excluding land) of local authority dwellings varied directly with area (58% varied with linear dimensions). In the private sector the inclusion of land would probably tend to reduce the proportion of costs varying directly with size of dwelling.

Whether or not such a bias is introduced in practice depends on how far average house sizes have tended to change. There is a clear relationship between size and type of dwelling and, as we indicated above, the mix of traded dwellings by type has changed quite markedly over the last few years. On the other hand, the Nationwide treats each type of dwelling separately, so that any bias on account of size changes introduced via changes in composition should not arise. The possibility of bias arising because of trends in average size *within* particular categories of dwelling type cannot be excluded, but the available data do not allow the possibility to be examined further.

The Nationwide index itself is compared with the official DoE index over the period from 1973 fourth quarter (when the current Nationwide methodology was introduced) in table 8. It will be seen that in fact the Nationwide index runs ahead of the official index. This feature is what one would expect given the influence of changes in the mix of dwellings by type, discussed earlier; on the other hand, the trend it shows could be one which is biased one way or the other on account of the use of prices per square foot. On balance it is reasonable to conclude that the Nationwide index has the merit of more nearly approaching a true price index than the official published index of crude average prices (always accepting that this one society is representative of all transactions), but that the evidence it provides should be interpreted carefully because of the technical problems we have discussed and because of the fact that all of the data available (from all sources) will be affected by qualitative changes which are not readily amenable to measurement at all.

With regard to the evidence on price trends offered by other societies, it should be recalled that the data are comparable to the official series in being based on crude averages. The evidence itself, however, covers as yet only short and varying periods of time and both the Abbey National and Times/Halifax data change their bases: thus comparisons at this stage are limited. It will be seen from table 3, however, that the Abbey National price trend appears generally consistent with the official series whereas the Times/Halifax data do not show a consistent relationship with the official series. There are no obvious explanations for these features of the data.

Table 8. Price indices for new houses—mortgages approved (UK), 1973-1979. (Source: see table 1 and appendix.)

	Date (fourth quarter) ^a						
	1973	1974	1975	1976	1977	1978	1979
DoE	100	102	113	123	137	174	223
Nationwide	100	105	119	131	145	182	232

^a Published series converted so that fourth quarter 1973 = 100 for comparative purposes.

3.3 Regional price differentials

The third main use of the data is for the analysis of regional price differentials. We confine our discussion here to the interpretation of the evidence at a single point of time, although the data indicate that notable changes have also taken place over time. The official data are summarised in the first two columns of table 9 below; they indicate considerable regional disparities in average prices ranging from 29% above the national average in Greater London in 1979 to 25% below the national average in the Yorkshire and Humberside region.

The interpretation of these data, however, is beset by the same kind of problems—relating to the comparability of the sets of dwellings being compared—discussed earlier. Again, data which would allow the influence of the various relevant characteristics to be explored are not readily available. As before, therefore, we

concentrate here on one major characteristic—the influence of type of dwelling. The importance of the composition of traded dwellings in influencing the level of average prices (given the price differentials by type of dwelling that exist) was emphasised above. It is equally important in a regional context, even at a single point of time, because there are very considerable differences in the composition of traded dwellings between one region and another (see table 10). Comparability across regions may be improved by standardising the mix of dwelling types by using a common set of weights for each region. This we do in table 9 using weights for each dwelling type appropriate to the UK as a whole. It will be seen that the effect is very marked: average price levels within most regions and the size of regional disparities are altered considerably; the rank order of regions is also changed.

Table 9. Average regional house prices (all dwellings, mortgages completed), 1979. [Source: DoE 5% sample survey—DoE (1972–1980) and unpublished data.]

Region	Actual average prices		Average prices standardised for mix by dwelling type	
	value (£)	as a percentage of UK value	value (£)	as a percentage of UK value
1 North	15443	78	16642	84
2 Yorkshire and Humberside	15003	75	15185	76
3 East Midlands	15836	79	14745	74
4 East Anglia	18461	93	16979	85
5 Greater London	25793	129	31614	159
6 South East (excluding region 5)	24675	124	24561	123
7 South West	20494	103	20114	101
8 West Midlands	18493	93	17595	88
9 North West	16902	85	17246	87
10 Wales	17061	86	16376	82
11 Scotland	19371	97	19861	100
12 Northern Ireland	21824	110	19567	98
UK	19925	100	19925	100

Table 10. Regional distribution of dwellings mortgaged by building societies by type of dwelling, 1979, as percentages. [Source: DoE 5% sample survey (unpublished data).]

Region ^a	Bungalows	Detached houses	Semidetached houses	Terraced houses	Flats or maisonettes	Purpose-built flats	Others ^b
1	9.3	12.2	37.3	33.2	1.0	6.3	0.7
2	11.3	19.6	38.1	29.6	0.2	1.1	negligible
3	12.5	27.6	37.3	21.3	0.2	1.0	negligible
4	16.2	32.1	27.1	22.6	0.5	1.5	0.0
5	1.5	6.3	22.0	38.8	11.2	20.2	0.1
6	7.8	23.5	28.9	31.4	1.7	6.6	0.1
7	11.7	24.1	27.5	32.7	1.5	2.4	0.1
8	7.0	26.8	40.5	21.1	0.5	4.0	0.1
9	7.5	18.6	43.7	28.4	0.2	1.7	0.0
10	14.5	23.5	35.3	25.7	0.2	0.7	0.2
11	17.1	19.0	24.4	11.9	7.4	20.1	0.1
12	34.6	22.9	33.7	8.4	0.0	0.4	0.0
UK	9.9	21.2	32.8	27.8	2.2	6.0	0.1

^a See table 9 for list of regions.

^b Includes 'not known'.

Particular care is required, therefore, in the interpretation of the regional statistics. In this respect it would be helpful either to compile a 'standardised' set of figures, as we have done here, or to publish separate data for each type of dwelling.

With regard to the interpretation of regional price levels, as such, it is also necessary to remember that the limitations in the coverage of building society data (particularly of secondhand dwelling transactions at the lower end of the price range) referred to

Table 11. Regional freehold/leasehold prices, England and Wales, November, 1978. [Source: Survey of Conveyances (Dunn and White, 1980, table 2).]

Region ^a	Average prices ^b (£)			Number of freehold properties (%)
	freehold	leasehold	total	
1	10272	9101	10077	83
2	10407	8089	10045	86
3	11393	8117	11265	96
4	13594	10465	13435	95
5	20395	14134	17859	59
6	19500	11755	18548	88
7	16600	12838	16232	90
8	12073	7963	11097	76
9	11768	7265	9919	59
10	11834	10886	11623	78
England and Wales	14971	10346	13994	79

^a See table 9 for list of regions.

^b Includes multiple transactions.

Table 12. Regional price differentials—comparison of unofficial sources, 1979; with regional prices as a percentage of UK average. (The last row of figures gives the UK average price in £s.) (Sources: see table 1 and appendix.)

Region ^a	Nationwide ^b			Abbey National ^d			Times/Halifax ^e
	new	secondhand ^c	all	new	secondhand	all	secondhand
1	87	83	67 78	78	71	73	76
2	85	82	66 77	79	66	69	70
3	84	79	65 77	84	72	75	79
4	97	95	90 95	90	89	90	95
5	141	129	138 128	129	122	121	137
6a	131	130	133 132	119	119	119	133
6b	113	111	109 112	94	95	95	108
7	98	103	104 103	97	83	87	89
8	101	92	88 93	91	75	78	80
9	95	90	76 85	93	90	91	91
10	92	90	81 87	102	96	99	98
11	98	100	98 99	100	100	100	100
12	102	99	98 104	100	100	100	100
UK	100	100	100 100	100	100	100	100
	(23420)	(22680)	(19670)(21540)	(22904)	(21615)	(21850)	(22291)

^a See table 9 for list of regions. The South East (excluding London) is subdivided into Outer Metropolitan Area (6a), and Outer South East (6b).

^b Fourth quarter 1979.

^c The figures are for modern and older houses, respectively.

^d 1979.

^e December 1979.

earlier, also tend to introduce an upward bias. This is shown by the analyses drawn from the more comprehensive surveys of conveyancing (confined to England and Wales) shown in table 11. This source also indicates that there are regional differences in the proportions of freehold and leasehold dwellings traded which also affects the comparability of regional averages, although it is possible that this may be a reflection, in part, of a correlation between type and age of dwelling and the nature of title. In addition, these statistics cover (unlike the building society data) dwellings not intended for owner-occupation. It will be appreciated that there may also be regional differences in the other determinants of price: unfortunately, although much detailed information is collected in the DoE five per cent sample, regional summaries of it are not readily available for analysis.

3.4 *Unofficial sources*

We now turn briefly again to the surveys by individual societies. As before, the only society for which the prices are not based upon crude averages is the Nationwide. The same comments apply as before and no further discussion is required. A summary of the evidence they provide in terms of differentials is given in table 12. It will be seen that there is a good measure of agreement over the size of the regional disparities. The most reliable indicator amongst the unofficial sources is again perhaps the Nationwide. It may also be a more reliable indicator than the 'standardised' index we have calculated on the basis of the official data in table 9; but uncertainty about the incidence of other factors and about the adjustment for size of dwelling in the Nationwide analyses make it impossible to come to a firm conclusion.

4 **Summary and conclusion**

The purpose of this paper has been to make a critical evaluation of the statistics on house prices that are now regularly produced by a number of official and unofficial agencies. We focus attention on their interpretation in the context of their three main uses: the measurement of price levels, the measurement of price changes over time, and the measurement of regional differences.

Depending on the purpose for which the information is required, the interpretation of the statistics in each of these three main uses presents some difficult problems because of the heterogeneity of dwellings and the degree of noncomparability that this introduces. We have been concerned with the physical characteristics of dwellings as determinants of price rather than other factors operating via changes in supply and demand. Sufficiently detailed disaggregated data on the characteristics of dwellings cross-classified with price that would enable a full appraisal of their influence to be made are not readily available. We have concentrated, therefore, on the influence of one major characteristic (perhaps the major characteristic), namely type of dwelling.

With regard to the interpretation of the data on absolute price levels, the essential point is that building societies do not finance all house purchases and may not provide, therefore, a representative source. This does in fact appear to be the case, particularly with regard to secondhand dwellings. The information now obtained by the Inland Revenue in surveys of conveyancing provides a particularly valuable source here.

Insofar as building societies provide the main institutional source of finance, however, the data available from this source, particularly when related to other characteristics relating to the purchaser or to the mortgage advance itself, are obviously of great value. It seems to us, however, that it would be useful to widen the scope of the analyses to cover other institutional sources on a similar footing (as we indicated earlier, the only other institutional source of mortgage finance for which price data are regularly collected and published at present is the insurance companies).

This may be particularly important in future in view of the possible growth in importance of other institutions, particularly the commercial banks, in the mortgage market.

With regard to the measurement of changes over time, none of the data available can be regarded as providing a true price index. With one exception, all the index numbers are simply based on a crude average price and reflect, therefore, not only price movements but also the combined effect of changes in the characteristics of the set of dwellings traded from one period of time to the next. We show that over recent years such changes have not been insignificant. The one exception, referred to above, is the Nationwide index. This does allow for changes in the type and size of dwellings and their regional distribution and, therefore, is closer to being a true price index. It is not able, however, to allow for qualitative differences between dwellings and we suggest that the allowance made for size difference may introduce bias.

The interpretation of the regional analyses is subject to the same reservations as the time series discussed above since there are notable differences in the mix of dwellings between one region and another. Regional disparities, therefore, are not simply reflections of differences in regional price levels.

There would seem to be two ways of seeking a solution to these problems. One would be through the use of appropriate sets of weights for the relevant characteristics along the lines adopted by the Nationwide Building Society. The other would be through the use of econometric techniques by means of which the relative significance of various characteristics may be defined and their influence on price levels from one period to another, or between one region and another, may be allowed for simultaneously. We propose to explore these two possible solutions further in future work.

Acknowledgements. Our thanks are due to officials of the Department of the Environment; the Building Societies Association; the Nationwide, Abbey National, and Halifax building societies; and the Incorporated Society of Valuers and Auctioneers for supplying information and data.

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APPENDIX
Data sources referred to in table 1

Source	Publication
DoE/BSA survey and DoE 5% sample	<i>Housing and Construction Statistics (HCS)</i> formerly <i>Housing Statistics (HS)</i> quarterly (HMSO, London) <i>BSA Bulletin</i> quarterly (Building Societies Association, London)
Inland Revenue	<i>Economic Trends</i> monthly (HMSO, London) Various issues: May 1974 "Surveys of conveyancing"; September 1976 "Conveyancing since 1973"; February 1978; March 1979; March 1980 "Trends in sales of land and buildings ..."
Nationwide	<i>Nationwide Building Society Bulletin</i> formerly <i>Occasional Bulletin</i> quarterly (Nationwide Building Society, London)
Abbey National	<i>Homes—People, Prices and Places</i> quarterly (Abbey National Building Society, London)
Times/Halifax	<i>The Times</i> (Times Newspapers Ltd, London)
ISVA/FW Housing Index	<i>The Valuer, Journal of the Incorporated Society of Valuers and Auctioneers</i> ten issues per year
Survey of Insurance Company Mortgages	<i>Housing and Construction Statistics</i> quarterly (HMSO, London)
LCES index	Two publications by London and Cambridge Economic Service: <i>London and Cambridge Economic Bulletin</i> published quarterly as a supplement to <i>The Times Review of Industry (and Technology)</i> ; and <i>The British Economy, Key Statistics 1900-1970</i> (Times Publishing Company, London, 1971)

Fleming, M. C. and Nellis, J. G. (1981b) "The Inflation of House Prices in Northern Ireland in the 1970s", *The Economic and Social Review*, Vol. 13, pp. 1-19.

The Inflation of House Prices in Northern Ireland in the 1970s

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Précis: Official statistics published by the Department of the Environment (London) suggest that during the 1970s Northern Ireland changed from being the cheapest housing region in the United Kingdom to being the most expensive region but one. This article seeks an explanation for this remarkable change. It is argued that to some extent the apparent differences are a statistical distortion, but that it remains true that Northern Ireland has experienced a more rapid rate of house price inflation than the rest of the UK. An econometric model of the Northern Ireland housing market is estimated, the results of which suggest that increased demand, unmatched by increased supply, offers the major explanation. Key importance is attached to the availability of mortgage finance.

I INTRODUCTION

Over the period 1969-1979, official figures published by the British Department of the Environment (DOE) report that average house prices in Northern Ireland (NI) (based on building societies' returns for both new and existing properties) rose more than five and a half-fold: from £3,941 to £21,824. In contrast, over the same period, average dwelling prices for the

*The authors would like to express their thanks to officials of the Department of the Environment (Northern Ireland), the Department of the Environment (UK), the Department of Finance (Northern Ireland), the Nationwide Building Society and to Mark Boleat of the Building Societies Association for their help. The comments of the anonymous referees are also gratefully acknowledged. Responsibility for the content and any deficiencies remains our own.

United Kingdom (UK) as a whole rose by only just over four-fold: from £4,640 to £19,924. The inflation of house prices in Northern Ireland has been by far the fastest among all the regions in the UK. As a consequence, average prices in the Province rose to a level above the UK average for the first time in 1976 and have remained there ever since, moving from a low of 62 per cent of the national mean in 1973 to a peak of 118 per cent in 1978. Excluding the south-east of England, Northern Ireland has been the most expensive housing region in the United Kingdom since 1977.

These developments raise some interesting questions about the local housing market, especially since they have taken place in a highly unsettled political climate and over a period during which the economic situation in the region has shown no significant improvement relative to the rest of the United Kingdom.

In this paper we seek an explanation for these facts. In section II we first examine the nature of the statistical evidence and its interpretation. A demand and supply model of the Northern Ireland housing market is set-up and estimated in section III, while a final section summarises the findings and draws some conclusions. An appendix is also included, describing and reporting the results of causality tests on house price — mortgage funds relationship.

II THE STATISTICAL EVIDENCE AND ITS INTERPRETATION

The principal information about house prices comes from regular sample surveys of building societies conducted by the DOE (UK) in conjunction with the Building Societies Association (BSA) in which each society provides information about the houses on which it has given mortgage loans. However, reliable comparisons of average prices over time or space (i.e., between NI and the rest of the UK) demand that the data should satisfy certain conditions. Since housing does not constitute a single homogeneous product, it is important that account should be taken of differences in the *mix* of house types and other qualitative characteristics, in order to ensure, as far as possible, the comparison of like with like. Comparison of the absolute *level* of prices also demands that the statistics should cover all house-purchase transactions. On the other hand, the measurement of price trends over time imposes the somewhat less demanding requirement that the data should adequately represent price movements without necessarily measuring the absolute level of prices accurately. Unfortunately, the published statistics do not satisfy these conditions and, as a result, the comparisons that are commonly made are open to distortion. We examine here the causes of this distortion, the direction and, as far as possible, the size of the errors intro-

duced.

Comparisons are distorted for two reasons. One is because the data are crude averages in which no allowance is made for variations in the *mix* of transactions by type of house. The other is that the data cover only houses purchased with the aid of a loan from a building society. Consequently they are not representative of all transactions and, for reasons given below, the degree of non-representativeness has changed over time, affecting both the measurement of price levels and price trends.¹

II.1 Housing Mix

Variation in the mix of dwellings traded is important because of large differences in price for different types of dwelling. For instance, detached houses in NI, in 1979, were 39 per cent above the overall average dwelling price while terraced houses were 34 per cent below, see Table 1. There is a considerable difference between the UK and NI in the mix of dwellings for which the building societies have given mortgages and substantial changes in the mix have occurred over the last few years. It is particularly notable that in NI, bungalows (one of the most expensive types of dwellings) constitute over one-third of the market as against 10 per cent in the UK, whereas terraced housing (the cheapest type) constitutes less than 10 per cent in NI but over a quarter in the UK (Table 1).

Table 1. Price differentials and the mix of dwellings by type. 1979

	Bungalows	Detached houses	Semi- detached houses	Terraced houses	Flats and maison- ettes	All types
(a) Price Differentials – Prices as percentages of overall average.						
Northern Ireland	106	139	76	66	*	100 (£21,824)
(b) Distribution of Dwellings Mortgaged (Percentages)						
Northern Ireland	34.6	22.9	33.7	8.4	0.4	100
United Kingdom	9.9	21.2	32.8	27.8	8.2	100

* Insufficient sample

Source: Department of the Environment (London) 5 per cent sample survey (unpublished data).

¹ For a detailed analysis of these problems with respect to the UK housing market in general, see Fleming and Nellis (1981).

Given these differences in mix, the comparison of crude averages is inherently misleading. Appropriate comparisons between the two areas can only be made on a *standardised* basis – for example, by adopting a fixed set of weights for both the UK and NI. This we do in Table 2. Using weights for each type of house appropriate to the UK as a whole gives a “mix-adjusted” average price level for NI in 1979 of 98 per cent of the UK average, whereas the crude average price given in published tabulations shows NI price levels standing at 110 per cent of the UK average.

Table 2: *The effect of mix on house price comparisons. Northern Ireland 1979*

<i>Average Price</i>	<i>Price £</i>	<i>Price as per cent of UK average</i>
Actual Average	21,824	110
Standardised for mix*	19,567	98

*Average price for each type of dwelling weighted in proportion to the distribution by type in the UK as a whole.

Source: Based on 5 per cent Sample Survey, unpublished data (DOE, London).

We conclude, therefore, that a good part of the apparent rise in NI prices relative to the UK is a statistical distortion reflecting a difference in the mix of house transactions. However, whilst on this mix-adjusted basis price levels in the Province are currently shown to be no higher than those in the UK generally, it does appear, none the less, that the *rate of change* of prices in NI has been greater than in the UK generally. This is implied by the elimination of the differential that existed in the early 1970s.

Information on price trends for each *type* of property is not available from the official statistics for this period. However, the above conclusion is supported by detailed analyses prepared by one of the largest building societies (the Nationwide), which are broken down according to type and age of dwelling. These confirm that for each housing category the rate of increase of prices has been higher in NI than in the rest of the UK (Table 3).

II.2 Coverage of the Data

We now turn to the second factor – the representativeness of the building society statistics themselves. Building societies are not the only source of finance for house purchase. Some houses are purchased without the aid of loans at all and others are purchased with loans from insurance companies,

Table 3: Nationwide Building Society data - comparative prices by types of dwelling, Northern Ireland and United Kingdom 1973-79
(Data refer to 4th quarter of each year)

	New dwellings						Other dwellings						All dwellings									
	1973			1979			1973			1979			1973			1979						
	£	% change		£	% change		£	% change		£	% change		£	% change		£	% change					
(a) Detached houses																						
Northern Ireland	£ 8,760	29,150	333	£ 9,890	28,140	285	£ 10,290	29,800	290	£ 9,690	28,770	297	£ 13,280	31,660	298	£ 12,650	30,300	240	£ 13,350	30,570	229	
United Kingdom	£ 13,280	31,660	298	£ 13,650	31,220	229	£ 12,650	30,300	240	£ 13,350	30,570	229	NI as % of UK	66	92	72	81	98	73	94	94	
(b) Semi-detached houses																						
Northern Ireland	£ 5,640	19,170	340	£ 6,590	18,990	288	£ 6,580	19,040	289	£ 6,440	19,040	296	United Kingdom	£ 8,430	20,320	241	£ 9,140	22,160	242	£ 9,130	20,880	229
United Kingdom	£ 8,430	20,320	241	£ 9,310	20,330	218	£ 9,140	22,160	242	£ 9,130	20,880	229	NI as % of UK	67	94	71	72	86	71	91	91	
(c) Terraced houses																						
Northern Ireland	*		-	£ 4,810	16,660	346	£ 5,420	12,990	240	£ 5,110	13,970	273	United Kingdom	£ 8,640	21,080	244	£ 7,470	16,480	221	£ 8,140	17,780	218
United Kingdom	£ 8,640	21,080	244	£ 9,620	20,680	215	£ 7,470	16,480	221	£ 8,140	17,780	218	NI as % of UK	-	-	50	73	79	63	79	79	
(d) Other types																						
Northern Ireland	£ 7,770	24,310	313	£ 8,420	24,130	287	£ 7,360	22,530	306	£ 8,110	24,140	298	United Kingdom	£ 8,890	23,700	267	£ 9,380	21,400	228	£ 9,650	22,050	228
United Kingdom	£ 8,890	23,700	267	£ 9,980	22,350	224	£ 9,380	21,400	228	£ 9,650	22,050	228	NI as % of UK	87	103	84	78	105	84	110	110	
(e) All types																						
Northern Ireland	£ 7,520	24,100	320	£ 7,820	22,640	290	£ 7,450	19,240	258	£ 7,690	22,580	294	United Kingdom	£ 10,080	25,310	251	£ 8,770	20,100	229	£ 9,760	21,950	225
United Kingdom	£ 10,080	25,310	251	£ 10,430	23,090	221	£ 8,770	20,100	229	£ 9,760	21,950	225	NI as % of UK	75	95	75	85	96	79	103	103	

Source: Nationwide Building Society, London

*Insufficient data

commercial banks, public agencies or from other sources. A particularly important development occurred in the 1970s with the establishment of a Home Loans Scheme by the newly-formed Northern Ireland Housing Executive (NIHE) directed at the needs of low-income families wishing to purchase low-valued properties. This has become an increasingly important source of finance. At the end of 1979 the maximum mortgage acceptable under this scheme was £15,000.² The annual number of loans made by the NIHE doubled between 1976 and 1978 whereas building society loans increased by little over one-fifth; in value terms this represents a threefold increase for NIHE loans compared with one and a half times for building societies operating in the North of Ireland. By 1978, the NIHE provided 19 per cent of the total number of loans (Table 4).

Table 4: *Number and value of home loans advanced in Northern Ireland, 1971-79*

Year	No. of loans			Value of loans		
	<i>Building societies</i>	NIHE	NIHE as % of total	<i>Building societies</i>	NIHE	NIHE as % of total
	<i>Thousands</i>		%	£m	£m	%
1971	8.7	—	—	28.6	—	—
1972	8.8	—	—	32.9	—	—
1973	7.6	na	—	33.2	6.7	16.8
1974	5.8	na	—	31.5	7.2	18.6
1975	7.9	na	—	54.7	5.7	9.4
1976	8.6	1.3	13.1	68.6	4.6	6.3
1977	9.3	2.0	17.7	84.8	9.0	9.6
1978	10.6	2.5	19.1	107.2	14.0	11.6
1979	9.2	2.0	17.9	116.5	12.4	9.6

Sources: *Northern Ireland Housing Statistics 1979*, (HMSO, Belfast) and Department of Finance (NI) — unpublished data.

Limitations in the scope of the statistics to that sector of the housing market financed by building societies would be of no consequence if there were no difference between this sector and those served by other sources. However, the advent of the NIHE into the house finance market appears to have had the consequence that building societies have tended to concentrate

² Whilst not necessarily limited to second-hand properties, the maximum lending ceilings have resulted in few loans being made for new houses under this scheme, and indeed none at all after 1975.

their lending "up-market" in NI. This view is supported by the fact that the average recorded income of borrowers from the societies in the Province has risen above the UK average (Table 5) whereas income levels in general in the former region have remained substantially below those in the UK (Table 6). The inference is, therefore, that the building society price data for NI have tended to be biased upwards on account of this factor over recent years. However, it is doubtful, for reasons given below, whether this is sufficient to explain away entirely the apparent change in relative price levels even after allowing for the mix-effect discussed earlier.

Table 5: *Average recorded income of borrowers from building societies, Northern Ireland and United Kingdom, 1971-79*

	1971	1975	1979
Northern Ireland	£1,937	£4,010	£7,184
United Kingdom	£2,187	£4,036	£6,735
NI as % of UK	89%	99%	107%

Source: DOE/BSA. Five per cent sample survey of building societies – *Housing and Construction Statistics*, No. 15, Table 38 (1976) and No. 32, Table 39 (1980), London: HMSO.

Some indication of the effect on the NI series is provided by data for both existing and new dwellings now being collected separately by departments of the NI administration on a more comprehensive basis than hitherto.

Existing Dwellings: Virtually all (approximately 96 per cent) of the transactions in existing dwellings – the type affected by the activities of the NIHE in the housing finance market – are now covered by the new survey. This gives an average 1979 price of £16,793, compared with the building society survey figure of £21,254. This confirms our view that the limitation in the scope of the DOE/BSA survey to building societies alone has introduced a strong upward bias to the DOE/BSA series for existing dwellings in NI.

None the less, it still appears that the rate of increase of prices for existing dwellings has remained substantially higher than in the UK. Data collected retrospectively for the period May-June 1972 on the new survey basis indicates a rise in prices of well over four-fold for all types of dwellings (over five and a half-fold in the case of medium/large terraced houses), whereas in the UK, prices increased less than three-fold (see Table 7).³

³ No breakdown by type of house for the UK is available from the official data for this period but compare the Nationwide Building Society analyses in Table 5.

Table 6: *Income trends in Northern Ireland and the United Kingdom*
(Index numbers, 1971 = 100)

	1971	1972	1973	1974	1975	1976	1977	1978	1979
<i>Average weekly household income:</i>									
Northern Ireland	100	112	115	152	190	227	239	263 (£ 87.14)	na
United Kingdom	100	111	128	152	189	214	242	276 (£106.13)	na
<i>GDP at factor cost per head:</i>									
Northern Ireland	100	106	126	150	192	221	253	293	334 (£2220)
United Kingdom	100	112	129	151	190	221	251	287	325 (£2,866)
NI as % of UK	75.4	71.6	74.1	75.1	76.0	75.2	76.1	76.9	77.4

Sources: *Regional Statistics*, London: HMSO, Annually — various issues; *Family Expenditure Survey*, London: HMSO, Annually — various issues.

Table 7: Comparison of surveys* of prices of existing houses, Northern Ireland and United Kingdom, 1972-79

	Northern Ireland						United Kingdom			
	New Government Survey*						DOE/BSA Surveys			
	Small terrace	Medium/large terrace	Semi-det./chalet bungalows	Semi-detached bungalows	Detached bungalows	Detached house	All types	5% Survey	5% Survey	90% Survey
1972 May-June †	£1,539	£ 2,067	£ 4,121	£ 4,256	£ 5,598	£ 6,650	£ 3,869	£ 4,880 ‡	£ 6,927 ‡	£ 7,010 ‡
1979	£6,496	£11,669	£16,855	£17,334	£25,395	£28,906	£16,793	£21,254	£19,675	£20,739
% change	422	564	409	407	454	441	434	436	284	296

* The new Northern Ireland government survey covers approximately 96% of all sales of existing dwellings.

† Data for Northern Ireland collected respectively; no other data were collected prior to 1977.

‡ Second quarter 1972.

Sources: Northern Ireland Housing Statistics 1979 (HMSO, Belfast); Dept. of Finance (NI); Central Economic Services — unpublished data; Housing and Construction Statistics (HMSO, London) and Building Societies Association, Facts and Figures (The Society, London, quarterly).

New Dwellings: In the case of new properties, the new survey is still confined to building societies but with a much greater coverage than the DOE/BSA survey (50 per cent as against 5 per cent). Thus, the new data are more reliable for this reason. Further, limitation in scope here to building societies is less important than in the case of existing dwellings because the societies are responsible for a much bigger proportion of new house sales than second-hand sales. As noted earlier, the NIHE has been active only in the second-hand market in recent years because of the lending ceilings it imposes. This new survey gives an average price (£22,928 in 1979)⁴ very much in line with the figure produced by the DOE/BSA survey (£23,484). These figures, of course, do not cover houses purchased without the aid of a building society loan, but the proportion of transactions excluded is small and there is no reason to believe it introduces an important bias, especially since the NIHE is not active in the new property market. For comparative purposes, the new survey, like the earlier DOE/BSA surveys, is also limited in that it makes no allowance for the changing mix of dwellings by type (and the new data have not been collected retrospectively). We may turn again, however, to the Nationwide Building Society analyses, given earlier in Table 3, which do provide a breakdown by type – accepting that these data are adequately representative. These indicate that prices for each type of new dwelling have risen faster in Northern Ireland than in the UK as a whole.

Unfortunately, it remains impossible to quantify precisely the difference in prices, certainly not on a fully comparable basis, between the Province and the rest of the UK. Nevertheless, it seems reasonably clear, given the more comprehensive data now available for new and existing dwellings separately, and after allowing for the changing composition of dwellings by type, that the level of house prices in the north of Ireland is not generally higher than the average for the United Kingdom, but that the difference between the two areas has undoubtedly narrowed as a result of a faster rate of increase in prices in NI during recent years.

As in any similar competitive market, the more rapid rise in house prices in the Province can only be explained in terms of the interaction between demand and supply factors, such as to differentiate this region from the rest of the UK. It is to this aspect of the problem that we now direct our attention.

⁴ Data supplied by the Department of the Environment (NI).

III MODELLING DEMAND AND SUPPLY FACTORS

III.1 *Theoretical Issues*

The approach which we follow here is to derive an estimating equation as a reduced form relationship from the specified arguments of demand and supply functions for housing. This approach closely follows that adopted by Nellis and Longbottom (1981) in their study of the UK housing market.

In the NI housing sector, market clearing prices are determined by those variables which influence the demand for, and supply of, houses. Thus, in the long-run, prices will adjust to their market clearing level. Analysis of demand and supply factors must therefore reflect the influence of the main economic agents that operate in this market, namely, potential buyers, sellers and financial intermediaries. In the case of housing, financial intermediaries play a particularly important role because of the inability of the majority of house buyers to finance their purchases entirely out of their personal assets. Thus, the cost of obtaining additional finance is a factor which enters the potential house buyers' decision calculus. However, due to the fact that the mortgage rate in the UK (and thus in NI) has typically been set below its market-clearing level, the mortgage market has often been characterised by excess demand and, consequently, funds for house purchase have been rationed. Thus a quantity constraint operates which must be considered when specifying the housing demand function.

The *demand* for houses, conceived in real terms, is determined by real household income, demographic factors (i.e., the number of potential buyers), prices, the cost and availability of mortgage finance,⁵ and the preferences of consumers. Hence, the demand function (H^d) may be specified as:

$$H_t^d = a_1 + a_2 PH_t + a_3 RYD_t + a_4 PTB_t + a_5 MR_t + a_6 M_t + a_7 PC_t \quad (1)$$

where PH = price of housing, RYD = real disposable income, PTB = number of potential buyers, MR = mortgage rate of interest, M = availability of mortgage finance, and PC = the general price of consumer goods.

The *supply* of housing in any period is dependent on the total stock available. This is identically equal to the existing stock of houses carried over from the previous period and units completed during that period, plus conversions and renovations minus demolitions. Since the latter three factors

5 The inclusion of the cost and availability of mortgage finance as separate explanatory variables may be questioned on the grounds that they are not independent of each other. However, in practice the mortgage rate in the UK is an administered rate which is changed relatively infrequently, whereas the availability of mortgage finance is much more volatile in the short-run, being directly related to the inflow of funds and the level of liquid assets held by the building societies. On balance, therefore, we feel justified in including these as separate variables.

can be regarded as being largely dependent on past stock, we postulate that the supply of houses depends on price and the existing stock of houses. House completions do not determine the desired stock of houses. In equilibrium, the existing stock is just sufficient to satisfy the demand for housing. So we may write the supply function (H^s) as:

$$H_t^s = b_1 + b_2 PH_t + b_3 HS_t \quad (2)$$

where HS = the existing housing stock.

In equilibrium,

$$H^d \equiv H^s \quad (3)$$

in which case we get

$$PH_T^* = c_1 + c_2 RYD_t + c_3 PTB_t + c_4 MR_t + c_5 M_t + c_6 PC_t + c_7 HS_t \quad (4)$$

where PH^* = equilibrium price of housing which ensures market clearing.

In the above equation it is assumed that the availability of mortgage lending is exogenous with respect to the demand for housing. An alternative approach is to treat the demand for mortgage finance as a derived demand: i.e., one which is dependent on house prices. We have examined the validity of this approach by conducting causality tests. These show that the direction of causation flows much more strongly from advances to house prices, than the reverse. This is strong evidence in favour of the hypothesis that mortgage finance should be treated as an exogenous explanatory variable. The results of the tests are set out in full in an Appendix.

III.2 Estimation Methodology

Equation 4 above is our estimating equation. It is an equilibrium relationship which will not hold at every moment in time, reflecting the cost of instantaneous adjustment towards equilibrium and modifications to the basic relationship caused by short-term influences. The relationship is thus intended to be a *steady-state* hypothesis. Hence, it is assumed that house prices adjust towards equilibrium (PH^*) on the basis of an *error-correction* hypothesis, such as

$$\Delta PH_t = -\lambda \left(\frac{PH}{PH^*} \right)_{t-1} \quad 0 < \lambda < 1 \quad (5)$$

The estimation methodology developed by Davidson *et al.*, (1978) was applied, enabling us to model the short-term dynamic behaviour of agents around a long-term trend in relation to Northern Ireland.

Before examining the results obtained using this estimation procedure, the

following sub-section sets out the actual variables used.

III.3 Variables Used in the Regression Analysis

PH: the average price of houses for which Northern Ireland building societies have granted loans, and is recorded at the completion stage in the mortgage process. The data used are those obtained in the DOE/BSA five per cent sample survey of building societies. It was not possible to employ the data from the new Northern Ireland Government survey, referred to earlier, because they were not available for the total sample period.

RYD: real permanent income, proxied by a four-quarter moving average on real personal disposable income. Northern Ireland, however, lacks a quarterly income series and following the example of Hewitt and Thom (1978), it was decided to interpolate a quarterly series from the available annual series. The annual growth rates of disposable income were distributed on a quarterly basis, weighted according to the relative quarterly growth rates from the overall UK income series.

PTB: there is the problem of deciding which demographic variable is most appropriate in measuring the pressure of demand from the number of potential house buyers, given that no adequate series for the rate of household formation exists. As a proxy, it was decided to use the number of marriages per quarter in Northern Ireland as an explanatory variable (coded MARG in the results).

MR: the rate of interest on mortgages. In NI this is the same as that recommended by the BSA for the UK in general.

M: the building societies' stock of mortgage assets (end period). A quarterly series is estimated using annual published data for the mortgage stock and the volume of building societies' net advances per quarter in NI.

PC: the implicit consumer price deflator for the UK (Central Statistical Office). An independent price series for NI is not available.

HS: a quarterly series for the existing housing stock in the Province, derived by interpolation from the annual published housing stock figures on the basis of completions and demolitions.

THC: the total number of house completions distributed on the basis of a four-quarter moving average. While the number of completions in any single quarter represents an insignificant proportion of the total housing stock, short-term fluctuations in the rate of new construction may have a significant impact on the expectations of potential buyers and sellers in the housing market.

All variables were expressed in natural logarithms, and seasonal dummies were included.

III. 4 Regression Results

The estimated equation given below (Equation 6) is the equation preferred after investigating alternative specifications of the general model, including different lag structures. It should be noted that not all coefficients are statistically significant, and some bear a contradictory sign (in particular MR, HS and MARG). We comment further on the results for individual variables below; at this stage however we would stress that the results are naturally dependent upon the reliability of the available data about which we expressed important reservations earlier.

$$\begin{aligned}
 \Delta \ln(\text{PH})_t = & 2.455 - 0.594\Delta \ln(\text{PH})_{t-1} + 0.339\Delta^2 \ln(\text{M})_t \\
 & (1.45) (3.64)^* \quad (0.21) \\
 & - 0.260 \ln(\text{THC})_t - 0.401 \ln\left(\frac{\text{PH}}{\text{PC}}\right)_{t-2} \\
 & (2.36)^* \quad (2.96)^* \\
 & + 0.096 \ln(\text{RYD})_t + 0.034 \ln(\text{MR})_{t-2} \\
 & (0.34) \quad (0.27) \\
 & + 0.339 \ln\left(\frac{\text{M}}{\text{PC}}\right)_{t-2} + 0.35 \ln(\text{HS})_{t-2} - 0.320 \ln(\text{MARG})_{t-1} \\
 & (2.00)^* \quad (1.94)^* \quad (1.62) \\
 & + \text{seasonal dummies} \quad (6)
 \end{aligned}$$

$$R^2 = 0.571$$

$$\text{SE} = 0.058$$

$$\text{DW} = 2.347$$

Notes: Δ = first difference; Δ^2 = difference of first difference;
t-statistics are reported in parentheses below the estimated coefficients.

* - significant at the 5 per cent level.

Estimation period: 1968(Q2) - 1978(Q4)

Noting that in long-run equilibrium, the short-term influences will have zero effect, and accepting as a valid constraint the homogeneity of house prices with respect to the prices of other goods (see Nellis and Longbottom, 1981, p. 18), the estimated equation renders the following steady-state solution:

$$\begin{aligned}
 \ln \text{PH} = & \text{constant} + 1.0 \ln(\text{PC}) + 0.375 \ln(\text{RYD}) + 0.153 \ln(\text{MR}) \\
 & + 0.787 \ln(\text{M}) + 0.089 \ln(\text{HS}) - 0.665 \ln(\text{MARG}). \quad (7)
 \end{aligned}$$

The elasticity of house prices with respect to each of the explanatory variables can now be observed directly. From the overall results, the following important points emerge: in the long-run, the stock of real mortgages appears to have the greatest influence on house prices – a 10 per cent rise in the real mortgage stock could be expected to raise prices by 7.8 per cent. This result is almost identical to that found for the UK as a whole by Nellis and Longbottom (1981, p. 19). In contrast, however, real permanent income in N. Ireland is found to play a much smaller role – a 10 per cent rise in RYD could be expected to raise house prices by only 3.7 per cent. Again, we would stress that this result should be viewed with caution, due mainly to the problems of generating an adequate quarterly income series (see Section III.3). The estimated coefficient on the mortgage rate variable (MR) exhibits a positive sign, contrary to our *a priori* expectations, and the elasticity of prices with respect to this variable was found to be very small. It can be argued that such a result is not surprising, since the mortgage rate in the UK is not a market-clearing rate anyway. The housing stock and marriage variables also produced unsatisfactory results in that both bear signs contradictory to *a priori* expectations. Here too, however, it is probable that the underlying data are at fault: on the one hand, it is difficult to reconcile changes in the published housing stock figures with completions, demolitions and conversions data, while on the other hand, the marriage variable fails to reflect other demographic influences on the number of households – it is particularly notable that the population of Northern Ireland fell during the 1970s.

Taking the statistics at their face value, the price of houses is seen to be relatively more responsive to *demand factors*, and in particular, most responsive to the availability of mortgage finance. This result is all the more important in relation to the advent of the Northern Ireland Housing Executive, in that, given the housing supply situation, the increased availability of mortgage funds, channelled through the NIHE, may well be a major factor in explaining the rapid increase in house prices in the Province during the 1970s. The available statistics indicate that over this period there has been no marked increase in lending in the Province by *building societies* relative to the rest of the United Kingdom. The number of loans granted in the Province, as a proportion of the total number for the UK, has remained fairly stable at 1.3 per cent. However, within Northern Ireland, as we indicated earlier, the NIHE became an important additional source of finance after 1973. In Great Britain, on the other hand, the equivalent source of funds – local authorities – reduced their lending very considerably after 1975. The result was a clear increase in total mortgage lending in the Province relative to the rest of the UK (Table 8).⁶ It should be noted,

⁶ Lending by insurance companies and other agencies is not covered as data for Northern Ireland are not available but such lending represents a small part of the total.

too, that the advent of the NIHE coincides with the timing of the acceleration in house prices in the Province in 1973, and that the properties which fall within the range of the NIHE lending (in the main, terraced housing) have risen most in value – this is evident from the new survey data referred to earlier (see Table 7).

Table 8: *Northern Ireland home loans as percentage of United Kingdom*

Year	<i>Building Societies</i>		<i>Building Societies & Public Agencies*</i>	
	<i>Number %</i>	<i>Value %</i>	<i>Number %</i>	<i>Value %</i>
1971	1.3	1.0	1.2	1.0
1972	1.3	0.9	1.2	0.9
1973	1.4	0.9	1.3	1.0
1974	1.3	1.1	1.1	1.1
1975	1.2	1.1	1.0	1.1
1976	1.2	1.1	1.3	1.2
1977	1.3	1.2	1.5	1.3
1978	1.3	1.2	1.6	1.4
1979	1.3	1.3	1.5	1.4

*NIHE in Northern Ireland and local authorities in England and Wales (data for Scotland are not available).

Sources: *Northern Ireland Housing Statistics 1979* (HMSO Belfast); Department of Finance (N.I.) unpublished data and *Housing and Construction Statistics* (HMSO, London, quarterly).

Taken together, these facts suggest that the increase in the supply of finance, made available through the Housing Executive, has been a causal factor behind the rapid rate of house price increases from 1973. Since the NIHE confines its lending to low-income groups wishing to purchase cheaper properties (in the main, terraced houses), the inflationary mechanism has operated by stimulating demand at this end of the market. The new Northern Ireland government survey of existing dwellings (see Table 7) highlights this point: it is notable that from mid-1972 to 1979, medium/large terraced houses rose in price over five and a half-fold, whereas most other types rose less than four and a half-fold. At the same time, however, it is likely that the stimulus to prices would spill over to more expensive properties as the building societies moved up-market.

Finally, one cannot overlook the civil disturbances that have occurred in the Province over the last decade. It would seem likely that these have generated concentrated demand pressures on certain areas, particularly around Belfast. Unfortunately, it has not been possible to quantify the effects of such factors on the housing market in general.

IV SUMMARY AND CONCLUSIONS

In this paper we have questioned the validity of inter-regional comparisons of house prices made on the basis of sample survey data obtained by the DOE (UK) and the Building Societies Association covering houses purchased with mortgage loans from building societies. These data indicate that after 1973 average house prices in NI rose to such an extent as to make the Province the most expensive region but one in the whole of the UK.

We argue that incomplete coverage of transactions and differences in the mix of house types introduces a lack of comparability which is particularly acute in the case of NI. In the absence of adequate statistical data, conclusions must be tentative but we suggest that the available data support the view that the general *level* of prices was probably no higher in NI in 1979 than in the rest of the UK, but that the *rate of increase* in prices in the Province was certainly higher from the early/mid-1970s onwards. The most plausible factors that may be held to account for this would appear to be an increase in demand pressures in certain areas within the Province caused by the effects of the civil disturbances and an increase in effective demand generally as the supply of funds was increased after 1973 via the Northern Ireland Housing Executive. On the supply side, although the stock of housing has risen, it would appear none the less to have failed to keep pace with the increased demand for owner-occupation in Northern Ireland.

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APPENDIX

Causality between House Prices and Mortgage Availability

The model estimated above includes mortgage availability as an explanatory variable. This rests on the assumption that the demand for mortgage finance is exogenous with respect to the demand for housing. However, it could be argued that the demand for such finance is itself a *derived* demand; that is:

$$M^d = \alpha PH.H^d$$

where M^d = the demand for mortgage finance.

To investigate this hypothesis, we applied the *causality* test suggested by Granger (1969). Basically, the test consists of regressing a dependent variable Y on a vector of lagged values of Y and a trend variable; then a vector of lagged values of X is added to the regression. F-tests are used to assess whether the addition of the X-lag vector significantly reduces the residual sum of squares of the regression. If the decrease is deemed significant, then X is said to *cause* Y. The procedure is then reversed (i.e., with X as the dependent variable, Y as the independent variable) to assess whether or not causality may also run from Y to X. There are important *caveats* to be made about the interpretations of the results of these tests. We turn to these later.

In relation to the present study, regressions were carried out on the average price of houses (PH) and the value of net advances (NA) made by building societies in the Province over the period 1968(Q2) — 1978(Q4) — quarterly data for 1979 not being available. It was assumed that the relationships were linear in logarithms. Seasonal dummies were included in all regressions and a linear time-trend was incorporated to satisfy the covariance — stationarity requirement. The test results shown below (Table A) contain 4 lagged values of the dependent variable and 4 of the independent variable — this structure gave the most significant results.

It will be seen that taking prices as the dependent variable, the addition of net advances brings about a marked fall in the standard error of estimate (s.e.e.); this fall is statistically significant at the 5 per cent level, based on an

Table A: Summary statistics of causality tests 1968(Q3)–1978(Q4)

(a) Dependent variable - average house prices (PH)

No.	Variables	s.e.e.	F(dof) Statistic	
			Regression	Specific
1	PH-lag	0.0817	203.78(8,30)**	—
2	PH-lag, NA-lag	0.0737	168.40(12,26)**	3.72(4,26)*

(b) Dependent variable = net advances (NA)

3	NA-lag	0.2206	38.06(8,30)**	—
4	NA-lag, PH-lag	0.2137	27.52(12,26)**	1.49(4,26)

Footnotes: The constant term for each regression is not reported;
s.e.e. = standard error of estimate: $F(dof) = F$ -statistic with
 (v_1, v_2) degrees of freedom;
* = significant at the 5 per cent level.
** = significant at the 1 per cent level.

F-statistic of 3.72 (section (a) of Table A). Conversely, with net advances as the dependent variable, it will be seen that the inclusion of a vector of lagged values of house prices also leads to a fall in the s.e.e.; but it should be noted that this fall is statistically insignificant; F-statistic = 1.49 (section (b) of Table A). On balance, therefore, these results provide evidence that causation runs from mortgage advances to house prices, rather than the reverse.

Naturally, it will be appreciated that these tests are subject to inevitable limitations. For instance, the results may be subject to biases arising from mis-specification, inappropriate choice of functional form etc. They may also be sensitive to the choice of time period. Qualifications of this kind are common to all such statistical analyses. While it cannot be argued, therefore, that the results provide conclusive proof of the hypotheses, it is none the less reasonable to argue that they are informative (for further discussion on the application of causality tests, see Jacobs *et al.*, 1979 and Mixon *et al.*, 1980).

Fleming, M. C. and Nellis, J. G. (1985a) "Research Policy and Review 2. House-Price Statistics for the United Kingdom: A Survey and Critical Review of Recent Developments", *Environment and Planning A*, Vol. 17, pp. 297-318.

Research policy and review 2. House-price statistics for the United Kingdom: a survey and critical review of recent developments

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Received 22 June 1984

Abstract. This survey updates an earlier one made in 1980 (published in 1981). It provides a comprehensive review of the sources and nature of all statistics on house prices in the United Kingdom, paying particular attention to major developments that have occurred in the period since 1980. An appraisal of each source is made in the context of the problems involved in measuring price levels and price movements on a representative and comparable basis. Comparisons are made of the evidence provided by the various sources. In a concluding section guidance is offered on the choice of series for particular uses and desirable improvements are considered.

1 Introduction

In a paper published in this journal in 1981 (Fleming and Nellis, 1981) we provided a review and critique of the sources and nature of the statistical information on house prices in the United Kingdom that was available at that time. Eight current sources were identified (four official and four unofficial) and one noncurrent source. The principal conclusion of the paper was that none of the available series provided information which could be regarded as giving reliable evidence on price movements over time or on differences in price levels among regions.

The reason for this conclusion was that little or no attempt was made to place the measures on a comparable footing; most sources were based merely on simple average prices. Because houses differ according to a wide variety of locational and physical characteristics, simple averages of prices are not useful for comparative purposes unless the 'mix' of characteristics remains constant.

We suggested that there were two ways of seeking a solution to these problems. One way was through the use of a weighting system for the relevant house characteristics. The other way was through the use of econometric techniques by means of which the relative significance of various characteristics might be defined and their influence on price levels from one time period to another, or between one region and another, might be allowed for simultaneously. The first method has now been adopted by the Department of the Environment for the preparation of the official house-price index and by some building societies. The second method has now been employed by the authors to devise standardised indices for the Halifax Building Society using a data base specially developed by the Society; this data base provides much more extensive information on house characteristics than available hitherto in any UK source.

These developments have transformed the nature of the information available on house-price movements in the UK. The main purpose of this article, therefore, is to update our earlier paper by incorporating these developments. A subsidiary purpose is to discuss six other sources which were not considered before. We thus provide a comprehensive review of all available sources. The rest of this paper falls into three main parts: in one part (sections 2, 3, and 4) we define and describe the nature of

		1979-	A	UK	x	FTB	Occupational Lending Survey
9*	National & Provincial ¹ Average prices	approved					
10*	Anglia ^k Index	valuation	BA	UK	x	x	Housing Market
11	Survey of Insurance Company Mortgages ¹ Average prices	completed	Q	UK	x	x	HCS
12*	NHBC ^m Average prices	completed	Q	E/W	x	x	Private House-Building Statistics

Key: A annual, BA biannual, E England, E&W England and Wales, FH freehold, FOO former owner-occupier, FTB first-time buyer, I irregular, LH leasehold, M monthly, Q quarterly, and a superscript on a date denotes the appropriate quarter for that year, W Wales. A cross (x) signifies the availability of data in current regular analyses. An asterisk (*) in the left-hand column signifies a revision to the original summary table (see Fleming and Nellis, 1981, table 1).

^a Approved, completed, or hybrid of these two.

^b For HS and HCS—average prices from 1963 only, and covered building societies with 75% of assets. For HCS and BSA—covers building societies with 90% of assets from 1975 to 1980 and 80–85% from 1981 (pre-1975 figures are estimated). The completions series is now (May 1984) published in the BSA Bulletin only. From 1981, cases where the price was not representative of the value of the property, for example, sales to sitting tenants, are excluded.

^c 5% sample of mortgages. Survey commenced in late 1965, but present analyses run from 1968⁽²⁾. Dwellings for owner-occupation only. Various unpublished analyses are available on request. A new weighted index was introduced retrospectively in October 1982 (see text). Unlike the current DoE BSA series, sales where the price was not representative of the value of the property, for example, sales to sitting tenants, are not excluded from the average price series; they have been excluded from the weighted index, however, from 1981 in the case of sales to council house tenants and from 1982 for other sales.

^d Surveys of conveyancing in one week each year. Average values may be calculated from number and value of sales. Earlier analyses for three-bedroom semidetached houses alone classified by age, by region, by conurbation/other urban/rural for the period 1966–1973 were published in HS and HCS.

^e Based on comprehensive coverage of all mortgages approved by the Society (see text). The cross-classifications are type (six categories) x age (five categories).

^f The cross-classifications are type x age x region and type x age x FTB/FOO. The survey covers all the Society's mortgages, apart from the exclusions noted in table 2.

^g The cross-classifications are type x region x (age) and FTB/FOO x region. Dwellings for owner-occupation based on all the Society's mortgages less those at the extreme ends of the price range, exceptionally large dwellings, sales to sitting tenants and other sales below market price, dwellings built before 1800. Currently indices are calculated from average price per square foot of superficial floor space weighted by region and property type (see text). Secondhand dwellings are subdivided currently into 'modern' and 'older' categories (formerly by price bracket).

^h The cross-classification is type x region. Until the third quarter of 1983, separate analyses were also made for new houses and for secondhand houses broken down by age category. From the fourth quarter of 1983 fixed weights, relating to type of house and region, have been used in the calculation of the average price of all houses nationally and of the overall average price for each region (see table 3).

ⁱ Simple averages of mortgage offers during a particular month (irregular frequency between one and three times a year) from December 1979. Breakdown between new and other dwellings not always made.

^j Based on a sample of mortgages approved during the last quarter of each year broken down by occupation of borrower.

^k Based on prices after adjustment by surveyors to allow for unusual factors (see text).

^l Based on returns from a sample of insurance companies which generally account for about 50% of insurance company advances for house purchase. Cases where the price is not representative of the value of the property, for example, sales to sitting tenants, are not excluded.

^m Based on returns by purchasers' solicitors giving the purchase price of new dwellings registered with the NHBC at the time of mortgage completion. Unpublished data are available back to 1970. Prices are rounded to nearest £1000. Coverage is to be extended to UK.

Table 2. Summary of published sources of house-price statistics (occasional analyses and surveys are excluded); data *not* based on actual transactions.

Ref. no	Source and form of data	Period covered and frequency	Coverage			Breakdowns by			Publication (see appendix)
			country	dwelling		region	dwelling		
				new	other		all	type	
(8)*	<i>Woolwich Equitable</i> ^a Average prices	1980-	UK						<i>Woolwich Review</i>
13	<i>ISVA/FW</i> ^b Housing index and average prices	April 1978-	E		x		x		<i>The Valuer and Financial Weekly</i>
14*	<i>RICS</i> ^c Price trends	1977-	E&W	x	x		x		<i>RICS News</i>
(12)*	<i>NHBC</i> ^d Average prices	1981 ⁽⁴⁾ -	GB	x			x		<i>Private House-Building Statistics</i>

Key: BA biannual, E England, E&W England and Wales, M monthly, Q quarterly, and a superscript on a date denotes the appropriate quarter for that year. A cross (x) signifies the availability of data in current regular analyses. An asterisk (*) in the left-hand column signifies a revision to the original summary table (see Fleming and Nellis, 1981, table 1).

^a Typical price ranges for three types of properties in two age bands (pre-1919 and post-1945) in 36 towns are specified, based upon assessments provided by surveyors.

^b Based on valuations of 'typical' houses by members of the Incorporated Society of Valuers and Auctioneers (estate agents, valuers, and surveyors)—in December 1983, 316 quotations on each of 6 house types were provided.

^c Based on questionnaire circulated to estate agent members of the Royal Institution of Chartered Surveyors who are asked to report each month on price trends over the previous three months (see text).

^d Based upon *estimates* of selling prices provided by builders when applying to register a dwelling with the NHBC before starting construction (at least 21 days before). Covers most private sector new building. Prices are rounded to nearest £1000. Unpublished data are available back to 1970.

the available sources, in a second part (section 5) we examine the evidence they provide about recent price movements and price levels, and in a third part (section 6) we consider the problems of interpretation and reliability. In a concluding section we provide a summary appraisal and discuss desirable improvements.

2 The sources

Tables 1 and 2 provide summary guides to all sources except banks—for which price-range data only are available (from the fourth quarter of 1982 in *Housing and Construction Statistics*). Additional sources and developments since the preparation of our earlier survey in 1980 (published in 1981) are indicated by an asterisk (*) in the left-hand column. There are six additional sources and three major developments in previously surveyed sources. It will be seen that we now categorise the sources into two major groups depending on whether or not they are based on actual house-purchase transactions. Detailed notes on each source are included as footnotes to the tables. We confine our attention here to a discussion of the salient features of each source and do not repeat information about the distinguishing characteristics of the sources surveyed earlier, if no subsequent developments have taken place. The most important development has been the growth in the number of sources providing mix-adjusted data from one in 1980 to five today (see table 3, overleaf).

In considering each source there are two major factors to take into account. These are, first, the scope of the data in terms of their representativeness of all house-purchase transactions and second, the nature and extent of the adjustments made, if any, to place the measures on a comparable footing. Related questions, which are important for purposes of interpretation, refer to matters such as differences in geographical coverage, in the time during the house-purchase-transaction period at which information is recorded, and in sample sizes etc. We now consider each source in turn, the reference numbers from tables 1 and 2 are given in brackets for each source.

3 Data based on actual transactions

3.1 DoE/BSA BS4 survey (1)

This survey, undertaken jointly by the Department of the Environment (DoE) and the Building Societies Association (BSA), and commonly referred to as the 'BS4 survey', has undergone two changes. From January 1981 the panel of building societies from which returns are obtained was reduced to the top seventeen societies (now sixteen after a merger), covering 80–85% of the total assets of the movement. At the same time, the return itself was also changed to exclude those dwellings which are sold at prices which are not representative of the value of the property—'nonmarket' prices (for example, council house sales and other sales to sitting tenants, etc). Not all societies, however, are able to provide figures on this basis for transactions at the completion, as opposed to loan-approval, stage, and the completions series has been temporarily discontinued in the official government publication *Housing and Construction Statistics*; it is continued, however, in the *BSA Bulletin* (see the appendix for details of publications).

3.2 DoE five percent sample (2)

3.2.1 *Average prices* The survey itself has remained unchanged; unlike the BS4 survey above, also carried out by the DoE, sales at nonmarket prices are *not* excluded. The series of average prices, therefore, continues on the same basis as before.

3.2.2 *Weighted index* An index based upon the information obtained in the five percent sample survey was introduced in October 1982 and carried back to the second quarter of 1968 (see tables 1 and 2). Unlike the index based on the BS4 survey returns, this index is not simply based on crude average prices for all transactions.

Table 3. Detailed comparison of bases of mix-adjusted sources using actual transactions data.

Ref. no	Source and form of data	The data base ^a	Method	House characteristics	Weighting system
2	DoE: weighted index	sales to local authority tenants excluded from 1981 and to other sitting tenants from 1982; previously no exclusions (32,000)	weighting of simple average prices for dwellings cross-classified by 4 characteristics	4 characteristics: type (3-4 types) ^b size (number of habitable rooms-3 groups); age (new/nonnew); region (12)	fixed: proportions of characteristics in period mid-1968 to mid-1974
4	Halifax: standardised index	all sales likely to have been at nonmarket prices and unusual cases (for example, extreme sizes) are excluded (153,000)	regression-based estimates of 'characteristics-prices'—base-weighted	13 characteristics: type (5); size (number of habitable rooms); age (years); bathrooms; WCs; central heating; garages; garage spaces; garden; land; freehold/leasehold; road charges; region (12)	fixed: means of quantitative characteristics and proportions of qualitative characteristics in base (1983) period
5	Abbey National: weighted average prices	sales likely to have been at discounted prices, including those to council and other sitting tenants, excluded (140,000)	weighting of simple average prices for dwellings cross-classified by 3 characteristics	3 characteristics: type (5); age (3 groups); region (12)	from fourth quarter 1981, weights are based on DoE 5% sample returns for the previous two years (updated annually)
6	Nationwide: weighted average prices	various exclusions aimed at eliminating sales at nonmarket prices plus unusual cases (for example, extreme age or size) (63,000)	weighted averages; the weighting system is applied to a set of average prices for houses cross-classified by age and type by region, the average price being obtained by multiplying average prices per ft ² in the current quarter by the weighted average property size in the previous 8 quarters	4 characteristics: type (4); age (3 groups); size (ft ²); regions (13)	at the regional level, rolling weights based on own transactions over previous 8 quarters are used. At the UK level, the regional averages are weighted according to the regional distribution of the stock of owner-occupied houses
7	Leeds Permanent: weighted average prices	all 'preferential price' transactions such as 'right-to-buy' cases which involve discounts and sales between relatives at nonmarket prices are excluded (55,000)	weighting of simple average prices for dwellings cross-classified by 2 characteristics	2 characteristics: type (5); region (12)	fixed weights relating to the distribution of mortgages by region and type of dwelling obtained in the DoE 5% sample survey in 1980

^a The data base has been edited as indicated in this column; the size in 1983 after editing is given in parentheses. ^b Depending on region.

To deal with the problem of noncomparability of house prices, an attempt is made to allow for the influence of changes in the mix of three house characteristics (type, size, and age of dwellings, where age represents a distinction between new and second-hand dwellings) and changes in the regional distribution of house-purchase transactions. The procedure involves the generation of a matrix consisting of 156 cells, each representing a cross-classification of the characteristics referred to above. For each cell a mean price is calculated in each successive time period. An overall 'weighted' mean is then calculated in which the weights are the number of transactions in each cell over a period: mid-1968 to mid-1974 up to 1982 and then transactions in the period 1980-1982. The total (unedited) sample size each *year* (the index is produced quarterly) has averaged 27 400 over the period 1968-1983, ranging from 18 700 (in 1974) to 34 700 (in 1978). An important constraint on using this method, however, is the need for the sample to provide an adequate number of observations in any one cell of the matrix: the objective is to obtain at least twenty observations per cell (DoE, 1982, page 136).

The effect of the retrospective introduction of mix-adjusted series by the DoE is notable in showing divergent movements of prices for new and nonnew dwellings when compared with the corresponding movements based on simple average prices: over the period 1969-1981, prices of new dwellings rose much *less* on a weighted average basis whereas, by contrast, prices of nonnew dwellings rose much *more* (compare DoE, 1982, table 2).

3.3 *Inland revenue (3)*

There has been no change in this survey.

3.4 *Halifax Building Society (4)*

A fundamental change was made to the data published by Halifax Building Society in April 1984, with retrospective changes being carried back to January 1983. Previously, simple average prices and an index based on them were published as the Times/Halifax index in *The Times*. From January 1983 the Society has collected detailed information about the characteristics of all the houses on which it makes mortgage loans and now uses this information to devise standardised indices which allow for the influence of changes in the mix of characteristics over time. The publication of simple average prices has continued, alongside the standardised indices, but for an extended range of subgroups: new houses, nonnew houses, houses bought by first-time buyers and by former owner-occupiers, as well as for all houses combined.

The methodology used to compute the standardised indices is unique among British sources of house-price data. The development work on its application was carried out by the authors and a detailed account of it has been provided elsewhere (Fleming and Nellis, 1984b). A shortened and simplified account is to be found in Fleming and Nellis (1984a). In brief, standardisation is carried out by using multivariate regression analysis to measure the influence of characteristics on prices in each successive time period, the regression coefficients on each characteristic being treated as an implicit 'price' for the characteristic in each period. A standardised price is then computed by taking a weighted average of the 'characteristics-prices', where the weights represent the composition of characteristics possessed by the houses on which mortgage loans were made in the base period (1983). Thus this computed price represents the average price for houses possessing a standard 'bundle' of characteristics. A direct analogy may be drawn with the repricing of a standard basket of goods in the retail price index. The standardised index as such is obtained as the ratio between the standardised price in each period and the average price in the base period expressed as a percentage.

The data base used for the calculations is exceptionally large (over 12 000 houses per month on average during 1983 after editing to exclude houses sold at nonmarket prices

and unusual cases) and provides information on a more extensive range of characteristics than is available in any other source in the UK. The following characteristics are incorporated in the analyses: location (region); type of property (house, bungalow, etc, subclassified according to whether detached, semidetached, etc); age; tenure (freehold or leasehold); number of rooms (habitable rooms, bedrooms, bathrooms, etc); number of separate toilets; central heating (none, full, partial); number of garages and garage spaces; garden; land areas over one acre; and liability to road charges. It is felt that the range and size of the data base, coupled with the methodology employed, provide a particularly reliable method of estimation. Thus the new series may be regarded as constituting a major advance in the measurement of house-price changes in this country.

3.5 *Abbey National Building Society (5)*

Until the fourth quarter of 1981, the published series were based on simple averages. The problem of noncomparability was then recognised by the introduction of the weighted average method similar to that now employed by the DoE for its weighted index. That is to say, simple average prices are computed for subsets of houses classified according to particular characteristics and these are then combined in fixed proportions into a single 'weighted' average. In the case of the Abbey National Building Society, the subclassifications are made according to three characteristics: type, age group, and region. Unlike the DoE series, no information is available about size—an unfortunate deficiency as size is a particularly important determinant of house prices. The weights used are derived from the DoE five percent sample survey results, not from the Society's own transactions (see table 3).

From the point of view of interpreting differences between the sources of average price data, it is important to recognise that the Abbey National publishes *weighted* average prices, whereas the DoE continues to publish average prices in simple average form, only using weighted averages as the basis for an index.

3.6 *Nationwide Building Society (6)*

No change has taken place in the methodology employed. We would simply point out that this society recognised earlier than other sources the problems involved in the use of simple average prices. Use is made of a system of weighted average prices for subcategories of houses, taking account of the same characteristics as in the DoE index, namely, size, age, type, and region. However, there are two notable differences from the DoE methodology. One is the use of a size variable based on the square footage of floor space (rather than the number of rooms)—a variable which may be expected to be a more sensitive determinant of prices. The other is the use of a set of regional weights based not on the actual number of transactions taking place in each region but on the stock of owner-occupied houses in each region. It should also be noted that the underlying data set undergoes preliminary editing to remove cases where dwellings are not sold at 'free market' prices and also to exclude houses falling into extreme or 'untypical' categories (see footnotes to table 1).

3.7 *Leeds Permanent Building Society (7)*

This society was not covered in our earlier survey. Data based on simple averages have been produced since 1978, and breakdowns by type and region continue to be so-based. From the fourth quarter of 1983, however, the price for *all* houses at both national and regional levels has been derived as a weighted average. But the problem of mix-variation and the distortion arising from the increased penetration of banks, in particular, into the mortgage market was recognised earlier, and adjustments were made to the series, effective from the end of 1981. These adjustments, however, were essentially ad hoc in nature. Further details of the current weighting system are

given in table 3. The transactions financed by the Society may not be representative of all building society transactions throughout the country, but the use of weights drawn from the DoE five percent sample of all societies should help to offset this factor. On the other hand, it will be noted that account is taken of two characteristics only, namely, type and region.

3.8 *Woolwich Equitable Building Society (8)*

This Society was not covered in our earlier survey. It will be seen from tables 1 and 2 that two sorts of data are published: simple average prices based on actual mortgage offers (shown in table 1) and surveyors' assessments (shown in table 2). The usefulness of the data in table 1 is limited, however, by the fact that they cover only selected periods of one month and are published irregularly. It is also limited as an indicator of price *movements*, as opposed to price *levels*, by being based on simple averages. The data in table 2 provide assessments of price ranges for certain types of property in thirty-six towns (see footnotes to table 2). These assessments are, of course, subjective but it is possible that they successfully reflect price levels and avoid the problem of a changing mix of transactions. As far as we are aware, they also offer the only source of information for individual towns. However, in the absence of other evidence, there is no means of judging their reliability.

3.9 *National and Provincial Building Society (9)*

This Society prepares analyses of average prices mainly for its own use: they are not formally published. It differs from other sources in making analyses according to occupation of borrower only: no overall averages are published. The overall sample size is relatively large (over 6000 in the 1982 survey) but when broken down by occupations, the small sample sizes that inevitably follow in some cases make the results open to potentially large margins of error. It also needs to be borne in mind that the lending of the Society is more concentrated in some areas than in others and is thus not likely to be representative of national data.

3.10 *Anglia Building Society (10)*

This source differs from other building society sources in two respects. First, whereas most societies record prices at the mortgage-approval stage, the Anglia records it at the time it carries out a valuation survey. As this precedes the approval stage, it provides a more up-to-date indicator of prices, though the time lag between valuation and approval will generally be a matter of weeks only. Second, the Society deals with the problem of comparability, as no two houses are the same, by including data in the data base, only after adjustment ('devaluation') by its surveyors, so that like may be compared with like. This devaluation makes allowance for such factors as different fixtures and fittings, garages, central heating, environmental factors, etc, which may have affected prices. The published figures, which provide a measure of price movements (average prices as such are not published), therefore need to be interpreted in this light. The adjustments are, of course, subjective, but it is possible that they successfully deal with the problem of comparability, especially as each house is considered individually. Again, as with other individual societies, it is possible that the regional distribution of transactions financed by the Society may not be representative of all transactions nationally.

3.11 *Surveys of insurance company mortgages (11)*

No change has taken place in this survey. Note should be taken of the comments made previously (Fleming and Nellis, 1981, page 1113).

3.12 *NHBC (12)*

See section 4.1.

4 Data not based on actual transactions

4.1 NHBC (12)

Information from this source was not published at the time of our earlier survey. It will be seen from tables 1 and 2 that two separate series for new average house prices are now regularly published: simple average prices based on returns made by the solicitors of purchasers of new houses at the completion stage of the mortgage transaction (shown in table 1) and simple averages of the *estimated* selling prices of new dwellings *started* by housebuilders registered with the National House-Building Council (NHBC) (shown in table 2). The estimates are made by builders when they apply to register a dwelling with the NHBC. This series represents, therefore, selling prices at the time of application, modified by expectations (there are safeguards against underestimating price). Builders are required to register dwellings at least twenty-one days before building starts; most applications are made slightly earlier. Both series provide almost total coverage of new houses started or completed in the private sector.

The comprehensiveness of coverage of this source and the timeliness of its publication (about ten days after the end of each quarter) make it an especially valuable one for the new housing market. The completions-stage series is particularly important as a measure of average price *levels*, as opposed to *movements*, though it must be remembered that the prices recorded each quarter will have been determined at various earlier dates extending up to several months prior to contract completion. The problem that faces other sources of excluding sales taking place at nonmarket prices to sitting tenants etc does not arise because the data cover new houses only. As a measure of price *movements* over time, however, they suffer from the limitation of being affected by changes in the mix of properties. The main value of the series based on starts would seem to be as an indicator of current market sentiment on the part of builders and possibly as a forward indicator of price movements.

4.2 ISVA/FW (13)

No change has taken place in this survey by the Incorporated Society of Valuers and Auctioneers (ISVA) and *Financial Weekly*.

4.3 RICS (14)

The Royal Institution of Chartered Surveyors (RICS) seeks a return each month from its members involved in the housing market on the state of the market over the previous three months. With regard to prices, each respondent is required to assess the movement of prices for six categories of dwelling (according to type and age) under five broad price-movement bands ranging down from "very much higher (about 8% or more)" through "the same" to "lower". The published results show the percentage of agents reporting under each of these headings by region. It should be noted that the scope of the survey is confined to England and Wales.

5 Recent evidence on price levels and price changes

Having summarised the main features of the available sources in the previous sections, we now turn to compare some of the recent evidence they provide on national and regional price levels and price changes. It is not possible to make a direct comparison of all fourteen sources because of differences between some of them with regard to mortgage timing, coverage, frequency, computational methods, etc. Consequently, we devote attention to only eight of the fourteen in making comparisons of price levels and price changes at the national level, and to only five sources in making corresponding comparisons at the regional level. This allows us to subdivide the information conveniently into the following four subsections:

- (1) comparison of national price levels,
- (2) comparison of national price changes,

- (3) comparison of regional price levels,
 (4) comparison of regional price changes.

It is necessary, of course, to base the comparisons on a particular period. The only period which permits all possible comparisons to be made is 1983. For this reason, and for the sake of brevity, the comparisons are confined to this period. In particular, only price levels for the fourth quarter of 1983 and price changes during 1983 are examined.

5.1 Comparison of national price levels

Table 4 presents nine sets of average house-price figures for the UK reported by eight of the fourteen sources for the last quarter of 1983, covering all, new and existing houses, as well as those bought by first-time buyers and former owner-occupiers. The first six of these sources are based solely on building society lending and thus their figures are not strictly comparable with the other two: insurance companies and ISVA/FW. Furthermore, three of the data sets relate to completions-stage data, whereas five relate to approval-stage data. Despite these differences, some informative comparisons are possible.

Table 4. Comparative house-price levels (£) for the United Kingdom (reported averages, fourth quarter 1983).

Ref. no ^a	Mortgage timing	All houses	New houses	Existing houses		First-time buyers	Former owner-occupiers
				modern	older		
1	approved	29251	32096	28830			
	completed	28383	31665	27846			
2	completed	27594	31813	26981		20471	35298
4	approved	30821	34473	30313		22676	36044
5	approved	29326	33395	28614		25097	33064
6	approved	28720	33850	30520	25930	23230	37820
7	approved	29106					
11	completed	37700	42100	37100			
13	na	38148 ^b					

Key: na not applicable.

^a See tables 1 and 2 for a description of the source.

^b At December 1983 and covers England only.

5.1.1 *All dwellings* The approval-stage data for all houses give a range of reported prices from £28720 (Nationwide) to £30821 (Halifax). Corresponding prices measured at the mortgage-completion stage exhibit a much wider range—£27594 (DoE five percent) to £37700—but note that the latter refers to insurance company lending which, in general, focuses on the upper end of the housing market. Recall too that some sources report simple averages (DoE and Halifax), whereas others now report weighted averages only (Abbey National, Nationwide, and Leeds). It should also be recalled that the sources vary in the extent to which the data base is edited to exclude properties sold at nonmarket prices and other 'atypical' dwellings (see table 3).

5.1.2 *Analyses by type of house and buyer* The gap between reported prices widens considerably when the data for the various subclassifications are considered. If the insurance company figures are disregarded because they relate to a different part of the market, the difference between the building society sources ranges from £2800 in the case of new houses up to £4800 in the case of houses bought by former owner-occupiers. Although the data may differ for the same reasons as were advanced

earlier and may also reflect increased variability due to reduced sample sizes when divided into subcategories, it is notable that there is no consistency either in the magnitude of the differences or in the sources giving the highest and lowest limit of the range for each subcategory.

5.2 Comparison of national price changes

Table 5 presents a comparison of national house-price changes, as reported by the same eight sources discussed above, from the first quarter to the fourth quarter of 1983. It will be noted that two series are now shown for the DoE (five percent sample) and for the Halifax, the first in each case based on the reported simple average prices and the other based on a 'weighted index' (in the case of the DoE) and a 'standardised index' (in the case of the Halifax).

Table 5. Comparative house-price changes (%) for the United Kingdom (first quarter 1983 to fourth quarter 1983).

Ref. no ^a	Type of data	Mortgage timing	All houses	New houses	Existing houses		First-time buyers	Former owner-occupiers
					modern	older		
1	simple averages	approved	8.7	5.0	9.2			
	simple averages	completed	10.4	6.3	10.4			
2	simple averages	completed	10.4	7.6	10.2		10.9	8.0
	weighted index	completed	8.8					
4	simple averages	approved	4.1	0.9	4.6		6.0	3.1
	standardised index	approved	6.8	6.1	6.6		6.1	6.7
5	weighted averages	approved	11.9	8.1	12.7		9.5	13.5
6	weighted averages	approved	10.0	10.4	9.5	10.1	5.3	9.6
7	hybrid	approved	10.6					
11	simple averages	completed	9.0	10.5	8.8			
13	typical valuations	na	8.3 ^b					

Key: na not applicable.

^a See tables 1 and 2 for a description of the source.

^b March–December 1983 and covers England only.

5.2.1 All houses It will be seen that there is a threefold difference in the evidence on price changes for all houses during 1983 ranging from 4.1% to 11.9%. This comparison, however, ignores the mix-adjustment problem. Five sources take account of the problem in their own way (table 3 refers)—DoE five percent, Halifax, Abbey National, Nationwide, and Leeds Permanent—but even these show considerable divergence ranging from 6.8% (Halifax) to 11.9% (Abbey National). It is also notable that the effect of mix-adjustment on a particular series differs: in the case of the DoE five percent sample the rate of change is reduced (10.4% down to 8.8%), whereas in the case of the Halifax it is increased (4.1% up to 6.8%). The comparisons may also be affected by the differences in mortgage timing referred to earlier, but it is not possible to generalise because it depends on the rate of change of prices during the periods actually covered by the respective sets of approvals and completions data (as opposed to the date at which they are recorded for statistical purposes): although the price levels shown by the two types of data may be expected to differ, the rate of change of prices may not.

5.2.2 Analyses by type of house and buyer The differences here remain larger for all categories, ranging in the most extreme case (new houses) from under 1% (Halifax) to over 10% (insurance companies and Nationwide). Mix-adjustment by 'standardisation' or 'weighting' reduces the measure of disagreement, but it still ranges up to a twofold difference in the rate of change (former owner-occupiers).

5.3 Comparison of regional price levels

Comparison of regional price levels is confined to data for *all* houses reported in the fourth quarter of 1983 by the DoE five percent sample and by the four largest building societies. Attention is restricted to these sources alone because they share common features: (a) they provide *quarterly* information on house prices for each region of the UK, and (b) they all use the same twelve regional definitions, namely, so-called Economic Planning Regions (EPRs) (though it should be noted that the Nationwide further subdivide the South East EPR into 'Outer Metropolitan Area' and 'Outer South East'). The other sources surveyed earlier either provide only annual, biannual, or monthly data, or they focus on variously defined areas other than the standard EPRs. Such a wide variety of bases prevents us from making comprehensive comparisons across all sources and series. The data are given in table 6.

The prices reported by the DoE five percent sample and the Halifax are simple averages, whereas those reported by the Abbey National, Nationwide, and Leeds Permanent in the last quarter of 1983 are based on weighted averages. There are considerable disparities in these reported prices, both between regions and more importantly between sources. Regional differences are to be expected, given the different impact of supply and demand conditions in different parts of the country, but differences between sources are the chief concern of this paper. At one extreme, for example, whereas the Abbey National reports an average price of £43826 for houses in the Greater London area, the DoE reports a figure of £36447, and the Leeds Permanent reports a figure of £36793—a range of more than £7000. Other differences between sources are smaller but the majority exceed £2000.

It is interesting to note, however, that, although the reported price levels for this period vary considerably between sources, the *rankings* of regional prices are broadly similar: table 7 refers. This is particularly the case with regard to the four individual society series, as opposed to the composite DoE series. It is also notable that the ranking of sources region by region shows a good measure of consistency, with the Halifax generally showing the highest price level and the DoE generally showing the lowest: table 8 refers.

It should be appreciated that comparisons of house prices at the regional level suffer from the same drawbacks discussed earlier in relation to national prices.

Table 6. Comparative house-price levels (£), by regions, for all dwellings (reported averages, fourth quarter 1983).

Region	DoE 5% sample completed	Halifax approved	Abbey National approved	Nationwide approved	Leeds Permanent approved
1 North	21 662	23 913	23 518	23 230	22 596
2 Yorkshire and Humberside	21 153	22 250	23 147	21 820	22 917
3 East Midlands	22 680	24 143	22 351	23 010	23 653
4 East Anglia	27 043	29 634	26 485	28 700	29 302
5 Greater London	36 447	40 163	43 826	37 160	36 793
6 South East (excluding region 5)	35 276	38 700	36 493	40 780 ^a 32 930 ^b	37 485
7 South West	29 772	32 176	30 349	29 990	30 665
8 West Midlands	24 459	26 511	24 878	24 530	25 240
9 North West	23 838	23 794	24 506	23 380	23 856
10 Wales	24 590	24 807	23 101	23 660	23 976
11 Scotland	24 022	28 275	28 673	28 330	28 027
12 Northern Ireland	20 921	25 465	24 054	23 700	26 522

^a Outer Metropolitan Area. ^b Outer South East.

However, the problem is further aggravated by the fact that significant differences exist in the composition of traded dwellings between regions (for details, see Fleming and Nellis, 1981, table 10), the regional representation of different societies varies considerably, and sampling error is inevitably increased at the regional level by virtue of reduced sample sizes. Particular caution should be exercised, therefore, in interpreting regional house-price levels.

Table 7. Regional house-price levels: ranking of regions by source (fourth quarter 1983).

Region ^a	DoE 5% sample	Halifax	Abbey National	Nationwide	Leeds Permanent
1	10	10	9	10	12
2	11	12	11	12	11
3	9	9	12	11	10
4	4	4	5	4	4
5	1	1	1	1	2
6	2	2	2	2 ^b	1
7	3	3	3	3	3
8	6	6	6	6	7
9	8	11	7	9	9
10	5	8	10	8	8
11	7	5	4	5	5
12	12	7	8	7	6

^a See table 6 for list of regions.

^b Based on average of prices for Outer Metropolitan Area and Outer South East.

Table 8. Regional house-price levels: ranking of sources by region (fourth quarter 1983).

Region ^a	DoE 5% sample	Halifax	Abbey National	Nationwide	Leeds Permanent
1	5	1	2	3	4
2	5	3	1	4	2
3	4	1	5	3	2
4	4	1	5	3	2
5	5	2	1	3	4
6	5	1	4	3 ^b	2
7	5	1	3	4	2
8	5	1	3	4	2
9	3	4	1	5	2
10	2	1	5	4	3
11	5	3	1	2	4
12	5	2	3	4	1

^a See table 6 for list of regions.

^b Based on average of prices for Outer Metropolitan Area and Outer South East.

5.4 Comparison of regional price changes

Regional house-price *changes* relating to each of the five sources noted above for all dwellings from the first quarter to the fourth quarter of 1983 are given in table 9. As with the comparison of national price changes, two series are presented here for both the DoE five percent sample and the Halifax, based on simple averages and weighted or standardised indices as described earlier (see table 3). The other sources are all based on mix-adjusted data.

All sources agree that different regions suffered somewhat different inflation rates, but there is little or no agreement about the precise magnitude of the inflation or

about the regions suffering the highest or lowest rate (see table 10). On a mix-adjusted basis, the various candidates for the highest rate include Scotland (Halifax and Leeds Permanent), Greater London (Abbey National and Nationwide), and Northern Ireland (DoE). On a simple average basis Wales (DoE) and East Midlands (Halifax) appear in the list. At the other end of the range there is a better measure of agreement: the lowest rate of increase on a mix-adjusted basis is accorded to West Midlands (DoE, Halifax, Nationwide), to the East Midlands (Leeds Permanent) or to Yorkshire and Humberside (Abbey National); whereas on a simple average basis the West Midlands appears again (Halifax) together with Northern Ireland (DoE).

Table 9. Comparative house-price changes (%), by regions, for all dwellings (first quarter 1983 to fourth quarter 1983).

Region ^a	DoE 5% sample C		Halifax A		Abbey National A	Nationwide A	Leeds Permanent A
	SA	WI	SA	SI			
1	16.0	7.6	7.3	6.3	11.4	11.6	6.2
2	8.0	10.0	7.6	6.2	9.7	7.1	10.5
3	8.3	6.4	8.1	6.8	10.7	8.1	5.8
4	6.8	4.3	4.9	9.6	11.6	10.4	10.9
5	11.1	9.9	4.1	7.8	16.5	14.4	6.2
6	10.7	9.6	3.7	8.1	11.7	14.8 ^b 11.4 ^c	8.3
7	15.0	11.1	4.8	5.4	10.5	9.7	9.1
8	13.1	3.9	3.0	3.2	10.2	3.9	9.0
9	10.6	4.9	5.8	5.2	10.7	7.5	6.7
10	17.0	14.4	5.6	4.1	13.8	6.0	10.2
11	5.8	6.4	7.8	9.7	12.7	10.6	12.6
12	1.8	15.9	5.7	5.3	12.0	10.6	10.2

Key: A approved, C completed, SA simple averages, SI standardised index, WI weighted index.

^a See table 6 for list of regions.

^b Outer Metropolitan Area.

^c Outer South East.

Table 10. Regional house-price changes: ranking of regions by source (first quarter 1983 to fourth quarter 1983).

Region ^a	DoE 5% sample		Halifax		Abbey National	Nationwide	Leeds Permanent
	SA	WI	SA	SI			
1	2	7	4	6	7	3	10
2	9	4	3	7	12	10	3
3	8	8	1	5	8	8	12
4	10	11	8	2	6	6	2
5	5	5	10	4	1	1	10
6	6	6	11	3	5	2 ^b	8
7	3	3	9	8	10	7	6
8	4	12	12	12	11	12	7
9	7	10	5	10	8	9	9
10	1	2	7	11	2	11	4
11	11	8	2	1	3	4	1
12	12	1	6	9	4	4	4

Key: SA simple averages, SI standardised index, WI weighted index.

^a See table 6 for list of regions.

^b Based on average of price changes for Outer Metropolitan Area (14.8%) and Outer South East (11.4%).

It is particularly notable that the effect of mix-adjustment, observable from the DoE and Halifax series, is very striking, sometimes increasing and sometimes decreasing the rate. In one case (the DoE series for Northern Ireland), the rate changes from 1.8% to 15.9% moving the region from the bottom rank of regional inflation rates to the highest! The reliability of this result is dubious because of the small samples recorded for Northern Ireland in the DoE five percent sample, but it serves to stress, in a particularly striking manner, the importance of mix-adjustment and the need for it to be based on a sufficiently large and representative data base. We comment further on the problems of interpretation and the question of reliability in the next section.

6 Interpretation

The preceding section has revealed very considerable conflicts in the evidence provided by the various sources about price levels and price movements. We now turn to the question of interpretation. As before, we consider this question under the same headings of price levels and price movements. We draw a sharp distinction between the two because information which may be useful for measuring one may not be useful for measuring the other. With regard to the reliability of data on price *levels*, the most important question relating to any source is its representativeness of all transactions, whereas in the context of measuring price *movements* a more important question is that of mix-adjustment. We now examine the available sources in this context.

6.1 Price levels

The most comprehensive source in the sense of covering all transactions is the Inland Revenue's annual survey of conveyances (table 1, reference number 3). Unfortunately, it is limited to one week only each year, is published with a considerable time lag, and is confined to England and Wales. Further, interpretation of this source needs to take account of the fact that, by virtue of its covering all transactions, sales both at market and at 'nonmarket' prices (including discounted local authority council house sales) are covered. It should be noted too with respect to timing, that the prices themselves have no precise reference point because they will have been determined at various times depending on the time lags before transactions are finalised.

Of the remaining sources based on actual transactions, eight out of nine are derived from building societies (table 1 refers). Given this limitation, the most comprehensive source is the DoE/BSA BS4 survey, covering 80% or more of building society transactions. On the other hand, it has only recently begun to exclude houses sold at nonmarket prices and then may not do so as completely as other sources. The main disadvantage of information drawn solely from building society sources is the fact of its partial coverage of the market. Although building societies are the most important source of institutional finance for house purchase, the share of the market for which they are responsible fluctuates considerably from year to year and is not representative of the whole market because other institutions attract business from particular sectors of it: banks and insurance companies tend to lend 'up-market' and local authorities tend to lend 'down-market'. Over recent years the relative importance of these other institutions has fluctuated very considerably—for example, over the period 1972–1982 the proportions have varied as follows: banks (2%–36%), insurance companies (0%–5%), local authorities (0%–24%)—and has been an important source of bias in figures based solely on building society data. The only institutions which are not building societies for which house-price data are published are insurance companies (table 1, reference number 11).

The representativeness of data provided by *individual* societies needs to be interpreted with three additional factors in mind: geographical coverage, sample size, and the lending policies of different societies. The problem of nonrepresentative geographical coverage may be met by using nationally representative weights rather than relying on the society's own pattern of transactions. The Nationwide, Abbey National, and Leeds Permanent Societies have all adopted this practice, though the actual weights used differ (see table 3). It is difficult to comment on the question of sample size without fuller information, but it is likely to be most acute in the analysis of subclassifications of data as in the analyses, for example, by type of house and by region. These are also likely to be open to additional error on account of the under-representation of some societies in some areas.

With regard to lending policies, these change from time to time and it is not possible to generalise. One notable factor likely to affect the average price levels reported by different societies is the policies they adopt with regard to differential interest rates on large loans (and thus, by extension, on the more expensive properties): societies not operating a differential rate system or offering better terms than others will attract more of the business at this end of the market and thus inflate the average price level they report. Differential schemes were dismantled in the face of competition from banks in the mortgage market in 1982-1983. They have now been reintroduced and at the time of writing (late May 1984) only one society among the top five (Woolwich Equitable) does not operate a differential scheme; the others operate a sliding scale, according to size of loan, which varies from one society to another. Currently, in addition to the Woolwich Equitable, upward bias is more likely to affect the Nationwide (which provides more attractive rates at the top end of the range and charges a higher rate at the bottom end of the range) and the Abbey National (which operates differential rates from a lower loan level than other societies).

Another problem in the interpretation of building society data is of more recent origin and arises from the practice of mix-adjustment. We have argued that mix-adjustment is essential for comparing price movements. Some societies, however, publish only average prices (at least for *all* properties) in a mix-adjusted form only⁽¹⁾ (for example, Abbey National, Nationwide, Leeds Permanent) and thus, if for no other reason, they are not directly comparable with other sources.

Comparisons are also affected, as we indicated earlier, by differences in timing (mortgage completions versus mortgage approvals) and in the extent to which the underlying data base is edited to exclude sales taking place at nonmarket prices. Most building society data are measured at the approvals stage. This has the disadvantage of including some cases for which mortgage loans were approved but which were subsequently cancelled or amended. On the other hand, such data allow prices to be defined at a more precise point of time and are more up-to-date.

For information about regional price levels and for breakdowns by type of house (new or nonnew) and type of buyer (first-time or former owner-occupier) we remain dependent on the DoE or individual building societies. The DoE naturally provides greater coverage of individual societies, but in this case the data are drawn from the five percent sample rather than the BS4 survey. This means that the data base is much reduced in size (and is indeed smaller than that used by some individual societies). Another consequence is that the data refer to completions and thus differ from those used by the individual societies, all of which (except Anglia) now record transactions at the approvals stage, and are not edited to exclude nonmarket price transactions etc. On the other hand, the analyses made by individual societies may be biased by their lending policies and, at the regional level in particular, by an unrepresentative regional

⁽¹⁾ Subcategories may be left as simple averages as in the current Leeds Permanent data.

representation. We discussed lending policies above and no further comment is required. It is difficult to comment on regional representation in any comprehensive manner because of lack of information. It is known that a disproportionate part of the lending of even the largest societies is concentrated in some areas. Nonetheless it remains possible that individual societies may provide reasonably representative national coverage; this is the case for the Halifax and possibly for other societies too. Naturally, however, the lower the level of aggregation at which analyses are made (for example, by house type within regions) the smaller become the sample sizes and thus the advantages of increased disaggregation need to be balanced against the disadvantages of larger sampling errors. Thus, other things being equal, the balance of advantage will tend to lie with the larger societies (amongst the top five societies the rank order by assets is as follows: Halifax, Abbey National, Nationwide, Leeds Permanent, and Woolwich Equitable).

Next we turn to the sources which are not based on actual transactions (table 2 refers). Three of the four sources quote actual price levels as opposed to price movements: Woolwich Equitable, NHBC, and ISVA/FW. But in this context they would seem to have little to offer over data based on actual transactions, especially now that many sources provide breakdowns by house and buyer type and edit their data to exclude atypical transactions of one kind or another. The only advantage they would seem to offer as indicators of price *levels* would appear to be, first, their possible ability to override the distortion in building society figures, arising from time to time from their partial and varying coverage of the total market and, second, in providing information not available from other sources, for example, information about typical price ranges in particular towns as in the Woolwich Equitable data.

6.2 Price movements

Our comments here may be taken as applying both to national and to regional data. We have stressed the impossibility of making reliable measurements of price movements unless the underlying mix of transactions is held constant. Indeed this problem formed the main focus of our attention in our earlier review (Fleming and Nellis, 1981). In contrast to the situation then, when only one mix-adjusted source was available, there are now five such sources: the DoE (five percent sample) and the top four building societies (Halifax, Abbey National, Nationwide, and Leeds Permanent). With the exception of the Halifax, all use the same method of adjustment, namely weighted averages, but vary according to the number of characteristics taken into account and in the weights used. Details were set out in table 3. As we explained earlier, the Halifax uses a different methodology. There are three reasons for suggesting that the Halifax standardised indices probably now provide the most reliable measures. These are (not necessarily in order of importance): first, the data base is larger than that used by the DoE or by other societies; second, the range of information about house characteristics is wider; and, third, the methodology employed provides a more refined way of allowing for the influence of house characteristics on prices than the system of cross-classifications used in the weighted average method.

As yet, the Halifax indices cover only a relatively short period of time (from January 1983). For a longer time series, the choice of series must rest between the DoE weighted index, which has been calculated retrospectively back to 1968, and the Nationwide which is available back to 1946. It is difficult to comment on the relative virtues of these two series over the period for which they run together, as they are both based on the same type of characteristics and use a similar methodology. Apart from differences in the reliability and representativeness of the underlying data base, on which we are not able to offer any judgment, it would seem that the Nationwide

Table 11. Recommendations on the choice of series. (The comments here are meant to focus on the main reasons for the choice of particular series and on major limitations. Reference should also be made to the discussion in section 6 and the description of the series in sections 2-4.)

Type of data	Recommended series	Comments
<i>Price levels</i>		
National (UK) analyses		
(a) all dwellings	DoE/BSA BS4 survey	Most comprehensive <i>regular</i> coverage of transactions, but limited to building societies only.
(b) by house type (new/nonnew)	New only, NHBC (completed); otherwise DoE 5% sample (average prices) or Halifax (from January 1983)	The DoE source is more representative than individual societies, though the latter prepare more timely data and use larger data bases. The Halifax is the biggest society and publishes simple average prices—the other big societies publish <i>weighted</i> averages. All possess the disadvantage again of being limited to building societies. For new houses, however, the NHBC is the most representative, since it covers almost 100% of all new house transactions completed.
(c) by buyer type (FTB/FOO)		
Regional analyses		
(a) all dwellings	DoE 5% sample (average prices) or Halifax (from January 1983)	From 1983 the Halifax uses the largest data base, takes account of more house characteristics than the DoE or other societies and uses the most sophisticated methodology for mix-adjustment purposes. Before 1983, the Nationwide has the advantage of a larger data base, a better house-size variable and a longer historical series than the DoE, but the limitation to one society introduces a potential source of bias depending on its representativeness. Again, the restriction of all sources to building society transactions is an important limitation in principle.
(b) by house type (new/nonnew)	New only, NHBC (completed); otherwise DoE 5% sample (average prices) or Halifax (from January 1983)	
(c) by buyer type (FTB/FOO)		
<i>Price movements</i>		
National (UK) analyses		
(a) all dwellings	Halifax standardised indices (from January 1983); Nationwide or DoE weighted index (before 1983)	See comments above.
(b) by house type (new/nonnew)		
(c) by buyer type (FTB/FOO)		
Regional analyses		
(a) all dwellings	Halifax standardised indices (from January 1983); Nationwide or DoE weighted index (before 1983)	The only source incorporating mix-adjustment at this level of analysis.
(b) by house type (new/nonnew)		
(c) by buyer type (FTB/FOO)	Abbey National	

possesses certain advantages for the following reasons: (a) a larger and more consistent data base (editing of the DoE data base is recent and less extensive—see table 3) and (b) the house-size variable used by the Nationwide is based on floor space and is probably a better variable than that used by the DoE which is based on the number of habitable rooms. Apart from these differences, the series can also be expected to differ because of the use of completions versus approvals data and the use of completely different weighting systems—fixed in the case of the DoE and continually adjusted weights in the case of the Nationwide (see table 3).

The RICS and ISVA series also constitute useful supplementary sources because, although they are subjective in the sense of not being derived statistically from actual transactions, they do attempt to provide standardised assessments by obtaining opinions from their members working in the housing market about price movements for specific types of property.

7 Conclusions

In conclusion, we summarise our appraisal of the available sources and consider desirable improvements. Very considerable improvements have taken place in the quality of information now available about house prices, especially about price movements, since our survey of the situation in 1980 (Fleming and Nellis, 1981). These improvements have all taken place over the last two years. Nonetheless, room for improvement still remains.

We have considered the information currently available under two main headings: data on price levels and data on price movements at the national and regional levels, respectively. There is no one series which can be regarded as the most reliable for all purposes: this depends on the particular type of data required. We summarise our conclusions about the most reliable series in table 11. But we would stress that the reasons for the conclusions are stronger in some cases than for others and should be considered in the context of the discussion in section 6. Note also the comments made in the final column of table 11.

Finally we turn to desirable improvements. The most important deficiency of all the available series is their limited coverage of the housing market. The main sources are confined to building society data. Unfortunately, these are open to an important source of bias as other financial institutions enter and withdraw from the market to a greater or lesser extent from time to time. As a prerequisite, reliable measurement (especially of price levels) demands representative coverage of the whole market.

Reliable measurement of price *movements* poses a standard index-number problem in a particularly acute form because of the highly diverse character of housing and the importance of locational attributes in determining prices. All methods of mix-adjustment depend upon the availability of information about the locational and physical characteristics of the houses being traded. The most extensive information about these matters is now embodied in the new Halifax indices, but the range of relevant information is not exhausted. Improvements in this area, therefore, require better and more extensive information about these matters.

Acknowledgements. We are grateful to officials of the Abbey National, Nationwide, Leeds Permanent, Woolwich Equitable, National and Provincial, and Anglia Building Societies, the Incorporated Society of Valuers and Auctioneers, the Royal Institution of Chartered Surveyors, the National House-Building Council, and the Department of the Environment for providing information.

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APPENDIX

Table A.1. Data sources referred to in tables 1 and 2.

Reference number	Source	Publication
1, 2	DoE/BSA BS4 survey and DoE five percent sample	<i>Housing and Construction Statistics (HCS)</i> formerly <i>Housing Statistics (HS)</i> quarterly (HMSO, London) <i>BSA Bulletin</i> quarterly (Building Societies Association, London)
3	Inland Revenue	<i>Economic Trends</i> monthly (HMSO, London). Various issues from May 1974. Currently published in an annual article entitled "Trends in sales of land and buildings ..."
4	Halifax	<i>National Bulletin</i> monthly and <i>Regional Bulletin</i> quarterly (Halifax Building Society, Halifax)
5	Abbey National	<i>Homes—People, Prices and Places</i> quarterly (Abbey National Building Society, London)
6	Nationwide	<i>Nationwide Building Society Bulletin</i> formerly <i>Occasional Bulletin</i> quarterly (Nationwide Building Society, London)
7	Leeds Permanent	<i>Housing Finance</i> quarterly (Leeds Permanent Building Society, Leeds)
8	Woolwich Equitable	<i>Woolwich Review</i> biannually (Woolwich Equitable Building Society, London)
9	National and Provincial	<i>Occupational Lending Survey</i> annually (internal document, not formally published, National and Provincial Building Society, Bradford)
10	Anglia	<i>Housing Market</i> biannually (Anglia Building Society, Northampton)
11	Survey of Insurance Company Mortgages	<i>Housing and Construction Statistics</i> quarterly (HMSO, London)
12	NHBC	<i>Private House-Building Statistics</i> quarterly (National House-Building Council, Amersham)
13	ISVA/FW Housing Index	<i>The Valuer, Journal of the Incorporated Society of Valuers and Auctioneers</i> ten issues per year and <i>Financial Weekly</i>
14	RICS	<i>RICS News</i> monthly press notice (Royal Institution of Chartered Surveyors, London)

Fleming, M. C. and Nellis, J. G. (1985b) "The Application of Hedonic Indexing Methods: A Study of House Prices in the United Kingdom", *Statistical Journal of the United Nations Economic Commission for Europe*, Vol. 3, pp. 249-270.

The application of hedonic indexing methods: A study of house prices in the United Kingdom

M.C. Fleming and J.G. Nellis

The hedonic approach to price measurement is described and applied to a newly-developed data base relating to house sales in the United Kingdom. This data base is exceptionally large and provides information on a wide range of house characteristics not available hitherto. A monthly index of prices covering all (both new and non-new) houses is derived for the period from January 1983. Indices for sub-groups of houses and buyers are presented. The housing market background in the United Kingdom is outlined and the problems of measurement and the results are appraised.

1. Background

This paper reports on the development of an index of the purchase price of houses¹ in the United Kingdom (UK). It is to be distinguished from indices of the price of housing services, based on rents or imputed rents, of the kind employed in national income accounts. Unlike the latter, we are concerned here only with that part of the stock which changes hands through sale each year plus newly-built houses being added to the stock. Apart from its intrinsic interest to house buyers, sellers and intermediaries, such a measure is of central importance in the compilation of capital formation and capital stock statistics, in studies of

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¹ We use the term 'house' not in its strict sense but, following common practice, to refer to all sorts of permanent dwellings including bungalows, flats and maisonettes.

the composition and distribution of national wealth, and in studies concerned with modelling the behaviour of house prices. The objective of measurement raises index number problems in a particularly acute but interesting form because of the great heterogeneity of housing units. We first place the work in context against the background of the housing situation and market in the UK.

The housing market in the UK is a very active one. Although only a small part of the stock changes hands each year – probably well below one tenth – it represents, nonetheless, a very large number of transactions. The major part of the stock consists of houses and bungalows; only about ten per cent are flats. Over the space of three decades or so a major transfer of ownership from private landlords to owner-occupiers has occurred – the latter doubling to reach a level exceeding three fifths of a much enlarged total stock (a greater proportion than in any country of Western Europe except Spain, Norway, Greece and Belgium) [1]. At the same time, due partly to relative price changes, housing has come to dominate personal wealth [9]². These developments, together with a rapid inflation of house prices in the 1970s, have led to house prices becoming a widespread focus of attention. There are now at least fourteen major organisations (including the government department responsible for housing), supplying regular reports on UK house price levels and movements; this contrasts with the position twenty years ago when only two regular reports were available [4,5].

Not surprisingly perhaps, with so many organisations providing house-price reports, the information which they supply is very often in conflict not only with regard to price levels and the magnitude of price movements but also with regard to the direction of change. The main reason for this has been that, until recently, little or no attention was paid to the problems of measurement coupled with limitations in market coverage depending on the source. Measurement has consisted either in taking simple averages of prices (entailing the bold implicit assumption that the underlying mix of properties and their characteristics remain constant) or, more recently, a weighted average of mean prices for sub-categories of houses classified, for instance, by type, size, etc. But, at the most, only four house characteristics have been employed for sub-classification purposes.

Partial coverage of the market arises because most series (including the official data) are confined to houses purchased with the aid of loans from one type of institutional source, namely building societies. Building societies are non-profit-making savings and loan institutions ('friendly societies') specialising in the provision of loans for house purchase. In 1983, the year to which our analysis relates, they provided three quarters of total institutional finance. Each of the major societies has its own series. But individual societies have different lending policies catering for different borrower-groups and tend to have an uneven regional representation throughout the country. A comprehensive review of all of the available sources and the evidence they provide has been provided elsewhere

² By 1975 (the latest year for which information is available) housing had come to represent 44 per cent of personal sector net worth, more than doubling in the space of 18 years; the next biggest item – equity in life assurance and pension funds – represented only 12 per cent of the total.

[4.5]. In this paper we discuss the application of the so-called 'hedonic technique' to devise a new index of house prices in the United Kingdom aimed at capturing the influence of a much larger range of housing attributes than is available in any other source, and using a data base specially established for this purpose.

The principles and practice of the hedonic approach to measurement are outlined in the next section. The data base and the subsequent empirical analysis are described in Sections 3 and 4. The standardised indices which represent the results of the study are given in Section 5. Conclusions follow in Section 6.

2. The hedonic approach to measurement: Principles and practice

2.1. Principles of the hedonic approach

The hedonic approach to measurement rests upon the idea that goods are valued by consumers for their utility-bearing attributes or characteristics, not because they provide a single well-defined service in consumption [12,13]. Houses are durable goods providing a flow of services over long periods of time and, at the most fundamental level, may be regarded as simply satisfying the basic human need for shelter. However, few if any houses are alike and the demand for housing services must be regarded, more realistically, as a demand for a complex bundle of attributes. Thus, at a particular point of time, given supply and demand conditions in the market, the valuation placed on a house by a prospective purchaser may be expected to depend on the particular bundle of attributes possessed by the house in question.

What makes houses particularly interesting, but at the same time difficult to analyse, is the very complexity of the attributes they possess. They differ according to a wide variety of quantitative and qualitative characteristics relating to the properties themselves. For example, they differ by type, size, design, amenities, quality of materials and workmanship, state of repair (in the case of non-new houses), garden, garage(s) etc. – the list is almost endless. At the same time, unlike other consumer goods, houses are unique in occupying a fixed location and thus locational attributes must also play an important part in determining prospective purchasers' valuations. Again, a host of factors may come into play: closeness to towns or town centre, to schools, shops, transport and recreational facilities etc. and, not least, the general environmental quality of the neighbourhood.

It follows that the application of the hedonic technique makes large data-capturing demands if useful samples of goods and their characteristics are to be obtained. This is one reason perhaps why the technique is not more widely used than it is. Although, in principle, it is widely applicable to index-number problems it has found more widespread use in cross-section studies and has proved particularly valuable in coping with the problem of standardisation in international comparisons, as in Phase III of the UN ICP project [11] in which it was used for the evaluation of housing services (based on rents data) and for other

goods. Subsequently, in Phase IV of the project, the hedonic method was replaced by a new method for price comparisons of residential and other construction works but retained for 'sophisticated' products such as producer durables. Other reasons that have probably limited the application of the technique in practice, apart from the large regular data needs it imposes, are its relatively greater statistical sophistication compared with standard index calculation procedures and the extensive computational effort needed on a regular basis.

2.2. Application of the hedonic technique

This section provides a relatively non-technical account of the application of the hedonic technique. Details of the technical aspects of the empirical analysis are presented separately in Section 4 after describing the data employed.

The standard statistical approach to the application of the hedonic technique of price measurement is to use multivariate regression analysis to isolate the variations in price that are caused by changes in the qualitative and quantitative characteristics of goods (in this case housing), from those which reflect other market forces (that is, purely inflationary factors) [6.16]. Given data on house prices and the attributes of the houses sold in different time periods, we can thus estimate the change in average price, from one time period to another, on a standardised basis (that is, keeping the mix of attributes or characteristics constant).

In relation to the present study, a sample of house prices, P_{it} , may be observed, where t represents the time period in which each house i is sold. Given the supply and demand conditions in the housing market, such houses may be priced differently due to differences in their characteristics. Thus, for each house i , we can write P_{it} as some function of these various characteristics, X_j , together with a group of unmeasured factors (assumed to be randomly distributed) which are specific to each house but for which data are not available, e_{it} ; that is:

$$P_{it} = f(X_{1t}, X_{2t}, \dots, X_{jt}, e_{it}).$$

Given the dichotomous nature of much of the data employed in this study, many of the characteristics can only be represented by 'dummy variables' which take the value of one or zero depending upon the presence or absence of a particular attribute. Coefficients pertaining to each of the explanatory variables in the above equation are estimated using the technique of ordinary least squares. Separate regressions may be estimated for different sub-sets and/or different time periods. In addition to an analysis for *all* houses in the UK, we have also analysed various sub-sets at the UK and regional levels – however, in the interests of brevity we present the econometric analysis for all houses only in the UK. In total, five series are available at the UK level and a further 36 series at the regional level [7].

Although in principle it may be thought desirable to use all the information available from 'explanatory' variables, in practice certain variables may be so correlated one with another that it may be impossible to measure particular

coefficients in any one set or sub-set of the data without the problem of multicollinearity. As a consequence, it is necessary to conduct appropriate statistical tests to examine the possible existence of this problem and, if necessary, to take the appropriate remedial action. The problem of multicollinearity in statistical analyses of this kind is a matter of degree: the problem, where it exists, can rarely be eliminated and the aim of the researcher, therefore, can only be to minimise its effects. In the present study it was not found to be of major importance. A common procedure is to drop independent variables from the analysis which are 'highly' correlated with other independent variables. However, for the purpose of the analysis, the procedure for selecting variables was not determined solely on the basis of simple correlation but by systematic computer routines which explore the simultaneous correlation between *sets* of explanatory variables – these procedures are briefly described in sub-section 4.1. below.

At the same time, it is necessary to determine the appropriate form of the functional relationship between the variables. In this respect the dummy variable technique is particularly useful because it allows the incorporation of variables to which price may be related non-linearly, without the necessity of specifying the nature of the non-linearity. This is not the case, of course, for non-dichotomous variables and these are incorporated into the estimation procedure as integer values. However, preliminary analyses of polynomial transformations of these variables showed that such transformations provided no significant addition to the explanatory power of the regression equations. But, in contrast, transformation of the dependent variable, price, proved to be statistically significant and this was confirmed by the use of Box-Cox tests: these indicated a preference for a semi-logarithmic functional form for the estimating regression equations, with P_{it} expressed in natural logarithms (see sub-section 4.1 below).

2.3. The hedonic technique and index numbers

The next step is to apply the above methodology to derive index numbers. The usual way of devising an index, employing the hedonic approach, is *either* to take a weighted average of the estimated regression coefficients (each coefficient being regarded as an implicit characteristics-price), *or* to incorporate an additional dummy variable for time into a regression covering more than one time period: the coefficients on such dummies directly reflecting the change in price from one time period to another. We refer to these methods as the 'base-weighted' and 'time-dummy' methods respectively, although with regard to the former, it will be appreciated that weights other than those appropriate to the base period may be adopted. We consider each method in turn.

Base-weighted method

The steps involved in applying the base-weighted method may be summarised as follows:

- (i) Calculate the weights, Q_{jt_0} : the proportions of the qualitative variables and the means of the quantitative variables present in the base period.

- (ii) Estimate the regression coefficients, b_j , for the j explanatory variables, in both the base period (that is, b_{j,t_0}) and for every subsequent time period (such as, b_{j,t_n} for the current time period).
- (iii) Compute a base-weighted (Laspeyre's type) index for the current period (I_{t_n}) as follows:

$$I_{t_n} = \frac{\exp(\sum b_{j,t_n} Q_{j,t_n})}{\exp(\sum b_{j,t_0} Q_{j,t_0})} \times 100$$

Time-dummy method

Using the time-dummy method, an index of average prices on a standardised basis can be estimated *directly* from the regression analysis by *pooling* data for consecutive time periods and including 'time' as an additional explanatory variable in the estimating equation. However, in practice the pooling of a large number of periods is inconvenient, may lead to computational problems and certainly makes large demands for computer time when the data base and the number of variables are large. An alternative approach, therefore, is to use regressions for overlapping pairs of successive time periods. This produces estimates of the change in price between each overlapping pair of periods which can then be 'chained' accordingly to produce an index. For the purpose of this study both variants of the time-dummy method were employed for comparative purposes – see Section 5 below.

It should be noted that with respect to both of these time-dummy approaches, the general form of the estimating regression equation is identical to that for the base-weighted method, except of course that we now introduce a set of dummy variables, T_k (one variable for each period) into the equation employing the former method, and a single dummy variable, T , to represent the movement in price from one period to the next into the equation employing the latter method. In both cases, with price measured as before, in natural log form, the coefficients on each variable measure the proportionate, rather than the absolute, response of price with respect to unit changes in the independent variables. Therefore, with time incorporated as a dummy variable, percentage changes in price can be observed directly as the coefficient on T .

We now turn to describe the house-characteristics data base used in the new UK index and then set out the technical aspects of the analysis underlying its establishment.

3. The data base

The data base used was established by the largest building society in the United Kingdom (Halifax Building Society) from the beginning of 1983. It has several merits from the point of view of this study. First, the size of the data base is exceptionally large because the number of house purchase transactions financed

is as follows:

1. Purchase price (at the mortgage-approval stage).
2. Location: official standard regions (former 'Economic Planning Regions'-EPRs).
3. Type of property:
 - (a) House.
 - (b) Bungalow.
 - (c) Converted flat or maisonette.
 - (d) Purpose-built flat or maisonette.

Each of the above is sub-classified as follows:

- (a) Semi-detached.
 - (b) Detached.
 - (c) Terraced
4. Age: estimated age in years.
 5. Tenure: freehold/leasehold.
 6. Number of:
 - (a) Habitable rooms.
 - (b) Bathrooms.
 - (c) Separate toilets.
 7. Central heating: none, full, partial.
 8. Number of garages.
 9. Number of garage spaces.
 10. Garden (yes/no).
 11. Land (area of land if greater than one acre).
 12. Road charge liability (amount).

Two further points should be noted with regard to the data. First, as we indicate, the data refer to mortgage transactions at the approval, as opposed to the completions, stage. This means that the price information is more up-to-date as an indicator of price movements because of the time lags that occur between loan approval stage (roughly coincident in timing with the price negotiation stage) and the ultimate completion of the transaction – a lag that may extend over several months. On the other hand, some 'approvals' will not proceed to completion. It would be possible to exclude such cases but only at the expense of repetitive retrospective up-dating of information extending over several months because of the time lags referred to above. In order to gain the advantage of timeliness in the measurement of price changes, this problem is ignored: all approval data enter into the analysis except for those that are cancelled during the same month as the date of initial approval. Given the relatively small number of cancellations involved, there would seem to be no reason to believe that this procedure should represent a source of bias. Amendments to an initial offer that are made during the same month as the initial offer are incorporated in their amended form.

The second point to note is that not all of the information collected about house characteristics is used in the analysis. Apart from editing to exclude abnormal cases, as referred to above, some characteristics are omitted as a result

Table 1
Regional distribution of mortgages, UK, first quarter 1983 (%)

UK Regions	Halifax Building Society	All Societies
North	6.3	5.7
Yorkshire & Humberside	13.1	10.0
East Midlands	6.8	8.4
East Anglia	3.4	3.4
Greater London (GL)	9.9	8.9
South East (excl. GL)	19.3	21.7
South West	7.0	9.8
West Midlands	6.7	9.5
North West	14.2	9.8
Wales	3.5	3.8
Scotland	6.9	7.0
Northern Ireland	2.9	2.1

by the Society each month is very large and all of these are covered in the statistical reporting system. In 1983 it provided, after editing to remove unsuitable cases (as described below), over 150 000 transactions for analysis. As a consequence, the analytical procedures followed in this study permit much more reliable estimation than would otherwise be the case. Secondly, the scope of the data collected about house characteristics is more extensive than anything available hitherto in the United Kingdom and this again helps to improve the reliability of the statistical analysis. Thirdly, although the data come from one society alone, its transactions are not confined to any one area: it has branch offices throughout the United Kingdom and provides good national coverage of all building society transactions (Table 1) sufficient to allow the independent influence of regional location factors on prices to be isolated and thence held constant over time for the purpose of constructing a representative national index.

One disadvantage of the data base is its limitation to building society transactions. On the other hand, it is larger than any other source (including the official sample survey of all building societies [3]) and, further, no other source offers the advantage of covering *all* transactions even with restricted information on house characteristics.

As indicated above, although one hundred per cent coverage of all house purchase transactions financed by the Society is obtained, not all of the data are allowed to enter the analyses. In general, properties which are not for private occupation and those that are likely to have been sold at prices which may not represent 'normal' market prices are excluded (for example, public authority house sales at discounted prices under 'right to buy' legislation, sales to sitting tenants etc.). The vast majority of properties are sold 'freehold' and the purchase price includes both the house and the land associated with it. Leasehold properties are separately identified – see below.

We now summarise the information available about house characteristics. This

of preliminary statistical investigation of the usefulness of particular variables in contributing independently to the explanation of prices.

4. The empirical analysis

4.1. Technical aspects of the analysis

As briefly outlined above in sub-section 2.2, several interrelated problems are commonplace in regression analysis and are especially relevant in the present context. These problems are:

- (i) the choice of functional form for the estimating equation,
- (ii) the degree of correlation between the explanatory variables themselves (i.e. multicollinearity), and
- (iii) the possibility of the error term, e_{it} , exhibiting a non-constant variance (i.e. the presence of heteroskedasticity).

Considerable attention was devoted to each of these subjects in arriving at the estimating equations.

(i) The choice of functional form

The first step in regression analysis is to determine an appropriate functional form for the estimating equation. A potentially serious source of bias in hedonic price and other regression-based studies may be associated with functional form mis-specification. In principle, many functional forms are possible, but unfortunately there is no theoretical guidance as to which form is the most appropriate to particular models. The solution to this problem, therefore, reduces to an empirical one. Box and Cox [2] have developed a statistical test for the functional form providing the 'best fit' based on likelihood ratio tests. The procedure they suggest is adopted here, using the information available for January 1983 as a representative sample data set (extensive analyses were also carried out using other monthly data sets but the results indicated that the data structure was relatively stable from month to month). On the basis of these results, the semi-logarithmic functional form (with the dependent variable P_{it} measured in natural logs) was shown to be preferred.

Various versions of the Box-Cox test procedure may be employed to test for not only the appropriate transformation of the dependent variable, but also for the appropriate forms of the explanatory variables to be included in the estimating regression equations. However, in relation to the present study a major difficulty in applying this test is that many of the explanatory variables are dichotomous (i.e. dummy variables, taking the value of 0 or 1). This is problematic in that any power transformations of these variables, which include all the qualitative characteristics, must necessarily be linear. Thus the search for functional form using the Box-Cox procedure can only be conducted with respect to the quantitative explanatory variables and the dependent variable, price.

Considerable attention was devoted to searching for the optimal mix of

explanatory variables and their transformations in the hedonic regressions. Given the information on such a large number of qualitative and quantitative characteristics it will be appreciated that a search over *all possible* specifications is impractical. Nevertheless, we explored a very large number of possible specifications, focusing on those variables which, (a) were the most obvious candidates for transformation, and (b) were thought to be the most important determinants of house prices such as those variables representing size (number of bedrooms and habitable rooms) and the age of the property. The results showed, however, that transformations of the explanatory variables added very little, if anything, to the overall explanatory power of the hedonic price equation with respect to both the linear and semi-log models. The results were found to be substantially more sensitive to changes in the specification of the dependent variable. Consequently, the Box-Cox test for functional form ultimately focused on the choice between the linear and the semi-logarithmic models. The conclusion drawn from the analysis was that the logarithmic transformation of P_{it} provides the most appropriate functional form for the hedonic regression equation. The complete list of variables included in the final regression specifications which are used to generate the standardised index numbers, is shown later (Table 2).

(ii) Multicollinearity

Multicollinearity refers to the situation in which some or all of the explanatory variables are highly correlated and are therefore not independently distributed. The existence of marked interrelationships between explanatory variables can cause problems with respect to the following aspects of regression analysis:

- (a) estimated regression coefficients may not be uniquely determined,
- (b) estimates of the coefficients from sample to sample may fluctuate markedly, and
- (c) less reliability is placed on the relative importance of variables indicated by the partial regression coefficients.

It will be appreciated, however, that multicollinearity is inevitably present to some degree in most econometric analyses. It can rarely be eliminated completely and the aim of the researcher therefore is to minimise its influence as much as possible.

The procedure adopted for identifying such interrelated variables was partly by examination of the correlation matrix of all the variables, but mainly by systematic regression procedures in which the relative explanatory power of different variables is determined in turn. At each step of the procedure the interdependence between each variable being considered as a candidate for inclusion is compared against the *group* of variables already selected. The measure used in this procedure is referred to as the 'tolerance' level of a variable, measured by $(1 - R_j^2)$ where R_j^2 is the squared multiple correlation when the j th explanatory variable is considered as the dependent variable and the regression equation between it and the other independent variables is calculated. If the variable has a large R^2 - or equivalently a small tolerance - when it is predicted from the other independent variables, then the presence of multicollinearity (to a degree) can be assumed. The

variance of the estimators will be inflated and computational problems can occur.

The classic way of dealing with the problem of multicollinearity is to discard variables from the regression analysis. If a variable is found to be very highly correlated with one or more other variables, use of these other variables alone can capture the effect of all. This is the approach adopted in the present study. By setting tolerance limits at an 'acceptable' level (discussed below), as well as gleaning the evidence from the relevant correlation matrix, it is possible to identify the most significant interrelationships between variables. The choice of an acceptable level must be based essentially on judgement, bearing in mind that members of important *sets* of variables are to be retained. The choice was guided by comparing the inclusion/exclusion decisions resulting from setting alternative levels up to 0.5. For further details see [14, pp. 345–347].

Three alternative procedures are possible: 'forward selection', 'backward elimination' and 'stepwise selection'. These are described below.

- (a) In forward selection, the variables are entered in turn. The first variable entered into the equation is the one with the largest positive or negative correlation with the dependent variable. The F test for the hypothesis that the coefficient of the entered variable is zero is then calculated. In order to judge whether this variable (and each succeeding variable) is important, a criterion must be established specifying the actual value of the F statistic that a variable must achieve in order to enter the model – called *F-to-enter*. If the first variable selected for entry meets the criterion for inclusion, forward selection continues. Once one variable is entered, the statistics for variables not in the equation are used to select the next one (and so on).
- (b) In backward elimination, *all* variables are initially entered into the regression equation. In contrast to the above procedure which allows the researcher to specify 'entry criteria', backward elimination permits 'removal criteria' to be employed, based as before on the F test. Variables having F values less than a specified *F-to-remove* are therefore sequentially rejected from the regression.
- (c) Stepwise selection of independent variables is probably the most commonly used procedure in regression; it is really a combination of the backward and forward procedures. The first variable is selected in the same manner as in forward selection. If the variable fails to meet entry requirements (*F-to-enter* value), the procedure terminates with no independent variables in the equation. If it passes the criterion, the second variable is selected based on the highest partial correlation and, if it also passes entry criteria, it enters the equation. From this point, stepwise selection differs from forward selection since the F value of the first variable is examined to see whether it is small enough for the variable to be removed according to the removal criterion (*F-to-remove*) as in backward elimination. The next step is to examine the variables not in the equation for entry, followed by examination of the variables already in the equation for removal. Variables are removed until none remain that meet the removal criterion. To prevent the same variable from being repeatedly entered and removed, *F-to-enter* must

be greater than F-to-remove. Variable selection terminates when no more variables meet entry and removal criteria.

A detailed discussion of the computational procedures described above is given in [14, pp. 345–347] and [15, pp. 118–121].

It will be appreciated that each method may not necessarily give identical results. In the present study, however, all three methods were employed and they were consistent in leading to particular conclusions concerning the variables that it would be desirable to exclude from the final regression specifications (see sub-section 4.2 below).

(iii) Heteroskedasticity

In regression analysis, the error term e_{it} is assumed to have independent normal values with a mean of 0 and a constant variance of σ^2 . However, when we are dealing with data of the kind used in the present study, the constancy of variance assumption may be violated, and the appropriate model may in fact be one with a so-called heteroskedastic disturbance (error) term – for a detailed discussion of this problem see [10, pp. 249–269].

A simple and direct method of detection (and the one employed here) is to plot the residuals generated from the estimated regression equation against the predicted values of the dependent variable. If the spread of the residuals increases or decreases with predicted values, it may be taken as an indicator of heteroskedasticity in the data set. The total data set for January 1983 was again used to test for the existence of this problem. The resultant scatterplot of residuals was observed to be relatively uniform across the range of predicted values for P_{it} . It is concluded therefore that the constant variance assumption appears not to be seriously violated with respect to the January data set. There is no reason to believe this should not hold for the data sets relating to other time periods.

It should be appreciated, however, that even if heteroskedasticity exists, it would only increase the confidence intervals of the indexes; it would not affect their unbiasedness [10, pp. 250–254].

4.2. Regression results

Definitions and code names of the variables included in the final specifications are set out in Table 2. The regression results relating to all houses for January 1983 – the exploratory data period – are set out in Table 3. It will be seen that the statistical significance of each variable as indicated by its t-statistic is very high indeed: all, except one (variable FH), are significant at less than the 0.1 per cent level and the exception (FH) is itself significant at the one per cent level. The overall explanatory power of the equation, as measured by the adjusted coefficient of determination (\bar{R}^2), is 73 per cent.

The values of the coefficients and their signs need to be interpreted with reference to the particular member of each dummy variable set that it is necessary to omit for computational purposes – see Table 2. These variables are: detached houses, full central heating and the South East region. Thus the value of each

Table 2
Definitions and code names of variables included in final regression specifications

House Characteristic	Code	Definition
House type:		
Detached	DH ^(a)	Five dummy variables taking the value of 1 if the property corresponds to a particular type. Otherwise 0.
Semi-detached	SDH	
Terraced	TH	
Bungalow	BUNG	
Flat	FLAT	
Number of bathrooms	BATH	Actual number of bathrooms.
Number of separate toilets	WC	Actual number of separate toilets.
Number of garages	GAR	Actual number of garages.
Number of garage spaces	SPACE	Actual number of garage spaces.
Presence of a garden	GARDEN	Dummy variable taking the value of 1 if the property has a garden. Otherwise 0.
Number of acres	AI	Dummy variable taking the value of 1 if the property has one acre or more. Otherwise 0.
Central heating:		
None	CHO	Three dummy variables taking a value of 1 according to central heating provision. Otherwise 0.
Partial	CHP	
Full	CHF ^(a)	
Freehold	FH	Dummy variable taking the value of 1 if the property is freehold. Otherwise 0.
Location (Economic Planning Region):		
North	EPR1	Twelve dummy variables taking the value of 1 according to the region in which the property is located. Otherwise 0.
Yorkshire & Humberside	EPR2	
North West	EPR3	
E. Midlands	EPR4	
W. Midlands	EPR5	
E. Anglia	EPR6	
Wales	EPR7	
South West	EPR8	
South East	EPR9 ^(a)	
Greater London	EPR10	
N. Ireland	EPR11	
Scotland	EPR12	
Road charge liability	ROAD	Dummy variable taking the value of 1 if the property is liable to a road charge. Otherwise 0.
Number of habitable rooms	HAB	Actual number of habitable rooms. ($0 < \text{HAB} \leq 20$) ^(b)
Age of property	AGEPROP	Actual age of property in years.

^(a) Variables omitted for computational purposes: one variable from each dummy-variable set must be excluded in order to avoid the problem of indeterminacy of the ordinary least squares normal equations [8].

^(b) Restriction imposed to eliminate outliers.

Table 3
Regression results – all houses, January 1983

Variable	Coefficient	t-Statistic
SDH	-0.2851	35.1
TH	-0.4603	48.4
BUNG	-0.0685	6.2
FLAT	-0.3315	21.4
BATH	0.1191	13.7
WC	0.0449	10.7
GAR	0.1754	27.7
SPACE	0.0752	9.1
GARDEN	0.0720	6.4
A1	0.4396	14.5
CHO	-0.1391	22.9
CHP	-0.0740	5.8
FH	0.0241	2.7
EPR1	-0.3848	29.6
EPR2	-0.4494	47.6
EPR3	-0.3550	38.2
EPR4	-0.4793	37.9
EPR5	-0.3368	28.4
EPR6	-0.3552	22.1
EPR7	-0.4359	28.5
EPR8	-0.1623	13.6
EPR10	0.2471	25.5
EPR11	-0.3978	16.1
EPR12	-0.1747	12.4
ROAD	0.1095	10.3
HAB	0.0798	35.9
AGEPROP	0.0004	5.2
CONSTANT	9.8809	436.8
\bar{R}^2	0.729	F-statistic 990.36
Sample size	9924	

regression coefficient measures the influence of the characteristic to which it relates relative to these omitted variables. Use of the term 'omitted' should not be misunderstood: the influence of the omitted variables is not excluded but is picked up by the constant (intercept) term.

The final stage of the analysis is to apply the regression results to derive standardised price indices in the way described earlier (sub-section 2.3). The results of this stage are considered in the next section.

5. Results: The standardised indices

As we explained in the Introduction, the aim of the study has been to derive several series of standardised index numbers at both the national and regional

levels of the UK. At the national level, the objective has been to compute one series to measure the change in price of all houses and four subsidiary series to measure changes for new houses, existing houses, houses purchased by first-time buyers and houses purchased by former owner-occupiers respectively. At the regional level, the objective has been to compute three series covering all, new and existing houses in each of the twelve official standard (former 'Economic Planning') regions of the UK. The end result, is 41 separate series: one for the whole set of data and 40 for various sub-sets of the data. In the interests of brevity we discuss only the series for all houses at the United Kingdom level.

5.1. Indices using the base-weighted method

Before presenting the series, we would point out that considerable attention was devoted to examining the sensitivity of the results to the particular pattern of weights adopted. Several different weighting systems were employed. The analyses showed that, over the period studied here, the index numbers were not sensitive to alternative weighting systems. Therefore, we present one series only, namely that using base weights reflecting the set of transactions taking place in January 1983. These are presented in Table 4 below together with indices obtained using the time-dummy method.

5.2. Indices using the time-dummy method

As we explained earlier, house-price indices are obtained using two variants of the time-dummy method: one pooling data over several months and one pooling data successively for pairs of adjacent months. It will be appreciated that this is tantamount to using current weights. The former method is particularly demanding of computer time, particularly when handling a data base containing observations for a large number of characteristics relating to around 13 000 houses per month on average. For this reason, the first variant of the method was applied to the first six months of the period only. This was sufficient to show that the two variants produced results that were in very close agreement. Consequently, only one set of time-dummy index numbers is presented, namely that obtained from pairwise pooling of the data for each period.

5.3. Comparison of hedonic indices and simple average price indices

The results obtained using the base-weighted and time-dummy hedonic methods of standardisation are presented in Table 4 together with an index based on the movement of simple average prices. It will be seen that there is a close measure of agreement between the hedonic indices, each showing a rise in prices over the research study period from January to September 1983 of just over eight per cent (8.2 and 8.3 per cent respectively). By contrast, the simple average price index rose by 7.1 per cent over the same period.

Since the research described in this paper was carried out, the series have been

Table 4

Price indices: Comparison of base-weighted and time-dummy standardised indices and simple average price index – monthly series, all houses, UK, January–September 1983 (January 1983 = 100)

Month	Base-Weighted Index	Time-Dummy Index	Simple Average Price Index
January	100.0	100.0	100.0
February	101.1	101.1	99.9
March	102.4	102.4	101.5
April	104.0	104.1	103.5
May	106.1	106.1	106.3
June	106.9	106.8	108.5
July	108.1	108.0	110.1
August	108.2	108.3	110.2
September	108.2	108.3	107.1

carried forward by the Society itself, using the base-weighted methodology, and rebased on the year 1983. The full set of monthly indices for each of the five national (UK) series for the whole period from January 1983 to October 1984 are included as an Appendix to this paper, together with indices based on simple average prices. The series are compared in Figures 1 to 3. It will be seen that over this longer time period the difference between the standardised and non-standardised (simple average) indices becomes even more pronounced.

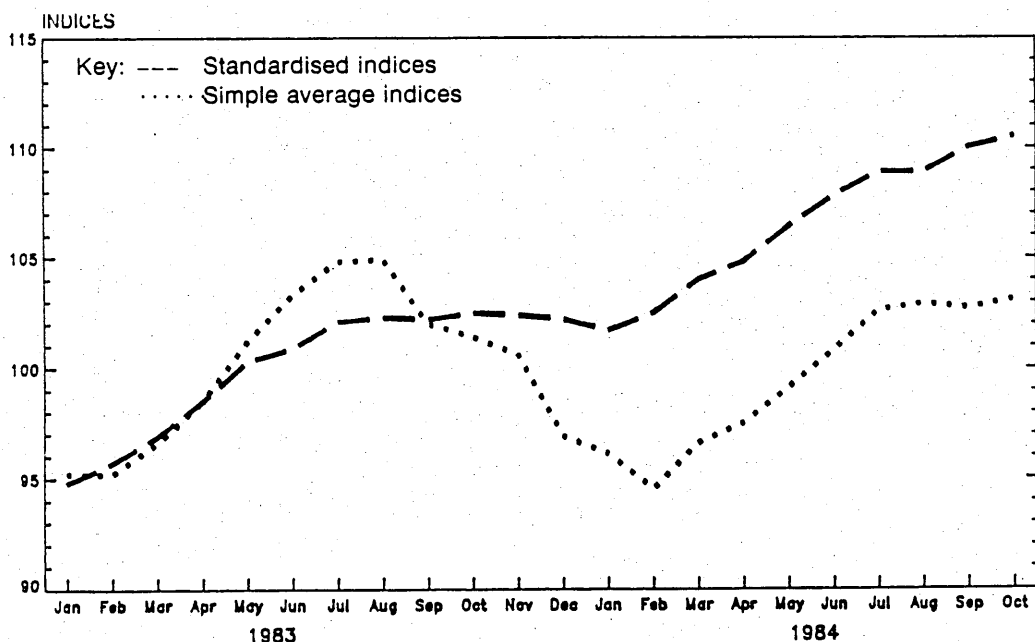


Fig. 1. Price indices – all houses.

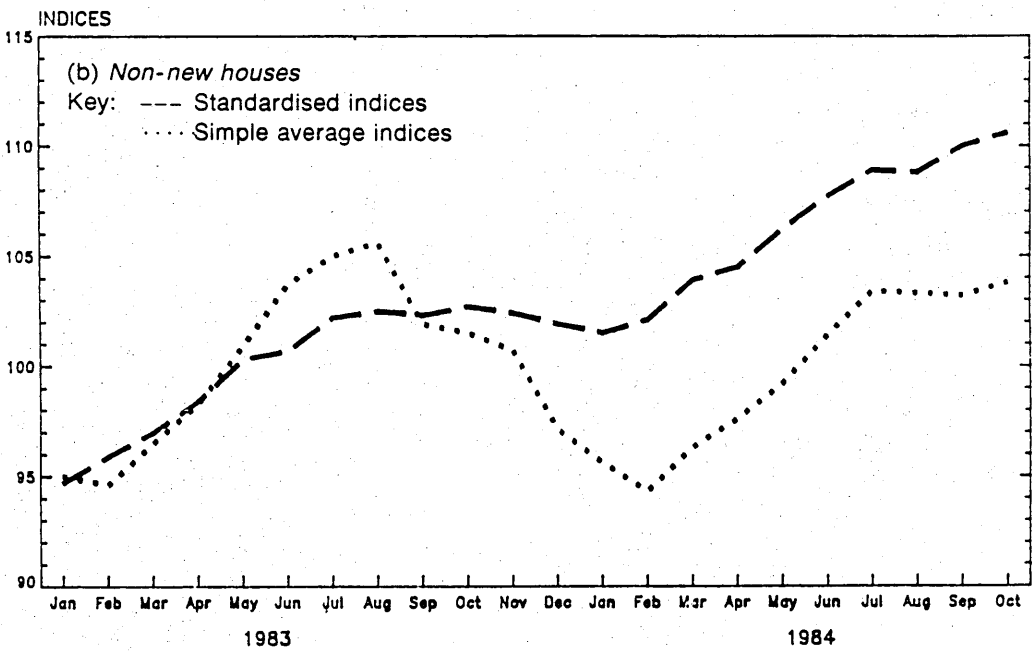
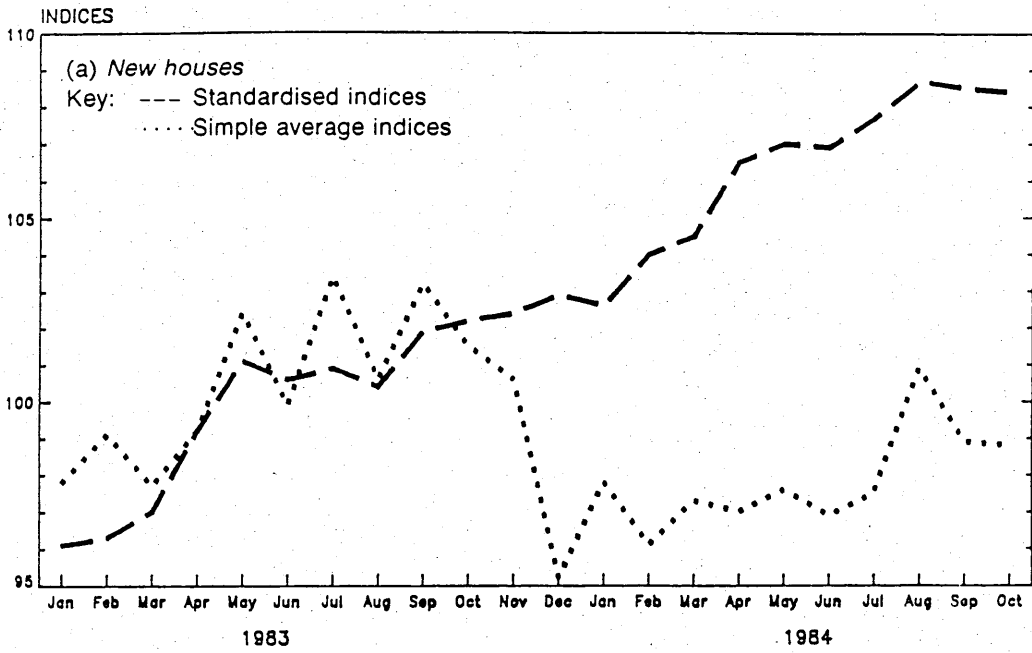


Fig. 2. Price indices - by house type.

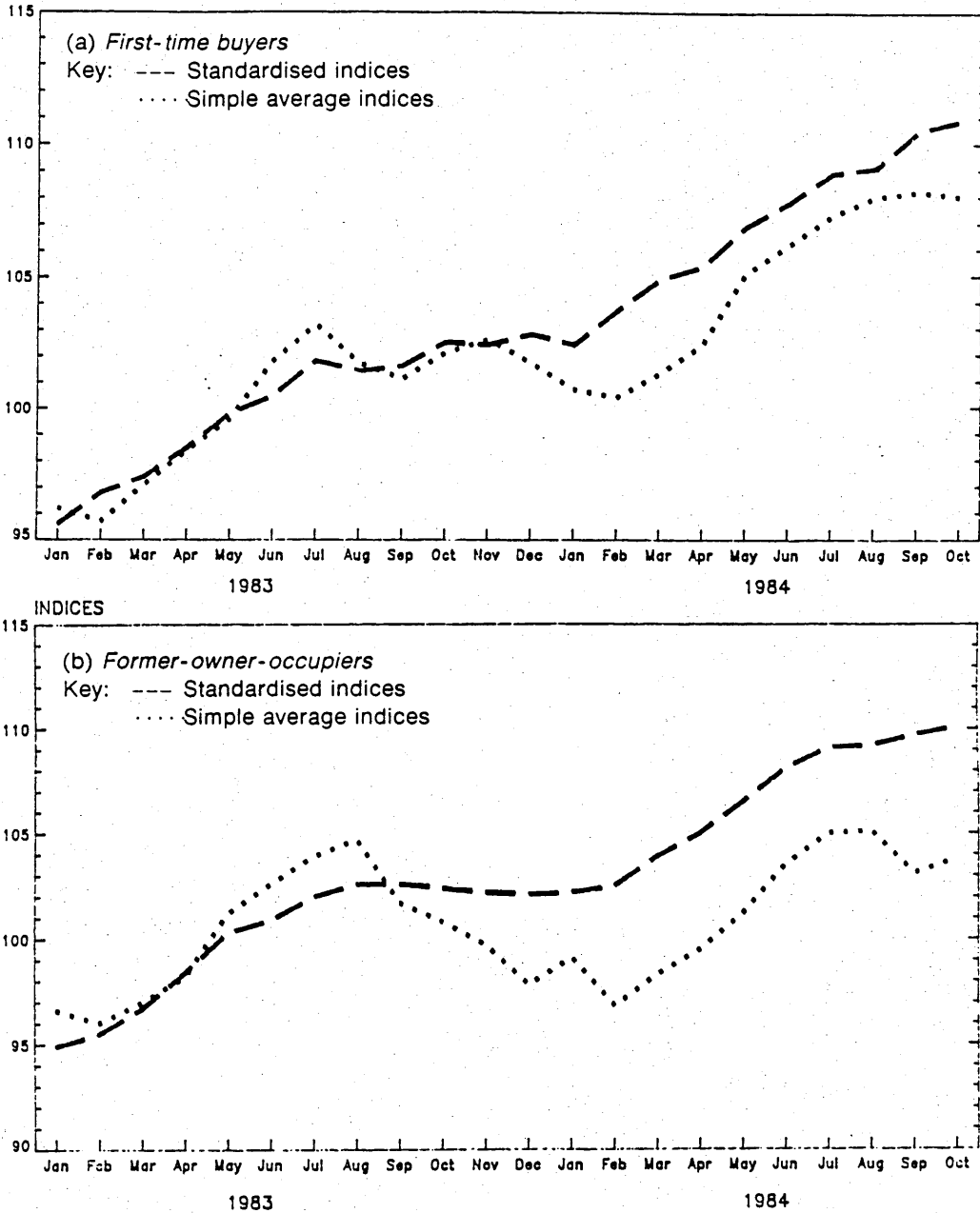


Fig. 3. Price indices - all houses by buyer type.

5.4. *Comparison of hedonic index with UK national accounts housing capital formation price deflator*

Finally, in this section of the paper, we compare the relevant standardised index (that for new houses) with that used for the deflation of private sector gross

Table 5
Comparison of standardised index for new houses with capital formation deflator (1983 = 100)

Date	Standardised Index of New House Prices	Private New Housing Capital Formation Deflator ^a
1983 Q ₁	97	97
Q ₂	100	99
Q ₃	101	102
Q ₄	102	103
1984 Q ₁	104	104
Q ₂	107	106 ^b
Q ₃	108	108 ^b

^a This series has a base of 1980 = 100; it has been converted arithmetically to 1983 = 100 for the purpose of the comparison here.

^b Provisional.

fixed capital formation in new residential buildings in the UK national accounts ³ (referred to, for brevity, below as the 'capital formation deflator'). Before doing so, however, we draw attention to the fact that a direct comparison is not strictly appropriate. Gross domestic fixed capital formation naturally excludes the value of transactions in land and therefore the capital formation deflator does not cover land prices. The standardised index we present, however, is an integral index covering both houses and land. Comparison of the two series has to be made on a quarterly, rather than monthly, basis because the capital formation deflator is not compiled monthly. They are shown in Table 5. It will be observed that the two series differ very little over the relatively short space of time for which it is possible, as yet, to make such a comparison. This is perhaps gratifying and suggests that the standardised index may be taken as a good forward indicator for the capital formation deflator, given the time lags involved in its compilation (some 3-4 months after the end of the quarter to which it relates, compared with a few days after the end of the month to which it relates in the case of the standardised index). On the other hand it is well perhaps to reserve judgement because of the short time-span of the comparison and also because there is good reason, as indicated above, why the series might be expected to differ.

6. Conclusions

By way of conclusion we comment on three matters: the need for standardisa-

³ It should be noted that private sector gross domestic fixed capital formation in dwellings covers not only the building of new dwellings but also the value of improvements to existing dwellings and that the latter is deflated by a different index. In each case the price index is lagged one quarter to reflect the lag between output and fixed capital formation as the latter is usually recorded at payment stage.

tion, the methodology and, finally, data requirements and limitations in the light of the results obtained in this study.

It is clear from the comparisons of standardised and non-standardised series, particularly over the longer period reported in the Appendix, that standardisation does make a very substantial difference to the reported rate of houseprice inflation. Simple average prices may be of interest in their own right as measures of contemporary price *levels* but they are undoubtedly biased as a measure of price *movements*.

With regard to methodology, the hedonic method of standardisation has the virtue of being able to accommodate evidence about a wide range of housing attributes effectively, in a way which it would be difficult to encompass in a system of weighted averages of the kind employed in some other sources [4,5] in the United Kingdom. Its effective use, however, imposes large data requirements in order to capture adequate evidence for a wide range of housing attributes across regionally-differentiated markets. Fortunately, the transactions financed by the Halifax Building Society do provide a sufficiently large and nationally representative data base to satisfy this condition, at least as far as the building society sector is concerned. It is able to yield highly significant estimates of the parameters and thus to produce reliable standardised price series.

Finally, perhaps it is well to remind potential users of the series of the reservations that still need to be entertained. These arise from the nature of the data rather than the methodology. One is that the data are limited to the transactions of one sector of the housing market, albeit by far the biggest sector, namely that financed by building societies, and that they cover one society only. However, we have shown that this society does have reasonably representative national coverage; and furthermore, a retrospective study carried out by the authors (unpublished) using the hedonic technique on a restricted range of variables, to compare price indices for the Halifax Building Society against all societies combined has shown a very close correspondence over a period of eight years from 1975 to 1983. We believe, therefore, that the results can be taken as representative of this sector. Limitation to the building society sector alone, however, is a more important limitation in principle because other institutions tend to cater for segments of the market possessing different characteristics from that served by building societies [4,5].

A final reservation is simply to remind the reader that the data base does not identify *all* relevant house characteristics. As we have pointed out, those that are employed are able to 'explain' a very high proportion of the observed variation in prices. Nonetheless, a quarter to a third of the variation remains unexplained. The available data are particularly deficient in measuring qualitative and locational attributes. These factors raise their own measurement difficulties but it is in this area that the main source of improvement is to be found. Further consideration is being given to these matters.

Appendix
Standardised and simple average house price indices for the United Kingdom, January 1983-October 1984 by type of house and type of buyer
(1983 = 100)

Date	Standardised Indices				Simple Average Indices					
	House Type		Buyer Type		House Type		Buyer Type			
	All	New	Non-New	FTB	FOO	All	New	Non-New	FTB	FOO
1983										
January	94.8	96.1	94.7	95.6	94.9	95.2	97.8	95.0	96.2	96.6
February	95.7	96.3	95.9	96.8	95.5	95.2	99.1	94.6	95.7	96.0
March	96.9	97.0	97.0	97.4	96.7	96.6	97.7	96.5	97.1	97.0
April	98.5	99.2	98.4	98.5	98.4	98.5	99.2	98.3	98.4	98.2
May	100.3	101.1	100.3	99.8	100.3	101.2	102.4	100.9	99.6	101.2
June	100.9	100.6	100.7	100.5	100.9	103.3	99.9	103.7	101.8	102.6
July	102.1	100.9	102.2	101.8	102.0	104.8	103.4	105.0	103.2	103.9
August	102.3	100.4	102.5	101.4	102.6	104.9	100.6	105.6	101.7	104.7
September	102.2	101.9	102.3	101.6	102.6	102.0	103.2	101.9	101.1	101.7
October	102.5	102.2	102.7	102.5	102.4	101.4	101.5	101.5	102.1	100.8
November	102.4	102.4	102.4	102.4	102.2	100.6	100.6	100.7	102.6	99.7
December	102.2	102.9	101.9	102.8	102.1	96.9	95.2	97.1	101.7	97.8
1984										
January	101.7	102.6	101.5	102.4	102.2	96.1	97.8	95.6	100.7	99.1
February	102.5	104.0	102.1	103.7	102.5	94.5	96.1	94.3	100.4	96.8
March	104.0	104.5	103.9	104.9	103.9	96.6	97.3	96.3	101.3	98.3
April	104.8	106.5	104.5	105.4	105.0	97.5	97.0	97.6	102.4	99.5
May	106.4	107.0	106.2	106.9	106.5	99.1	97.6	99.2	105.1	101.2
June	107.8	106.9	107.7	107.8	108.1	100.8	96.9	101.4	106.2	103.5
July	108.9	107.7	108.9	108.9	109.1	102.6	97.5	103.4	107.3	105.0
August	108.9	108.7	108.8	109.1	109.2	102.9	100.9	103.3	108.0	105.1
September	110.0	108.5	110.0	110.5	109.7	102.7	98.9	103.2	108.2	103.1
October	110.5	108.4	110.6	110.9	110.1	103.1	98.8	103.8	108.0	103.8

Abbreviations: FTB = First-time buyer, FOO = Former-owner-occupier

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Fleming, M. C. and Nellis, J. G. (1987) **Spon's House Price Data Book**, London:
E. & F. N. Spon.

Spon's House Price Data Book

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London

E. & F. N. SPON

*First published in 1987 by
E. & F. N. Spon Ltd
11 New Fetter Lane, London EC4P 4EE
© 1987 M. C. Fleming and J. G. Nellis*

*Printed in Great Britain at the
University Press, Cambridge*

ISBN 0 419 14230 4

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British Library Cataloguing in Publication Data

Fleming, M. C.

Spon's house price data book.

1. Dwellings—Prices—Great Britain

I. Title II. Nellis, J. G. III. Litt, Helen

333.33'8 HD7333.A3

ISBN 0-419-14230-4

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*To Ruth and
Helen and Gareth*

Preface

This book provides the first comprehensive collection and analysis of information about house prices in the United Kingdom. There is a very keen interest in both the level of house prices and house price movements and there is a very large number of sources which attempt to satisfy this interest. However, the large number of sources means that the information they provide is scattered over a wide range of publications, many of which, such as press releases, are relatively inaccessible. It seemed worthwhile, therefore, to try to bring all this information together in one place. Further, while the large number of sources that exist serve to increase the range of data available, unfortunately, they also serve to generate confusion, for the information they provide is sometimes in conflict. As a consequence, there is an important need for a guide to the nature of the various sources to help the user in the use and interpretation of the available data. This book serves that need.

The interest in house-price information arises for a number of reasons all of which demand accurate and reliable data. At a practical level, the information is of use to surveyors, valuers, town planners, local authorities, estate agents and other professionals involved in the housing market. House-price figures form the basis of expectations which influence private buying and selling decisions in both boom and slump periods. The information is useful to businessmen concerned with location decisions and regional deployment of staff. Reliable measurement is essential for research on the determinants of house prices and the causes of inflation. Beyond the direct practical use of reliable information, there remains its intrinsic interest because of the growth of home ownership and the fact that for many people housing represents the most valuable asset they will obtain. Thus, for all these reasons, it is essential that the nature and limitations of the available information on house prices should be understood.

This book, therefore, serves two purposes. First, it provides a comprehensive survey of sources of house-price information, a full account of the methodology and other technical details for each source and a complete set of the data available. These data cover various periods of time back to 1946. The main current source of information excluded is that obtained in qualitative surveys of trends in house prices conducted by the RICS. These surveys are meant to provide quick impressions of contemporary trends and there seems no advantage in reproducing the full historical series here. Full details of this source are given in Appendix A. Other sources excluded are those which have now been discontinued and *ad hoc* surveys, particularly those carried out from time to time by the Planning Departments of local authorities. Details of all these sources are also given in Appendix A.

The second main purpose is to provide an appraisal of the problems involved in measuring house prices and the way these problems have been met, if at all, in the available series. This provides the essential framework for considering the problems of interpretation associated with the available series and their usefulness for different purposes.

The first chapter provides a general discussion of the main problems of measurement and interpretation, classifies the available sources (eighteen altogether) in the light of this discussion and briefly examines some of the evidence they provide about price levels and long-term price movements. The remaining chapters take each source in turn, providing full technical details and a complete set of the data available.

Acknowledgements

We are grateful to the holders of the copyright of the material included in this volume for giving permission for it to be reproduced. The statistical data in Chapters 2 to 5, Chapter 8 and the material in Appendix B are reproduced by permission of the Controller of Her Majesty's Stationery Office. Thanks are also due to:

Inland Revenue Valuation Office, Abbey National Building Society, Anglia Building Society, Halifax Building Society, Incorporated Society of Valuers and Auctioneers, Leeds Permanent Building Society, National House-Building Council, Nationwide Building Society, Northern Rock Building Society, Principality Building Society, Ryden Residential Ltd, Woolwich Equitable Building Society.

We should also like to express our appreciation of the work carried out by Helen Litt, who has been responsible for compiling all of the data contained in this volume and for preparing Appendix A. Finally a special word of thanks is due to Stephen Fleming for his work in proof-reading the data tables.

List of Abbreviations

ABI	Association of British Insurers
BIA	British Insurance Association
BS	Building society
BSA	Building Societies Association
CB	County Borough
DOE	Department of the Environment
E&W	England and Wales
FOO	Former owner-occupier
FTB	First-time buyer
GB	Great Britain
HMSO	Her Majesty's Stationery Office
ISVA	Incorporated Society of Valuers and Auctioneers
LA	Local authority
LCES	London and Cambridge Economic Service
NHBC	National House-Building Council
NI	Northern Ireland
PD	Particulars of Deposit
PPRU	Policy Planning and Research Unit (Northern Ireland Department of Finance and Personnel)
RICS	Royal Institution of Chartered Surveyors
RPI	Retail Prices Index
UK	United Kingdom
VOPMR	<i>Valuation Office Property Market Report</i>

1. Measurement, Interpretation and Evidence

The measurement of average house prices raises a number of problems depending on the use to which the information is to be put. An appreciation of these problems and of the methods used to deal with them is important for understanding the available data and avoiding pitfalls in their use and interpretation. The purpose of this chapter, therefore, is to consider these problems, the methods of measurement used and related matters which are important for purposes of interpretation. It is thus meant to provide an essential background against which all of the data included in this volume may be assessed. This is particularly important in view of the large number of sources that exist and the confusion that surrounds the conflicting evidence they sometimes provide. Currently, there are eighteen main sources of information covering various periods of time back to 1946.

The discussion here is in general terms. Full technical details for each source of data (following a standard form of arrangement in which the matters discussed here are treated systematically) are given at the beginning of each chapter dealing with that source. But we take the opportunity here to provide a summary classification of the available sources in order to highlight their points of similarity and difference. A commentary is also included on the most useful sources for different purposes and a summary review of the evidence they provide is given. The chapter is arranged as follows:

- 1.1 Purposes of measurement
- 1.2 Problems of measurement
- 1.3 Solutions to measurement problems
- 1.4 Other problems of comparison
- 1.5 The analysis of data sources
- 1.6 Comparative classification of data sources
- 1.7 The choice of appropriate series
- 1.8 The evidence on price trends, 1946-1986 and price levels in 1986

1.1 PURPOSES OF MEASUREMENT

The users of house-price data require the information for three main purposes:

- (a) to measure price movements over time,
- (b) to measure average price levels at a particular point of time, and
- (c) to make comparisons of price levels between one area of the country and another

Broadly speaking, users may be divided into two groups. On the one hand there are those who are directly involved in the housing market either as buyers and sellers or in providing professional services of one kind or another to buyers and sellers. On the other hand, there are those who are not so involved but who are interested in the measurement and analysis of trends and in research on the housing market.

The second group of users are generally more interested in the measurement of price movements over time (information often presented in the form of index numbers) rather than the actual level of prices as such. An index of house prices is, of course, used officially as a constituent in measuring changes in the cost of housing services incorporated in the Retail Prices Index (RPI). An index of prices is also of use to those, such as valuers, property insurers and owners contemplating sales who wish to make an estimate of the likely current market value of a property on the basis of information about the price for which it had been sold at some time in the past. This is particularly useful in cases where information on actual current transactions in the same area (which could be used for comparative "benchmark" purposes) is lacking, either because of the specific characteristics

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of the property it is desired to revalue, or because of the more general absence of local market information.

Data on average prices, as opposed to price movements, are naturally of primary interest to potential house-buyers. In this case there is also a special need for more detailed information because the interest of a buyer focuses less on a single average than on the dispersion of prices for different categories of property in different locations. Such information is also of interest to those who provide advice and other services to both buyers and sellers.

Information on differences in price levels between one area of the country and another naturally concerns those who are thinking of moving from one area to another, but it is also of interest to town planners and to firms contemplating location decisions and the relocation of key employees.

It is also important to distinguish the measurement of price movements from the measurement of price levels as such because the primary data needed to provide the basis of such measurements are not necessarily the same in each case and the measurement problems differ. The measurement of price levels requires representative coverage of all sectors of the market, whereas the measurement of price movements does not require such coverage, provided that the price movements in different sectors are similar. In this case, data drawn from one sector may be adequately representative of the market as a whole.

1.2 PROBLEMS OF MEASUREMENT

The main problem of measurement, and one which affects both the measurement of price levels and price movements, is that few houses are identical: they may differ according to a wide variety of physical characteristics such as size, type, garden, garage, quality of fixtures and fittings, etc. Even where similar houses are built, they are unique in having a fixed location, the regional and other localized attributes of which (for example, convenience of access to schools, transport facilities, shops etc. and the general environmental quality of the neighbourhood) also influence price. Until recently little or no attention was paid to the influence of these factors in measuring house prices: most sources merely took a *simple* average of the prices of all houses sold in a particular time period. But simple averages of house prices cannot be compared unless the houses traded retain the same mix of characteristics over time and this mix does not differ between different sources. But this is not the case. The mix of properties built and sold from one period to another has changed markedly and the coverage of different sources varies. For example, over the period from 1970 the proportions of different types of dwelling on which building societies have granted mortgage loans have varied considerably (Table 1.1). The proportions of terraced houses and flats and maisonettes have increased considerably at the expense of detached and semi-detached houses and bungalows. For new dwellings, however, it is notable that the proportion of detached houses has increased. Likewise, the age distribution of dwellings mortgaged has also varied considerably over the period since 1970 (Table 1.2). The proportion of new dwellings has more than halved while among the non-new dwellings those built before 1919 have increased their share of transactions very considerably. As a consequence of changes in the mix of these and other characteristics, simple average prices do not compare like with like*.

The problem is not unique to housing. It also has to be faced in attempts to measure price movements generally, as in the RPI. The latter is based on a standard of comparison, namely a standard "basket" of goods that people typically purchase, which is then repriced in successive time periods. To adopt the same principle for housing would require the existence of standard houses, both new and non-new, which are regularly sold and re-sold. Unfortunately, the problem is not so readily solved in this context since there is no such thing as a "standard" house and because locational factors play such a crucial role in determining prices. Further, there is a keen interest in the average *level* of prices (as opposed to measuring rates of change) in the case of houses but not in the case of other goods. Unlike housing, no attempt is made to measure the average price of, for example, cars or food.

* For further discussion of the evidence on house prices in this context see Fleming and Nellis (1981 and 1985a)

SOLUTIONS TO MEASUREMENT PROBLEMS

Table 1.1 Distribution of dwellings by type mortgaged by building societies

Year						Per cent
	Bungalow	Detached house	Semi-detached house	Terraced house	Flat or maisonette	Total
New dwellings						
1970	24	24	35	13	4	100
1975	15	35	30	14	6	100
1980	14	41	24	15	5	100
1985	13	31	24	20	12	100
1986	14	37	21	17	11	100
Non-new dwellings						
1970	14	19	40	24	4	100
1975	12	21	36	24	7	100
1980	9	16	33	33	10	100
1985	7	14	31	35	13	100
1986	7	14	31	34	14	100
All dwellings						
1970	17	20	39	21	4	100
1975	12	24	35	22	7	100
1980	9	20	32	30	9	100
1985	8	15	30	34	13	100
1986	8	17	30	32	13	100

Totals may not equal 100 due to rounding

Source: *Housing and Construction Statistics* and *BSA Bulletin* (DOE Five Per Cent Sample Survey of building society mortgages)

Table 1.2 Distribution of dwellings by age mortgaged by building societies

Year					Per cent
	New dwellings	Built before 1919	Built from 1919 to 1939	Built after 1939	Total
1970	27	17	22	34	100
1975	19	19	19	43	100
1980	15	28	18	39	100
1985	11	28	17	43	100
1986	10	28	17	45	100

Totals may not equal 100 due to rounding

Source: as for Table 1.1

1.3 SOLUTIONS TO MEASUREMENT PROBLEMS

There are three possible solutions to the problem of measuring house prices and house-price inflation rates on a like-for-like basis. One is to calculate average prices for more homogeneous groups of houses (for example, by type, by size, by age, etc.) and then to combine these in fixed proportions into a grand or *weighted* average. This average is useful for measuring *changes* over time because it relates to a standard set of houses and thus is

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not influenced by change in the mix. Sources which have adopted this method are:

- Department of the Environment (price index - not average prices) - see Chapter 3
- Abbey National Building Society - see Chapter 9
- Leeds Permanent Building Society - see Chapter 13
- Nationwide Building Society - see Chapter 15

The major limitation of this method is that it is only possible to allow for a small number of house characteristics. The existing measures only adjust for up to four house characteristics (namely, house type, size, age and region) in arriving at an overall weighted average price or index. Consequently, the degree of adjustment is limited and there may remain, therefore, an important element of non-comparability.

A second method of solving the problem of non-comparability is to employ statistical techniques to estimate the influence that each individual house characteristic, for which information is available, has on price - for example, the price difference made by an extra bedroom, the existence of a garage or garage space etc. These measurements may be referred to as "characteristics-prices". It is then possible to remove the influence of a varying mix of characteristics (and so to measure price changes for a standardized set of houses) by adding up these characteristics-prices in *fixed* proportions according to the mix of characteristics possessed by houses traded in some base period (the base period can, of course, be changed from time to time in the light of any significant changes in the mix). This method has been employed by the authors to compile national and regional standardized indices for the Halifax Building Society.* These cover the period from January 1983 and are now compiled by the Society on regular monthly and quarterly bases (see Chapter 11). The analogy with the standard basket of goods in the RPI will be obvious, although in our case we are dealing with a standard bundle of house characteristics rather than a basket of goods as such. It will be appreciated that this method requires the collection of a large amount of data on house characteristics at both national and regional levels in order to obtain accurate estimates of the characteristics-prices.

A third solution to the problem is to obtain the opinions of experts working in the housing market as surveyors and valuers etc. about "typical" prices and price changes. This method is based, therefore, on subjective estimates but it has the virtue of attempting to deal with the problem of mix variability. The Royal Institution of Chartered Surveyors (RICS) and the Incorporated Society of Valuers and Auctioneers (ISVA) publish data on this basis and some building societies publish similar assessments.

1.4 OTHER PROBLEMS OF COMPARISON

Apart from differences, if any, which arise because of the method employed to try to take account of differences in the mix of transactions from one time period to the next as outlined above, differences which may affect the comparability of one series with another also arise for four other sorts of reason. These are:

- (a) Coverage of the market
- (b) Measurement timing
- (c) Transactions at market and non-market prices
- (d) Geographical coverage

1.4.1 Coverage of the market

An important matter is how well any one source covers all house-sale transactions and thus how representative it is of the total market. Most of the data available are derived from building society sources. The first issue, therefore, concerns the representativeness of building society transactions in the context of the total housing market.

Building societies are the major source of loans for house purchase in the United Kingdom, but they are not the only source: finance is also provided by insurance companies, banks and local authorities as well as by ready money and loans from other sources. Comprehensive statistics of the relative importance of these sources are not available, but

* For a full account of the methodology see Fleming and Nellis (1984 and 1985b)

OTHER PROBLEMS OF COMPARISON

estimates drawn from the National Movers Survey carried out by the Department of the Environment (DOE) in 1973 suggest that at that time building societies were responsible for financing only two-thirds of house purchases (DOE, 1977, p.83). From the point of view of measuring house prices this would be of no consequence if there were no differences between the building society sector of the market and those served by the other sources of finance. There is evidence, however, to suggest that this is not the case. The survey referred to above (DOE, 1977) showed that house transactions financed by insurance companies and banks were at higher average price levels than building society transactions, and those financed from other sources were generally lower priced. Subsequent data from a 20 per cent sample of sales of dwellings in 1975, particulars of which were returned to the Inland Revenue, indicate that both mean and median prices drawn from the official building society surveys were generally higher than for all transactions (see Table 1.3 below). It will be seen that this was particularly the case with secondhand dwellings, a major explanation being that building societies financed a relatively small proportion of such dwellings at the lower end of the price range. There would appear to be no reason to believe that these surveys refer to atypical years. If this is the case the official statistics based on surveys of building societies should be regarded as tending to overstate the true average price level.

Table 1.3 Comparison of house prices for building societies and total market*, 1975

	Mean	Median
	£	£
<i>New dwellings</i>		
Building societies - DOE/BSA survey	12234	-
Building societies - DOE 5% sample	12013	10300
Total market (all sales)*	11860	10350
<i>Non-new dwellings</i>		
Building societies - DOE/BSA survey	11880	-
Building societies - DOE 5% survey	11734	10460
Total market (all sales)*	10949	10000

* The data on "all sales" refer to England and Wales whereas for building societies they refer to the UK. Adjustment of the latter to exclude Scotland and Northern Ireland (where average prices at this time were lower) would tend to increase the differential still further over those for all sales.

Sources: Department of the Environment, *Housing Policy Technical Volume Part II*, Chapter 6, Appendix E (HMSO, London 1977) and *Housing and Construction Statistics*, 24, Table 38 (HMSO, London 1978).

It should also be noted with regard to the *institutional* sources of finance that the share of the market served by building societies and other institutions has varied considerably at different times. In the period since 1970, the annual share of building societies has varied widely from 56 per cent to 96 per cent of the market. Other bodies have also taken widely varying shares ranging from 2 to 36 per cent for banks, 0 to 24 per cent for local authorities and 0 to 5 per cent for insurance companies (see Table 1.4). In addition, banks and insurance companies tend to concentrate their lending *up-market* while local authorities traditionally lend *down-market*. Consequently, divergent movements in the relative importance of these institutions have had an important influence in distorting the house-price figures based *solely* on building society sources - first in one direction and then in another as these institutions enter and leave the housing market at different points in time. In recent years it is likely that the major increase in bank mortgage lending in 1981 and 1982 had an important influence in tending to bias the building society figures downwards

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whilst their partial withdrawal in 1983-84 tended to exaggerate the size of the price increases suggested by building society data during 1983-84. The bias may have been reversed again in 1985 when banks almost regained their 1983 market share. In 1985, the average price of houses financed by banks' mortgages was some £14,000 higher than that financed by building societies - a difference of more than 40 per cent (Table 1.5). Houses purchased with insurance company finance were also more highly priced on average - a difference of £10,000 (over 30 per cent) compared with building societies.

Table 1.4 Distribution of net mortgage advances by institutional source
United Kingdom, 1970-85

Year	Per cent				
	Building societies	Banks	Local authorities*	Insurance companies	Other sources
1970	87	3	6	3	1
1971	88	5	6	1	1
1972	80	12	7	-	1
1973	71	11	12	4	2
1974	63	4	24	5	4
1975	76	2	17	2	4
1976	95	2	2	-	2
1977	96	3	-	1	-
1978	94	5	-1	1	-
1979	82	8	5	4	1
1980	79	8	6	4	3
1981	66	25	3	2	4
1982	56	36	4	1	2
1983	75	24	-2	1	2
1984	86	12	-1	2	2
1985	78	22	-3	1	1

Totals do not always equal 100 due to rounding

* Negative signs in this column indicate an excess of repayments over gross advances, i.e. decrease in mortgage balances outstanding during the period.

Source: *Housing and Construction Statistics*, HMSO, London

With regard to data from *individual* building societies, it is likely that they differ because of differences in their representativeness arising from differences in their regional coverage and in their lending policies, as well as differences in the methods of analysis described above. With regard to lending policies, differential mortgage rates offered by some societies at different times mean that they attract relatively more business at the upper or lower ends of the housing market from time to time and thus bias their average price figures accordingly.

Table 1.5 Average prices by institutional source of mortgage funds
All dwellings UK 1985

Source	Prices recorded at:	
	Mortgage approval stage	Mortgage completion stage
	£	£
Building Societies		
DOE/BSA BS4 Survey (Chapter 2)	33,188	31,876
DOE Five Per Cent Sample Survey (Chapter 3)	-	31,103
Banks (Chapter 4)	47,100	-
Insurance Companies (Chapter 5)	-	41,300

Source: see relevant chapters for details

1.4.2 Measurement timing

The main distinction with regard to timing is between the recording of price information at the mortgage approval stage or the mortgage completion stage. The gap between these two stages may be around 2 to 3 months, thus data at the approval stage provide an earlier indication of price movements than completions data. It also records information on a more precisely defined point of time because completions data, by contrast, necessarily refer to prices which will have been agreed at various *earlier* periods of time. On the other hand, mortgage approvals do not necessarily proceed to completion and others may proceed at amended prices. But it is thought that the proportion of mortgage approvals that are cancelled or amended in this way is fairly small. Only one source (the Anglia Building Society) records information at the valuation stage. This may precede approvals by around 2 to 3 weeks and thus provide an even earlier indication of price trends. But again it will be appreciated that some of these potential transactions may not proceed or may proceed only at amended prices.

1.4.3 Market and non-market prices

Another measurement problem results from the fact that some house-transactions take place at non-market prices. They are, therefore, not representative and ought to be excluded to remove the bias they introduce. The most important category of non-market price sales over recent years has been the sale of council houses to their tenants at heavily discounted prices (see Tables 3.7 and 3.8 in Chapter 3). Other examples would be sales to other sitting tenants and sales between relatives. Some sources exclude some or all of these categories, others exclude none.

1.4.4 Geographical coverage

The final general matter worthy of note is that the geographical coverage of different sources varies. The main explicit distinction is between the United Kingdom, Great Britain or England and Wales. But some sources may be restricted to a smaller area (for example, Wales, Scotland or Northern Ireland, or even local areas). Some individual building societies, of course, may have uneven geographical coverage but this is not defined in the published data. Some societies, however, attempt to compensate for this factor by employing national weighting factors drawn from official statistics.

1.5 THE ANALYSIS OF DATA SOURCES

As explained earlier, each of the following chapters presents a complete set of data available from each of the main sources. In each case this is preceded by full information about the particular data source. This is presented in a standard format as follows:

1. **Technical details.** This covers all the matters, discussed in this chapter, which are important for purposes of interpretation. It also provides a summary guide which indicates at a glance the kinds of data available from that source. It is arranged under the following headings:

- (a) Source of data and timing
- (b) Types of data and periods covered
- (c) Frequency
- (d) Geographical coverage
- (e) Method of analysis

2. **List of tables.** This gives details of the contents of each table and the time periods covered.

3. **Cross-classifications of data.** This gives a summary guide to the various cross-classifications of data (eg. by type, age, size of house, etc.) which may be found in the tables.

4. **Publications.** This gives details of publications under three headings:

- (a) Data
- (b) Descriptions of methodology
- (c) Supplementary studies.

Altogether data from eighteen different sources are presented in this volume: seven from government sources (i.e. collected by government departments) in Part I and eleven published by individual institutional sources in Part II. A summary classification of these sources is presented below. Appendix A contains a summary of discontinued and other miscellaneous sources, data from which are not included in this volume. Appendix B defines the official standard regions as they applied before 1965, from 1965 to March 31st 1974 and from 1st April 1974. Appendix C lists the addresses of all the sources covered in this volume.

1.6 COMPARATIVE CLASSIFICATION OF DATA SOURCES

A summary classification of the available sources of data is presented in Table 1.6. The purpose of the table is to show at a glance how all the sources compare in terms of the nature of the data they provide. It will be seen that of the seven government sources only two - both provided by the Inland Revenue - give comprehensive coverage of the housing market but, unfortunately, they are limited in other ways. One of them is based not on statistical surveys but on reports of *typical* prices provided by official valuers working in the field. The other is directly based on statistical information obtained as part of a survey of conveyances. This survey is not intended to provide information about house prices as such, but information about the number of transactions and their total value enables average values to be calculated. Unfortunately, the survey is confined to England and Wales and to transactions in one week only each year, and there is a considerable time lag before publication. Also, by virtue of covering all transactions, it includes some properties which will have been sold at non-market prices. Of the other five government sources, one is confined to Northern Ireland and the other four are confined to particular sources of mortgage finance: two surveys of building societies, a survey of insurance companies and a survey of banks (the last two surveys providing price range data only from which estimated average prices are derived).

Among the eleven individual institutional sources, covered in Part II, all but two emanate from building societies. One of the two exceptions is the Incorporated Society of Valuers and Auctioneers (ISVA) which provides data based on valuations of *typical* houses by its members. This source differs from all others in that it is not based on actual transactions. The other exception is the National House-Building Council (NHBC) which

Table 1.6 Summary comparison of data sources*

SOURCE	THE DATA BASE				MIX-ADJUSTMENT			
	Chapter ref	Name	Geographic coverage	Mortgage timing	Source of mortgage	Exclusion of non-market prices	Average prices	Index numbers
2		DOE/BSA BS4	UK	A & C	Building Socs	Yes	No	No
3		DOE 5% Sample	UK	C	Building Socs	No	No	Yes
4		Banks Survey	UK	A	Banks	No	No	No
5		DOE/ABI Survey	UK	C	Insurance Cos	No	No	No
6		Inland Revenue: Conveyances	E&W	C	All	No	No	No
7		Inland Revenue: <i>VOPMR</i>	GB	T	All	Yes	No	No
8		PPRU (Northern Ireland)	NI	C	All	Yes	No	No
9		Abbey National BS	UK	A	Abbey National BS	No	Yes	No
10		Anglia BS	UK	V	Anglia BS	Yes	No	No
11		Halifax BS	UK	A	Halifax BS	Yes	No	Yes
12		ISVA	E	T	All	Yes	No	No
13		Leeds Permanent BS	UK	A	Leeds Perm BS	Yes	Yes	No
14		NHBC	E&W/GB	C	All	Yes	No	No
15		Nationwide BS	UK	A	Nationwide BS	Yes	Yes	Yes
16		Northern Rock BS	N Eng	A	Northern Rock BS	Yes	No	No
17		Principality BS	W	C	Principality BS	Yes	No	No
18		Ryden Residential Ltd	S Cit	A	Halifax BS	Yes	No	No
19		Woolwich Equitable BS	UK	T	Woolwich Eq BS	Yes	No	No

* The analysis in this table refers to the nature of the data as currently compiled. Changes that have occurred over time are set out in the technical details given at the beginning of each chapter.

Abbreviations: A = mortgage approval stage C = mortgage completion stage E & W = England and Wales
 GB = Great Britain N Eng = North of England NI = Northern Ireland S = Scotland
 S Cit = Scottish Cities T = typical prices (estimated by surveyors and valuers, not based on mortgage data)
 V = valuation stage

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provides information about the prices of houses built, or to be built, by housebuilders registered with the Council. It relates solely, therefore, to new houses.

The data compiled by individual building societies are published mainly for publicity purposes. Their main value in comparison with the official DOE surveys of building societies is that they provide data which pre-date or supplement the official government statistics either in providing more timely data or breakdowns not available elsewhere. They are also important in providing alternative mix-adjusted series which are needed for the measurement of price movements. A list of the available sources arranged in chronological order according to starting date is given below. It will be seen that only one source predates 1950, and only four sources predate 1970. The rest were developed during the 1970s and 1980s. The choice of series for long-term analysis is therefore very restricted.

Starting date of series	Source	Chapter reference
1946	Nationwide Building Society	15
1956	DOE/BSA BS4 Survey of Building Societies	2
1965	DOE Five Per Cent Sample Survey of Building Societies	3
1968	DOE/ABI Survey of Insurance Companies	5
1973	Inland Revenue Survey of Conveyances	6
1974	Anglia Building Society	10
1975	Halifax Building Society	11
1976	Abbey National Building Society	9
1978	ISVA	12
	Leeds Permanent Building Society	13
	PPRU (Northern Ireland)	8
1979	Woolwich Equitable Building Society	19
1981	NHBC	14
1982	Bank of England Survey of Banks' Mortgages	4
1983	Inland Revenue <i>VOPMR</i>	7
	Principality Building Society	17
	Ryden Residential Ltd	18
1984	Northern Rock Building Society	16

With regard to the breakdowns published by each source, Table 1.7 below provides a summary analysis of the current breakdowns available and notes limitations in coverage to particular geographical areas.

With regard to mix-adjusted series, there are only five sources which provide such data (as noted earlier): the DOE Five Per Cent Sample Survey of building societies (Chapter 3), the Abbey National Building Society (Chapter 9), the Halifax Building Society (Chapter 11), the Leeds Permanent Building Society (Chapter 13) and the Nationwide Building Society (Chapter 15).

In the next section we comment on the most important series for the measurement of price levels and price movements and then turn to examine the evidence they provide.

1.7 THE CHOICE OF APPROPRIATE SERIES

The choice of appropriate series depends on the kind of information required. The primary distinction is between information on price levels and information on price movements. With regard to price levels, the most important question relating to any source is its representativeness of all house-purchase transactions, whilst in the context of measuring price movements, a more important question is that of mix-adjustment. A second distinction is between regional or other more localized data, as opposed to national statistics, and sub-classification of the data according to house or buyer characteristics. Naturally, a further consideration influencing choice is any restriction in the time period covered by each source and any restriction to a particular geographical area. Information on those matters is summarized in Section 1.6 above.

7.1 Measuring price levels

National data. With regard to the measurement of price levels, the most comprehensive source (covering *all* house-purchase transactions) is the Inland Revenue Survey of Conveyances. But, as indicated above, this is severely limited in other ways. Of the other sources, the most comprehensive *regular* coverage of transactions is that based on the DOE/BSA BS4 Survey. The survey is restricted to building societies but covers all transactions of the largest 16 societies (currently) and, since 1981, has excluded sales to sitting tenants. The survey, however, does not provide breakdowns by type of house, by type of buyer or by region. For these the choice rests between information drawn from the DOE Five Per Cent Sample Survey of building societies or from one of the big individual societies. The DOE five per cent sample is more representative than individual societies, but the latter prepare more timely data and use larger data bases. With regard to the individual societies, however, it needs to be appreciated that some publish simple average prices while others publish weighted averages (see Table 1.6). They are not, therefore, directly comparable.

House characteristics. The most detailed breakdowns of data on price levels according to house characteristics (summarized in Table 1.7) are those provided by the Inland Revenue VOPMR (Chapter 7) and the Halifax and Nationwide Building Societies (Chapters 11 and 15, respectively). Most sources provide analyses of house price levels according to type of house and several according to age but only two provide breakdowns by size of house (a third source - Ryden Residential Ltd - has recently been discontinued and, in any case, was confined to Scotland). Information is collected in the DOE Five Per Cent Sample Survey of building societies which would enable analyses of average prices according to these characteristics to be made but they are not currently published. Only one source (Inland Revenue Survey of Conveyances) provides data on freehold and leasehold property.

Local data. With regard to local data on price levels, most sources provide regional breakdowns, but only four sources provide sub-regional analyses of price levels (all but one Anglia Building Society - being restricted to a part of the UK only) - see Table 1.7. Four sources provide data at the level of particular towns but only two of these cover the whole country (GB or UK) - Inland Revenue VOPMR and the Woolwich Equitable Building Society.

Buyer type. With regard to breakdowns of prices according to buyer type (first-time buyers and former owner-occupiers) it will be seen (Table 1.7) that currently only three sources now provide such analyses (DOE Five Per Cent Sample Survey and the Halifax and Nationwide building societies).

Regional comparisons. The inter-regional comparison of absolute price levels is beset by the same problem of mix-variability as the measurement of price movements over time. The only source which publishes actual average prices on a mix-adjusted basis is the Nationwide Building Society (Chapter 15). Otherwise, comparisons are probably best made using one of the sources that provide detailed breakdowns according to house characteristics, sub-classified by region - see Table 1.7 and the discussion above.

It will be clear, therefore, that despite the wide range of sources of house-price data that currently exist, there is not quite the embarrassment of choice that this might suggest, since the interest of the user moves away from national aggregates to more localized data and breakdowns by house and buyer characteristics. Interest in historical, rather than current, data also restricts the range of choice, especially for periods before 1970.

7.2 Measuring price movements

For the purpose of measuring price movements the choice must rest on one of the mix-adjusted series. The main choice is between that provided by the DOE (Chapter 3) or those provided by the Halifax Building Society (Chapter 11) or the Nationwide Building Society (Chapter 15).

The Halifax Building Society series has the advantage that the data base employed is larger than that used by other sources, has good national coverage (see Fleming and Nellis, 1985b) and takes account of more house characteristics in the mix-adjustment procedure than the DOE or other societies. It also uses the most sophisticated methodology for mix-adjustment. However, the series only extend back to 1983. For periods before 1983, the choice rests between the Nationwide Building Society and the DOE weighted indices. The

Table 1.7 Current data breakdowns available from each source

SOURCE		HOUSE DATA						
Chapter ref	Name	All	New	Non-new	Type	Size	Age	Freehold/Leasehold
2	DOE/BSA BS4	*	*	*				
3	DOE 5% Sample	*	*	*	*	+	+	
4	Banks Survey	*						
5	DOE/ABI Survey	*	*	*				
6	Inland Revenue - Conveyances	*						*
7	Inland Revenue - VOPMR		*	*	*	*	*	
8	PPRU (Northern Ireland)		*	*	*			
9	Abbey National BS	*						
10	Anglia BS	*	*	*			*	
11	Halifax BS	*	*	*	*		*	
12	ISVA	*			*			
13	Leeds Permanent BS	*			*			
14	NHBC		*		*			
15	Nationwide BS	*	*	*	*		*	
16	Northern Rock BS	*			*		*	
17	Principality BS	*	*	*				
18	Ryden Residential Ltd ⁺⁺				*	*	*	
19	Woolwich Equitable BS				*	*	*	

+ Data available but not published

++ Discontinued in 1986

LOCAL DATA			BUYER DATA	CROSS-CLASSIFICATIONS		AREA
Regions	Sub-regions	Towns	FTB/FOO	2-way	3-way	
						UK
			*	*	+	UK
						UK
						UK
				*		E&W
		*			*	GB
	*			*	*	NI
						UK
	*			*		UK
			*	*	*	UK
						England
				*		UK
				*	*	E&W/GB
			*	*	*	UK
	*			*	*	N England
	*	*		*		Wales
		*		*		Scottish cities
	*				*	UK

former has an advantage over the DOE in having a larger data base, a better house-size variable and a longer historical series, but the limitation to one society introduces a potential source of bias depending on its representativeness (although, as noted earlier, a system of weights drawn from official statistics, rather than the Society's own transactions, is employed to try to overcome any bias that might arise for this reason). Although the mix-adjusted sources are confined to building societies and are thus potentially open to bias because of the influence of other institutions taking a varying share of the market at the upper or lower ends from time to time, the mix-adjustment process takes account of this factor. Therefore, the series are not subject to the bias that may affect the series based on simple average prices.

1.8 THE EVIDENCE ON PRICE TRENDS, 1946-1986 AND PRICE LEVELS IN 1986

Finally, we turn to highlight some of the evidence provided by the major sources on price trends and price levels, before presenting all of the detailed data available from each source.

1.8.1 Price trends, 1946-1986

Figure 1.1 below shows the inflation of *new* house prices over the forty years since 1946, based on Nationwide Building Society information, this being the only source which can be traced continuously over this time period (but for new houses only - data for non-new houses are only available from 1952). It will be seen that from 1946 up to the early 1970s the rate of increase of prices was at a much lower level than for the subsequent period. In fact, from 1946 to 1971, the average compound inflation rate was 5.8 per cent per year, whereas from 1971 to 1986 the rate of increase doubled to 14.9 per cent per year. Over the whole period from 1946 to 1986, the average price of new houses increased by more than thirty three times. Year by year rates of increase are shown in Figure 1.2. It will be seen that the fluctuations are considerable, with particularly dramatic surges between 1971/72 (47 per cent) and 1978/79 (29 per cent). Throughout virtually the entire period from 1971, annual changes have exceeded those for the earlier period. The period as a whole is characterised by a generally rising trend. Over the four decades from 1946 to 1986, the average rate of increase was 9.2 per cent per year. This conceals average rates which have risen in each decade from 4.5 per cent to 13.8 per cent (Table 1.8). It will be seen that these rates themselves conceal much more volatile rates of change from year to year, ranging from 1 per cent to 47 per cent (Table 1.8 and Figure 1.2). The preceding analysis has focused on new dwellings but it is clear that the picture for non-new dwellings is very similar (see Table 1.9 below).

Table 1.8 Average annual rates of inflation in new house prices 1946-1986

	Per cent		
	Average	High	Low
Whole period			
1946-1986	9.2	47	1
Decade by decade			
1946-1956	4.5	5	1
1956-1966	5.8	8	1
1966-1976	12.8	47	4
1976-1986	13.8	28	6

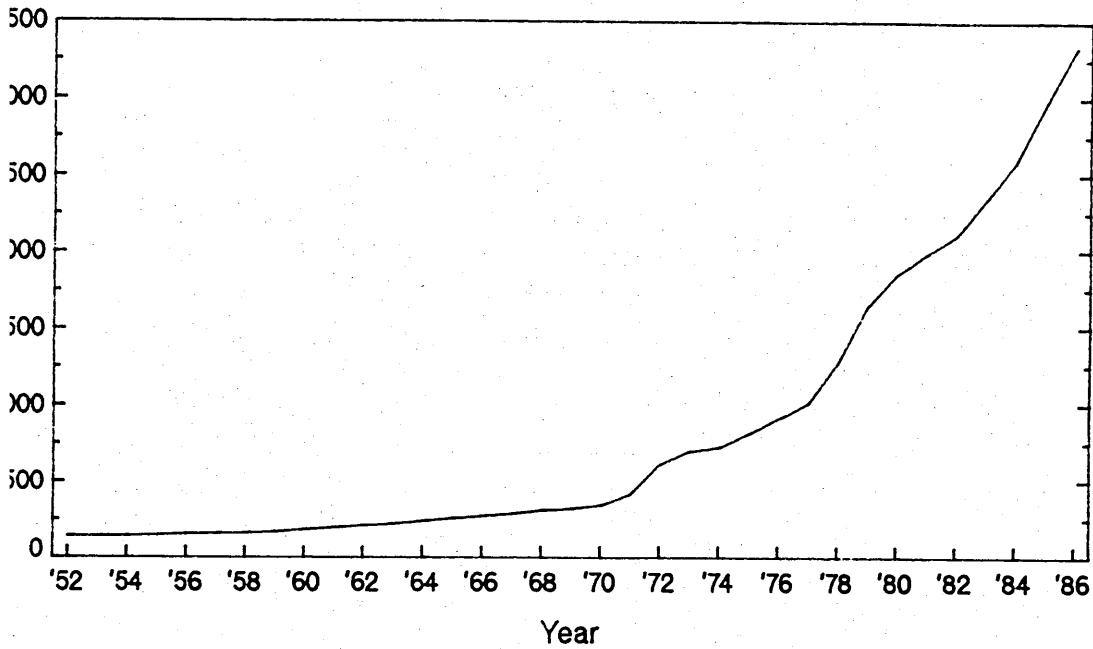
Source: Nationwide Building Society

Figure 1.1

Inflation of new house prices

United Kingdom 1946 - 1986

Index 1946 Q4 = 100*



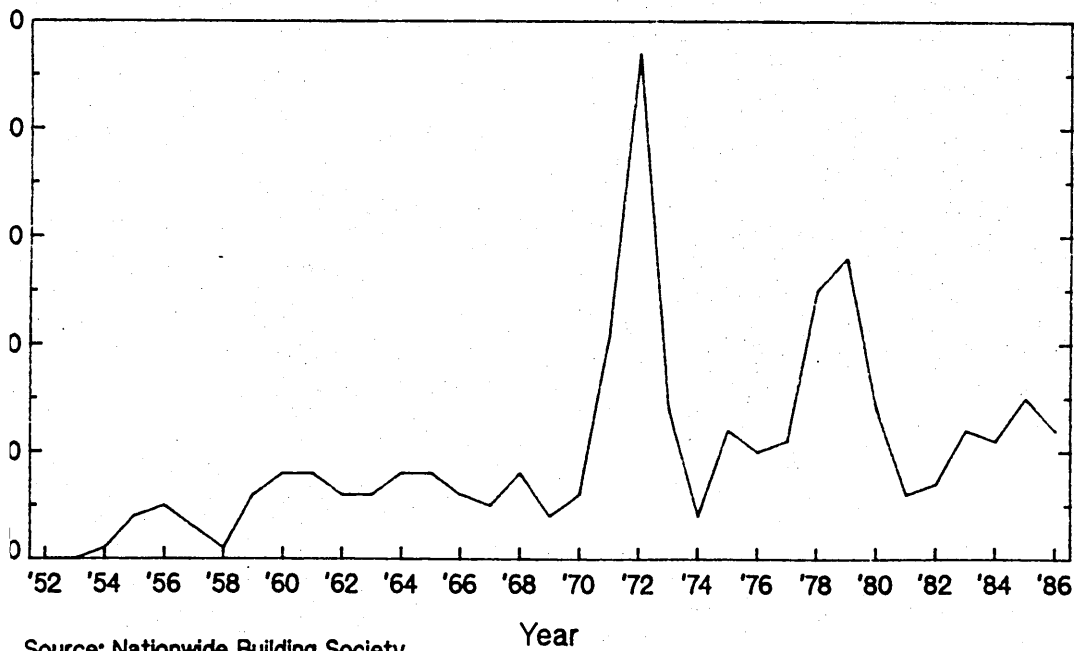
* Series for the years 1947-1951 inclusive are not available

Source: Nationwide Building Society

Figure 1.2 Annual percentage changes in new house prices

United Kingdom 1952-1986

Per cent



Source: Nationwide Building Society

MEASUREMENT, INTERPRETATION AND EVIDENCE

Restriction of the analysis above to the information available from one building society naturally involves the potential deficiency that it may not be representative of all transactions. We turn briefly, therefore, to consider this question. For more recent periods it is possible to compare the information with that available for *all* building societies. The price changes for new dwellings can be compared over the three decades from 1956 while the price changes for non-new and all dwellings can be compared over the two decades from 1966. The comparison is shown in Table 1.9.

It should be appreciated that the comparison is subject to two reservations. The most important reservation is that the Nationwide Building Society series is a mix-adjusted series, while that for all societies is based on simple average prices until the last decade, for which an official weighted (mix-adjusted) series is also available (shown in parentheses in Table 1.9). The other reservation is that the series for all building societies are based on mortgages *completed*, while those for the Nationwide Building Society are based on mortgages *approved*. The latter series may be expected to run ahead of a completions series in times of inflation. Bearing these reservations in mind, it will be seen that there is a fairly close correspondence between the series for comparable groups of dwellings and time periods. It would seem safe to conclude, therefore, that the Nationwide Building Society series do provide a reasonably reliable indication of long-run trends, particularly given the fact that it is a mix-adjusted series.

Table 1.9 Comparative rates of change in house prices: all building societies and Nationwide Building Society series (Average annual compound rates)

Period	Per cent						
	New dwellings		Non-new dwellings			All dwellings	
	All societies	NWBS	All societies	NWBS		All societies	NWBS
				Modern	Older		
Fourth qtr							
1946-1956	-	4.5	-	3.6	4.3	-	-
1956-1966	5.7	5.8	-	5.9	6.1	-	6.0*
1966-1976	13.0	12.8	11.3	11.9	12.7	12.6	12.2*
1976-1986	12.8 (12.6)	13.8	11.5 (12.6)	12.8	13.1	11.6 (12.6)	12.9

Sources and notes:

All societies: Based on DOE/BSA BS4 survey of building societies (completions series - see Chapter 2) except for the figures in parentheses which are based on the DOE weighted index (see Chapter 3)

NWBS: Nationwide Building Society series (see Chapter 15) - approvals data, mix-adjusted except for the period 1946-1956 (* indicates figures derived from data given in Appendix Table to Chapter 15).

1.8.2 National price levels in 1986

We now turn to the evidence on average price levels in the UK as a whole in 1986. As we explained earlier, it is unfortunately not possible to quote an average price covering all transactions because of the limited coverage of the data available from either government or institutional sources. For the purpose of the commentary here, we use the official sample survey of *all* building societies (see Chapter 3) because it covers the most important source of finance and provides the most detailed data. It should be remembered, however, that houses bought with mortgage loans from other institutions are generally more highly priced

THE EVIDENCE ON PRICE TRENDS, 1946-1986 AND PRICE LEVELS IN 1986

in those financed by building societies: in 1985, for example, those properties financed by banks and insurance companies were around 40 per cent and 30 per cent more expensive, respectively (see Table 1.5). On the other hand, those bought without loans or with loans from other sources tended to be lower priced (Table 1.3).*

Turning to the houses mortgaged by building societies, we focus attention on the price differences for new and non-new houses, type of house and type of buyer (FTB and FOO).

Table 1.10 Average prices by house type, 1986
Building Societies - United Kingdom

House type	New houses	Non-new houses*	All houses*	
			Average prices	Index (All = 100)
	£	£	£	
Flats	41,744	42,044	41,911	116
Attached	57,051	57,897	57,707	159
Semi-detached	31,220	33,480	33,321	92
Terraced	35,218	27,621	28,016	77
Flats & maisonettes	36,772	32,647	33,043	91
	43,562	35,464	36,276	100

The figures quoted include sales to local authority sitting tenants

Source: *Housing and Construction Statistics* and *BSA Bulletin* (DOE Five Per Cent Sample Survey of building society mortgages)

Table 1.11 Average prices by buyer type, 1986
Building Societies - United Kingdom

Buyer type	New houses	Non-new houses	All houses
	£	£	£
Former owner-occupiers	50,729	44,429	45,200
First-time buyers:			
Former LA sitting tenants	-	14,060	14,060
Other first-time buyers	32,481	28,644	28,979
All first-time buyers	32,481	27,016	27,444
Former owner-occupiers & first-time buyers (excluding LA sitting tenants)	43,562	36,769	37,488

* = local authority

Source: *Housing and Construction Statistics* and *BSA Bulletin* (DOE Five Per Cent Sample Survey of building society mortgages)

Compare also the data in Table 3.1 (Chapter 3) and Table 6.1 (Chapter 6)

MEASUREMENT, INTERPRETATION AND EVIDENCE

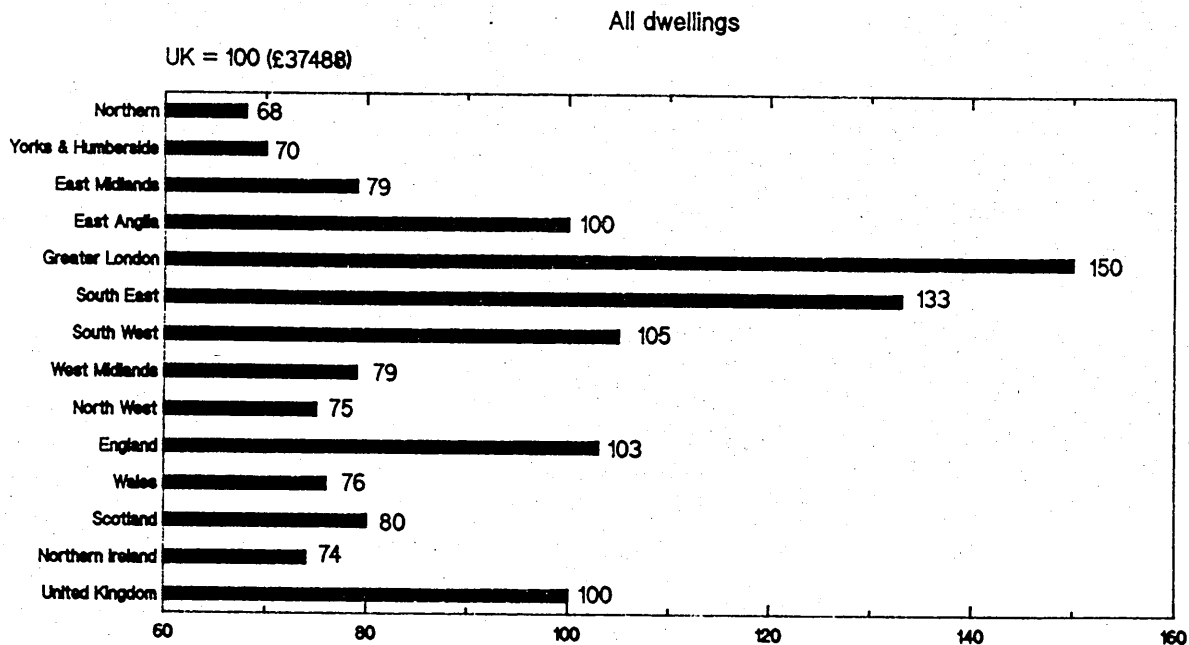
The average price for all houses in 1986 was £36,276. This concealed a price differential between new and non-new properties of over £8,000 - £43,562 as against £35,464 (see Table 1.10). The variation by type of house is considerable, ranging from nearly 60 per cent above the overall average for detached houses (£57,707) to over 28 per cent below for terraced houses (£28,016). There is very little difference between the prices of new and non-new properties when analysed by type, except in the case of terraced houses (for which the difference exceeds £7,000) and for flats and maisonettes (for which there is a difference of £4,000) - new houses being the more expensive in both cases on average.

Marked differences also exist between prices paid by different types of buyers. For example, in 1986, former owner-occupiers bought properties which, on average, were some £18,000 more expensive than those bought by all first-time buyers: £45,200, as against £27,444 (see Table 1.11). Even after excluding those properties sold to local authority sitting tenants (at heavily discounted prices) the difference is still over £16,000 (in 1986 the average price paid by local authority sitting tenants was £14,060). Corresponding differences can be seen for both new and non-new properties.

1.8.3 Regional price levels in 1986

We turn finally to an analysis of house price differences in 1986 across the regions of the United Kingdom, again using data drawn from the official sample survey of building societies (see Chapter 3). The regional definitions are given in Appendix B. Figure 1.3 illustrates the proportional variations in average prices for *all* houses in each region, taking the UK average as equal to 100. The most expensive region is Greater London, with prices 50 per cent *above* the UK average and the cheapest region is the Northern with prices more than 30 per cent *below*. It follows that average prices in the Northern region are less than half those prevailing in Greater London (£25,509 as against £56,242, respectively - Table 3.2, Chapter 3 refers). They are also little more than half those prevailing in the South East generally.

Figure 1.3 Regional variations in average house prices, 1986



Source: DOE Five Per Cent Sample Survey

THE EVIDENCE ON PRICE TRENDS, 1946-1986 AND PRICE LEVELS IN 1986

The figure reveals the "North-South divide" very clearly: the regions with average prices above or equal to the national average are all concentrated in the south - East Anglia, Greater London, South East and South West. All other regions in England as well as Wales, Scotland and Northern Ireland have prices around 20 to 30 per cent below the national average.

Regional analyses of the data according to new and non-new houses and buyer type (FTB and FOO) are shown in Table 1.12. The most notable point is that the regional differences are very much more pronounced for non-new houses than for new houses. It is also notable that for new houses the Northern region no longer remains the cheapest (Northern Ireland, Scotland, Wales and Yorkshire and Humberside all had lower average prices in 1986). Analysis by buyer type shows a very similar regional pattern to that for all dwellings.

Table 1.12 Regional variations in average house prices:
new, non-new and buyer type, 1986*

Region	New houses	Non-new houses	Buyer type	
			FOO	FTB
Northern	83	67	70	67
Yorks & Humberside	80	69	71	69
East Midlands	88	77	79	78
East Anglia	99	99	96	103
Greater London	129	153	153	162
South East	127	134	129	130
South West	100	105	101	105
West Midlands	94	76	81	76
North West	86	74	77	73
England	104	103	103	103
Wales	80	75	76	77
Scotland	82	80	83	84
Northern Ireland	72	71	75	82
United Kingdom	100	100	100	100

* Data exclude local authority sitting tenants

Source: *Housing and Construction Statistics* and *BSA Bulletin* (DOE Five Per Cent Sample Survey of building society mortgages)

These marked regional differences in average house prices are the result of many factors. As discussed earlier, the mix of properties sold in any time period has an important effect on average prices - and it is known that this varies from region to region (Fleming and Nellis, 1981). It should also be borne in mind that *within* the regions there are considerable variations in prices.

Finally, it will be appreciated that house prices in general are determined by supply and demand factors, including buyers' purchasing power, changes in the number and size of households, the availability of mortgage finance and rates of new housebuilding, to name but a few. It is not our aim here to provide an economic interpretation of such factors; suffice it to say that any such discussion of the causes of house price inflation or regional disparity of prices must begin with a clear understanding of the underlying nature of the house price data available from the various sources. Satisfying this need is the central aim of this volume.

MEASUREMENT, INTERPRETATION AND EVIDENCE

REFERENCES

- DOE (1977) *Housing Policy Technical Volume Part II*, HMSO, London.
- Fleming, M.C. and Nellis, J.G. (1981) "The interpretation of house price statistics for the United Kingdom", *Environment and Planning A*, 13, 1109-1124
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- Fleming, M.C. and Nellis, J.G. (1985a) "Research policy and review 2. House price statistics for the United Kingdom: a survey and critical review of recent developments", *Environment and Planning A*, 17, 297-318.
- Fleming, M.C. and Nellis, J.G. (1985b) "The application of hedonic indexing methods: a study of house prices in the United Kingdom", *Statistical Journal of the United Nations Economic Commission for Europe*, 3, 249-70

PART I Government Data Sources

DOE/BSA BS4 Survey

TECHNICAL DETAILS

(a) Source of data and timing

Building societies' lending records at mortgage approval and completion stages (mixed until 1975, then separate series thereafter).

(b) Types of data and periods covered

Average prices: 1956 to date.

An index of average prices (new houses) was also published until the 1970s; it was then discontinued and is not reproduced in this volume.

Available data

DATA BREAKDOWNS	DATA TYPE
-----------------	-----------

HOUSE DATA

All houses	*
New/Non-new	*
Type	
Size	
Age	

LOCAL DATA

Regions
Sub-regions
Towns

BUYER DATA

First-time buyer
Former owner-occupier

(c) Frequency

Monthly and quarterly (only quarterly before 1975)

(d) Geographical coverage

United Kingdom from 1975 (previously Great Britain)

(e) Method of analysis

Data are obtained from a panel of building societies showing the total number of advances made for house purchase and the total value of the houses purchased for new and non-new houses at both the approval and completion stages. These data are used to calculate average prices and, at one time, an index of average prices. The data collected and the coverage of the survey have changed on a number of occasions. An historical

account of its development based on one provided by the Building Societies Association (BSA) is given below.

From 1956 to 1974 quarterly returns were obtained from a panel of 80 building societies accounting for some 75 per cent of building society lending. All *new* houses mortgaged to these building societies were covered and the sampling error was therefore thought to be small. In 1972 it was discovered that some societies had been reporting prices at the completion stage and others prices at the approval stage. Societies were asked what practice they had adopted and this enabled two sub-series - for the approval and completion stages - to be calculated.

A new monthly return (designated BS4) was introduced in early 1974. This return provides information on the number and value of mortgage advances and house prices for new and non-new houses at both approval and completion stages. Some 50 societies comprising 90 per cent of the total assets of the building society movement completed the return and this large sample meant that much more reliability could be placed on the resultant figures.

In 1981 the details of the BS4 return were revised and the sample reduced to the largest 17 (16 by the end of 1986) societies, comprising over 80 per cent of the total assets of the building society industry. The revised return enables the average price of houses for which there is a free market value to be calculated. The previous return made no distinction between such houses and, for example, council houses purchased at a discount. The reduced sample and the changed definition mean that there is a discontinuity in the series between the end of 1980 and the beginning of 1981.

Reliable figures from the BS4 return are available only from the beginning of 1975 but it is obviously helpful to use existing data to provide a consistent back-run of figures. The Department of the Environment has therefore adjusted past figures to make them compatible with the BS4 series. For existing dwellings the DOE Five Per Cent Sample Survey has been used to calculate figures at the completion stage back to 1966 (see Chapter 3). Because the sample survey results are only based on a five per cent sample they should be treated with caution and they are not a reliable indicator of short-term trends. For new houses an index based on the DOE/BSA BS4 Survey has been used. The figures for the period since 1967 are reasonably reliable but those between 1963 and 1966 are based on a smaller sample and are therefore subject to a greater margin of error. It is not possible to break down the new house-price series into approval and completion stage figures before 1963. However, by chance, in that year the approval and completion stage average prices were the same and, for the purposes of any long-term comparison, it has been assumed by the DOE that this applied throughout the period between 1956 and 1962.

2.2 LIST OF TABLES

Average prices

- 2.1 United Kingdom: all, new and existing dwellings. 1956- annual and quarterly
- 2.2 United Kingdom: all, new and existing dwellings. 1956- monthly

2.3 CROSS-CLASSIFICATIONS OF DATA

None

2.4 PUBLICATIONS

(a) Data

Housing and Construction Statistics. HMSO, London. Quarterly and annual volumes
BSA Bulletin. Building Societies Association, London. Quarterly
A Compendium of Building Society Statistics. Building Societies Association, London.
 Annual
BSA Press Release. Building Societies' Monthly Figures. Building Societies Association,
 London. Monthly

b) Description of methodology

A Compendium of Building Society Statistics. 6th edition, Building Societies Association, London. 1985

c) Supplementary studies

None

DOE/BSA BS4 SURVEY

AVERAGE PRICES (at approval and completion stages) 1956 -

2.1 UNITED KINGDOM: ALL, NEW AND EXISTING DWELLINGS

Annual and Quarterly

E

Year	AT MORTGAGE APPROVAL STAGE			AT MORTGAGE COMPLETION STAGE		
	All	New*	Existing	All	New*	Existing
1956		2280			2280	
1957		2330			2330	
1958		2390			2390	
1959		2410			2410	
1960		2530			2530	
1961		2770			2770	
1962		2950			2950	
1963		3160			3160	
1964		3460			3360	
1965		3820			3660	
1966		4100		3850	3910	3820
1967		4340		4080	4150	4050
1968		4640		4340	4330	4340
1969		4880		4660	4690	4650
1970		5180		5000	4990	5010
1971		5970		5650	5510	5710
1972		7850		7420	6920	7610
1973		10690		10020	9630	10170
1974		11340		11100	11140	11090
1975	12119	12406	12057	11945	12234	11880
1976	12999	13442	12906	12759	13132	12679
1977	13922	14768	13764	13712	14343	13589
1978	16297	17685	16026	15674	16792	15447
1979	21047	22728	20739	20143	21455	19886
1980	24307	27244	23854	23514	26131	23085
1981	24810	28028	24374	24503	27910	24040
1982	25553	28508	25167	24577	27914	24149
1983	28593	31678	28146	27192	30943	26662
1984	30811	34160	30342	29648	33416	29112
1985	33187	37308	32673	31876	36295	31299
1986	38121	43646	37499	36869	42319	36238
1956	1	2240			2240	
	2	2280			2280	
	3	2300			2300	
	4	2280			2280	
1957	1	2290			2290	
	2	2290			2290	
	3	2340			2340	
	4	2380			2380	
1958	1	2360			2360	
	2	2400			2400	
	3	2410			2410	
	4	2390			2390	
1959	1	2390			2390	
	2	2400			2400	
	3	2410			2310	
	4	2420			2420	
1960	1	2430			2430	
	2	2480			2480	
	3	2560			2560	
	4	2640			2640	
1961	1	2690			2690	
	2	2740			2740	
	3	2790			2790	
	4	2850			2850	

* It is not possible before 1963 to break down the new house-price series into approval and completion stage. It has been assumed by the DOE that they were the same for the period 1956-1962 - see Section 2.1 (e).

Year	AT MORTGAGE APPROVAL STAGE			AT MORTGAGE COMPLETION STAGE		
	All	New	Existing	All	New	Existing
52		2910			2910	
2		2930			2930	
3		2950			2950	
4		3010			3010	
53		3080			3110	
2		3130			3120	
3		3160			3190	
4		3280			3190	
54		3370			3340	
2		3420			3340	
3		3520			3390	
4		3600			3420	
55		3700			3560	
2		3800			3600	
3		3850			3680	
4		3920			3790	
56		4010		3660	3800	3580
2		4080		3800	3910	3750
3		4210		3950	3930	3950
4		4150		3980	3980	3970
57		4270		3950	4020	3920
2		4310		4070	4160	4020
3		4360		4170	4170	4180
4		4420		4100	4230	4040
58		4510		4190	4200	4190
2		4700		4300	4320	4280
3		4690		4460	4350	4510
4		4710		4440	4470	4420
59		4720		4500	4550	4480
2		4840		4610	4660	4580
3		4940		4770	4740	4780
4		5040		4750	4790	4370
60		5000		4810	4870	4780
2		5180		4850	4890	4840
3		5300		5110	5060	5120
4		5230		5150	5100	5170
61		5600		5240	5190	5270
2		5770		5450	5390	5470
3		6190		5790	5570	5870
4		6350		6000	5760	6090
62		6650		6340	6080	6440
2		7380		6850	6430	7010
3		8680		7960	7240	8220
4		9440		8520	7930	8750
63		10150		9240	8810	9400
2		10640		9780	9460	9910
3		10960		10420	9970	10590
4		11240		10760	10340	10920
64		11230		10960	10850	11010
2		11160		10840	10960	10800
3		11450		11170	11200	11170
4		11490		11270	11420	11220
65	11492	11818	11411	11399	11852	11288
2	12117	12401	12053	11695	12052	11609
3	12403	12664	12351	12275	12404	12247
4	12367	12746	12291	12255	12566	12189

DOE/BSA BS4 SURVEY

AVERAGE PRICES (at approval and completion stages) 1956 -

2.1 UNITED KINGDOM: ALL, NEW AND EXISTING DWELLINGS
Annual and Quarterly (continued)

E

Year	AT MORTGAGE APPROVAL STAGE			AT MORTGAGE COMPLETION STAGE		
	All	New	Existing	All	New	Existing
1976 1	12432	12942	12321	12286	12738	12191
2	12956	13385	12864	12538	12948	12448
3	13350	13682	13282	13070	13274	13026
4	13280	13831	13170	13091	13522	12996
1977 1	13312	13986	13171	13159	13813	13023
2	13672	14463	13522	13376	13931	13260
3	14102	14951	13955	13926	14523	13818
4	14353	15442	14153	14115	14900	13970
1978 1	14711	16185	14414	14443	15556	14236
2	15655	17115	15358	14951	16157	14689
3	17147	18389	16917	16233	17219	16036
4	18049	19550	17765	17270	18343	17046
1979 1	18804	20612	18445	18270	19579	18025
2	20435	22118	20120	19242	20696	18940
3	22069	23650	21795	20939	21895	20753
4	23065	25036	22724	22047	23588	21746
1980 1	23385	26191	22888	22349	24524	21956
2	24429	27208	23965	23051	25710	22566
3	24633	27715	24191	24100	26763	23688
4	24664	27952	24223	24267	27466	23804
1981 1	24796	28512	24286	24383	27847	23902
2	25537	28612	25122	24780	28232	24329
3	24952	27990	24561	24984	28135	24575
4	23790	26794	23360	23756	27392	23229
1982 1	23804	27123	23353	23188	27122	22674
2	25362	28391	24974	24042	27389	23619
3	25955	28594	25621	25115	28040	24764
4	26688	29605	26301	25360	28678	24908
1983 1	26904	30570	26403	25706	29791	25234
2	28612	31825	28126	26547	30562	25989
3	29756	32245	29398	28213	31486	27724
4	29251	32096	28830	28383	31665	27846
1984 1	29400	33086	28874	28034	32054	27481
2	31021	34345	30543	29146	32858	28626
3	31706	34906	31289	30728	34272	30248
4	31095	34337	30635	30360	34172	29764
1985 1	31630	35657	31083	30502	34842	29951
2	32859	36555	32384	31473	35584	30899
3	33560	37624	33081	32226	36316	31714
4	34554	39477	33969	33338	38070	32719
1986 1	35317	40469	34716	33716	39265	33099
2	38097	43442	37484	35660	40908	35044
3	39494	45063	38910	38134	43267	37579
4	39409	45748	38680	39222	44969	38490
1987 1	40672	47460	39869	38840	45996	38012

** Indicates discontinuity in the series between 1980 and 1981 caused by revision of the sample of building societies in the survey.

OE/BSA BS4 SURVEY

VERAGE PRICES (at approval and completion stages) 1975 -

2 UNITED KINGDOM: ALL, NEW AND EXISTING DWELLINGS

Monthly

£

Year	AT MORTGAGE APPROVAL STAGE			AT MORTGAGE COMPLETION STAGE		
	All	New	Existing	All	New	Existing
75						
Jan	11452	11804	11369	11300	11893	11157
Feb	11350	11754	11248	11354	11833	11236
Mar	11668	11893	11611	11530	11833	11455
Apr	11927	12273	11848	11536	11970	11431
May	12091	12280	12047	11680	12006	11599
Jun	12337	12667	12266	11865	12185	11791
Jul	12437	12663	12392	12134	12367	12082
Aug	12475	12721	12426	12353	12498	12324
Sep	12304	12613	12243	12350	12356	12349
Oct	12471	12726	12421	12259	12455	12216
Nov	12318	12734	12237	12269	12483	12224
Dec	12292	12783	12189	12236	12766	12125
76						
Jan	12420	12920	12312	12342	12702	12271
Feb	12359	12793	12264	12198	12676	12096
Mar	12502	13082	12375	12310	12817	12199
Apr	12771	13309	12654	12457	12868	12373
May	12951	13297	12875	12484	12981	12373
Jun	13141	13552	13055	12667	12988	12594
Jul	13401	13610	13358	12871	13192	12800
Aug	13339	13710	13264	13177	13323	13148
Sep	13309	13726	13224	13183	13321	13153
Oct	13219	13806	13101	13109	13457	13033
Nov	13329	13725	13251	13047	13457	12958
Dec	13297	14003	13156	13119	13658	12998
77						
Jan	13450	14006	13332	13189	13848	13059
Feb	13296	13918	13166	13192	13849	13054
Mar	13294	14062	13079	13136	13819	12989
Apr	13564	14313	13417	13299	13885	13175
May	13643	14435	13489	13306	13879	13186
Jun	13882	14718	13731	13521	14135	13394
Jul	14069	14850	13934	13730	14207	13641
Aug	14166	15009	14021	13946	14656	13822
Sep	14145	15042	13988	14045	14738	13917
Oct	14306	15295	14127	14114	14791	13994
Nov	14442	15453	14257	14055	14825	13915
Dec	14425	15688	14189	14143	15105	13957
78						
Jan	14557	15940	14291	14398	15189	14261
Feb	14518	16024	14215	14330	15533	14107
Mar	15050	16556	14734	14570	15848	14319
Apr	15241	16847	14898	14770	15973	14525
May	15608	16983	15329	14898	16178	14621
Jun	16127	17556	15852	15196	16310	14939
Jul	16688	17952	16458	15819	16787	15618
Aug	17191	18448	16958	16309	17358	16107
Sep	17566	18758	17342	16594	17540	16403
Oct	17725	19186	17453	16964	17899	16773
Nov	18101	19526	17833	17318	18220	17130
Dec	18378	20000	18063	17560	18964	17259
79						
Jan	18486	20128	18157	18076	18994	17915
Feb	18721	20720	18327	18254	19495	18023
Mar	19152	20943	18798	18457	20118	18127
Apr	19751	21569	19400	18802	20307	18502
May	20464	22252	20130	19219	20760	18893
Jun	21043	22517	20776	19676	20977	19401
Jul	21739	23120	21499	20464	21230	20309
Aug	22123	23904	21824	21125	22229	20919
Sep	22391	23985	22107	21296	22348	21093
Oct	22876	24700	22560	21870	22868	21603
Nov	23138	25130	22800	22149	23593	21870
Dec	23226	25362	22849	22228	24459	21779

DOE/BSA BS4 SURVEY

AVERAGE PRICES (at approval and completion stages) 1975 -

2.2 UNITED KINGDOM: ALL, NEW AND EXISTING DWELLINGS
Monthly (continued)

E

Year	AT MORTGAGE APPROVAL STAGE			AT MORTGAGE COMPLETION STAGE			
	All	New	Existing	All	New	Existing	
1980	Jan	23275	25842	22843	22496	24331	22172
	Feb	23196	25939	22703	22178	24604	21732
	Mar	23633	26679	23086	22373	24617	21956
	Apr	24168	27008	23676	22837	25472	22556
	May	24439	27448	23926	22882	25669	22387
	Jun	24663	27159	24268	23420	26032	22941
	Jul	24743	27571	24323	23726	26554	23255
	Aug	24605	27674	24167	24318	27279	23877
	Sep	24551	27903	24086	24285	27492	23958
	Oct	24671	27880	24241	24355	27464	23908
	Nov	24746	27909	24316	24165	27283	23719
	Dec	24564	27986	24099	24276	27636	23780
-----**							
1981	Jan	24305	28017	23804	24430	27945	23983
	Feb	24433	28424	23903	24035	27507	23549
	Mar	25096	28729	24595	24381	28053	23863
	Apr	25503	28827	25049	24602	28354	24139
	May	25575	28678	25157	24738	28010	24316
	Jun	25536	28357	25161	25000	28302	24537
	Jul	25504	28574	25114	25118	28232	24721
	Aug	24935	27972	24544	25185	28163	24804
	Sep	24412	27433	24018	24600	27993	24141
	Oct	24121	27064	23723	24243	28554	23643
	Nov	23649	26583	23224	23636	26486	23239
	Dec	23525	26717	23042	23356	27142	22760
1982	Jan	23561	26973	23099	23440	27994	22922
	Feb	23552	26706	23115	22937	26564	22464
	Mar	24097	27497	23640	23188	27016	22655
	Apr	24859	27941	24469	23858	27513	23396
	May	25552	28452	25174	24158	27318	23775
	Jun	25690	28789	25294	24097	27346	23672
	Jul	25779	28457	25459	24899	28122	24517
	Aug	26060	28571	25733	25336	28030	25027
	Sep	26019	28726	25667	25120	27965	24758
	Oct	26502	29621	26091	24997	28054	24600
	Nov	26702	29590	26329	25277	28975	24802
	Dec	26871	29604	26495	25781	28917	25310
1983	Jan	26802	30367	26341	25700	29324	25325
	Feb	26788	30252	26305	25419	30217	24862
	Mar	27083	30989	26536	25929	29788	25449
	Apr	27998	31495	27492	26470	30756	25929
	May	28717	32046	28209	26441	30601	25882
	Jun	29113	31912	28676	26728	30375	26158
	Jul	29769	32417	29391	27817	31364	27304
	Aug	29889	32311	29533	28490	31350	28061
	Sep	29620	32020	29279	28338	31754	27814
	Oct	29361	32246	28947	28178	31605	27666
	Nov	29430	32303	29005	28343	31627	27832
	Dec	28921	31704	28495	28614	31744	28031
1984	Jan	29060	32934	28497	27904	31623	27446
	Feb	29205	32886	28683	28055	32228	27466
	Mar	29786	33350	29279	28121	32210	27523
	Apr	30540	34065	30049	29086	32583	28621
	May	31082	34492	30575	28877	32838	28340
	Jun	31406	34448	30970	29461	33094	28911
	Jul	31843	34979	31428	30279	33925	29786
	Aug	31913	35417	31471	31080	34528	30638
	Sep	31309	34274	30917	30849	34394	30335
	Oct	31152	33961	30763	30431	34511	29854
	Nov	30961	34305	30484	30127	33847	29582
	Dec	31194	34840	30659	30548	34168	29873

** Indicates discontinuity in the series between 1980 and 1981 caused by revision of the sample of building societies in the survey.

yr	AT MORTGAGE APPROVAL STAGE			AT MORTGAGE COMPLETION STAGE			
	All	New	Existing	All	New	Existing	
15	Jan	31289	35465	30722	29986	34864	29430
	Feb	31391	35775	30798	30190	34938	29586
	Mar	32105	35700	31617	30456	34755	29867
	Apr	32810	36870	32273	31276	35816	30683
	May	32834	36240	32391	31388	35545	30811
	Jun	32938	36577	32489	31754	35426	31205
	Jul	32884	36401	32475	32119	35815	31647
	Aug	33541	38124	33001	32262	36282	31793
	Sep	34236	38335	33745	32312	36925	31706
	Oct	34680	39164	34150	33070	37249	32545
	Nov	34384	39472	33773	33141	37769	32581
	Dec	34602	39831	33981	33664	39066	32873
16	Jan	34552	40087	33901	33316	39268	32741
	Feb	35299	40066	34739	33591	38920	32968
	Mar	35936	41179	35331	34184	39551	33541
	Apr	37414	42639	36791	34947	39987	34374
	May	38070	43135	37491	35714	41042	35113
	Jun	38804	44597	38160	36218	41514	35555
	Jul	39483	44848	38947	37353	42841	36753
	Aug	39637	45098	39062	38378	43481	37852
	Sep	39364	45277	38711	38777	43537	38245
	Oct	39512	45472	38840	40175	44528	39664
	Nov	39303	45654	38577	38510	44326	37792
	Dec	39397	46218	38587	38789	46024	37748
17	Jan	39691	46548	38875	38335	45580	37633
	Feb	40355	47385	39513	38784	46054	37933
	Mar	41561	48127	40796	39291	46210	38391

DOE Five Per Cent Sample Survey

TECHNICAL DETAILS

(a) Source of data and timing

Building societies' lending records at mortgage completion stage

(b) Types of data and periods covered

Average prices: 1965 to date. Survey commenced in 1965 but most of the present analyses run only from 1968 Q2.

Weighted index of average prices: 1969 to date

Available data (regularly published)

DATA BREAKDOWNS	DATA TYPES	
	AVERAGE PRICES	INDEX NUMBERS
HOUSE DATA		
All houses	*	*
New/Non-new	*	*
Type	*	
Size		
Age		
LOCAL DATA		
Regions	*	*
Sub-regions		
Towns		
BUYER DATA		
First-time buyer	*	
Former owner-occupier	*	

(c) Frequency

Quarterly (certain breakdowns of data only *published* annually)

(d) Geographical coverage

United Kingdom and official standard regions (defined in Appendix B)

The data for the standard regions are based on the former Economic Planning Regions as defined from 1 April 1974. Approximate figures have been produced for the period from 1968 Q2 to 1974 Q1 for the North, Yorkshire & Humberside, East Midlands, South East (excluding Greater London), South West, and North West regions which were altered; precise figures for the new regions cannot be recalculated because they are not exact combinations of the old counties and county boroughs by which the old data are coded.

DOE FIVE PER CENT SAMPLE SURVEY

(e) Method of analysis

Data are obtained from a regular survey by the DOE. Larger building societies complete questionnaires on a sample of five per cent of new mortgage advances; smaller societies provide a slightly larger sample.

Average prices: simple averages for all house sales, including sales at discounted prices.

Index numbers: until 1982 index numbers were based on simple averages of house prices, no allowance being made for the influence of changes in the mix of houses traded in terms of type, size, etc. In 1982 a mix-adjusted index was introduced and carried back to 1968 Q2. A description is given in *Economic Trends*, October 1982 (see Section 3.4(b) for details).

The mix-adjusted index is based on weighted average prices. These allow for the influences of changes in the mix of three house characteristics (type, size and age, where age represents a distinction between new and non-new dwellings) and changes in the regional distribution of house-purchase transactions. The procedure involves the generation of a matrix consisting of 156 cells, each representing a cross-classification of these characteristics. For each cell a mean price is calculated in each successive time period. An overall weighted average is then calculated, the weights being the number of transactions in each cell over the period mid-1968 to mid-1974 up to 1982 and since then an annually updated set of weights based on mortgages in the previous three years.

3.2 LIST OF TABLES

Average prices

- 3.1 United Kingdom: all, new, existing dwellings; type of buyer. 1965-
- 3.2 Regions: all dwellings. 1968-
- 3.3 Regions: new and existing dwellings. 1969-
- 3.4 Regions: type of buyer. 1969-
- 3.5 United Kingdom and regions: type of dwelling. 1979-
- 3.6 United Kingdom: type of dwelling -all, new, non-new. 1969-
- 3.7 First-time buyers: United Kingdom and regions. 1983-
- 3.8 First-time buyers: United Kingdom - type and age of dwelling. 1983-

Weighted index

- 3.9 United Kingdom: all, new, non-new dwellings. 1968 Q2-
Regions: all dwellings. 1969-

3.3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Numbers in the grid below refer to the corresponding tables compiled for this data source

Average prices and weighted index()*

ALL HOUSES		NEW	NON-NEW	AGE		TYPE		SIZE		REGIONS		SUB-REGIONS		TOWNS	FTB/FOO
3.6	3.6	3.6													
3.2,3.9*	3.3	3.3				3.5									
				3.8	3.8					3.4,3.7					
HOUSE DATA										LOCAL DATA				BUYER TYPE	

(b) Three-way classifications

None

PUBLICATIONS**(a) Data**

Housing and Construction Statistics. HMSO, London. Quarterly and annual volumes.

BSA Bulletin. Building Societies Association, London. Quarterly.

A Compendium of Building Society Statistics. Building Societies Association, London. Annual.

(b) Description of methodology

Evans, A.W., *Studies in Official Statistics 26: The Five Per Cent Sample Survey of Building Society Mortgages*. HMSO, London, 1975.

Department of the Environment, "A New Index of Average House Prices", *Economic Trends*, 348, October 1982, pp.134-8.

(c) Supplementary studies

Distribution of dwelling prices regularly published in *Housing and Construction Statistics* and in *BSA Bulletin*.

Unpublished analyses may be supplied by the Department of the Environment on request or on payment of a fee.

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1965 -

3.1 UNITED KINGDOM:

ALL NEW AND EXISTING DWELLINGS; TYPE OF BUYER

£

Year	All	New	Existing	TYPE OF BUYER	
				First-time Buyer	Former Owner-occupier
1966	3840	3953	3776		
1967	4050	4154	4001		
1968	4344	4447	4290		
1969	4640	4736	4598	4097	5418
1970	4975	5051	4946	4330	5838
1971	5632	5609	5640	4838	6666
1972	7374	6988	7519	6085	8965
1973	9942	9683	10043	7908	11900
1974	10990	11114	10950	9037	13049
1975	11787	12013	11734	9549	13813
1976	12704	13084	12618	10181	15160
1977	13650	14324	13513	10857	16246
1978	15594	16923	15312	12023	18792
1979	19925	21124	19675	14918	24074
1980	23596	26245	23145	17533	28959
1981	24188	28119	23642	18166	30110
1982	23644	28205	23083	17762	30634
1983	26471	30817	25901	19513	34260
1984	29106	33080	28557	22174	36717
1985	31103	36103	30476	23742	39390
1986	36276	43562	35464	27444	45200
1965 Nov/Dec	3637	3806	3548		
1966 1	3661	3887	3534		
2	3772	3910	3702		
3	3917	3938	3904		
4	3981	4060	3926		
1967 1	3911	3988	3873		
2	4030	4148	3971		
3	4147	4198	4125		
4	4070	4234	3993		
1968 1	4184	4286	4137		
2	4290	4402	4229	3782	4997
3	4474	4502	4459	3984	5112
4	4450	4606	4363	3988	5072
1969 1	4478	4598	4421	3987	5173
2	4572	4663	4529	4059	5346
3	4730	4740	4726	4141	5552
4	4754	4946	4676	4181	5566
1970 1	4785	4950	4723	4169	5669
2	4816	4913	4778	4207	5672
3	5108	5122	5103	4428	5969
4	5127	5188	5104	4464	5957
1971 1	5238	5329	5201	4566	6198
2	5393	5373	5400	4649	6424
3	5772	5699	5800	4945	6814
4	5995	5936	6014	5143	7029
1972 1	6326	6235	6361	5393	7549
2	6832	6583	6927	5773	8290
3	7878	7191	8119	6366	9634
4	8451	7960	8639	6813	10288
1973 1	9222	9062	9283	7446	11083
2	9639	9276	9790	7652	11544
3	10337	10015	10461	8140	12285
4	10709	10515	10785	8579	12733

Year	All	New	Existing	TYPE OF BUYER	
				First-time Buyer	Former Owner-occupier
1974					
1	10871	10872	10871	8921	13136
2	10778	11030	10677	8865	12997
3	11073	11204	11030	9154	13108
4	11135	11309	11087	9141	12979
1975					
1	11180	11585	11081	9214	12976
2	11632	11607	11639	9459	13507
3	12144	12273	12115	9669	14230
4	12024	12500	11917	9748	14309
1976					
1	12188	12495	12119	9852	14533
2	12454	12976	12331	10015	15010
3	13006	13310	12935	10327	15452
4	13114	13498	13029	10522	15538
1977					
1	13101	13795	12949	10570	15550
2	13322	13881	13219	10788	15884
3	13773	14375	13653	10832	16386
4	14139	15004	13968	11135	16819
1978					
1	14252	15621	13982	11178	17096
2	14878	16237	14580	11561	17840
3	16067	17084	15853	12189	19481
4	17208	18638	16890	13200	20751
1979					
1	17901	19059	17675	13701	21806
2	19131	20372	18870	14204	23249
3	20835	21557	20682	15607	24733
4	21807	23355	21474	16278	26344
1980					
1	22326	24667	21868	16817	27327
2	23065	25528	22618	17246	28201
3	24254	27056	23785	17618	29811
4	24497	27832	24015	18284	30148
1981					
1	24227	27971	23678	18234	29776
2	24670	28564	24129	18551	30366
3	24566	28562	24033	18295	30677
4	23183	27289	22616	17558	29462
1982					
1	22029	27169	21352	17087	28622
2	23121	28066	22523	17575	30008
3	24295	28141	23843	18114	31382
4	24579	29121	24013	18094	31605
1983					
1	24992	29573	24485	18467	32689
2	25805	30466	25194	19365	33410
3	27509	31178	27004	19829	35523
4	27594	31813	26981	20471	35298
1984					
1	27233	31541	26682	20821	35174
2	28644	32053	28161	21990	35901
3	30281	34325	29738	22945	37624
4	29759	33870	29151	22677	37630
1985					
1	29013	34774	28341	22228	37421
2	30952	34744	30451	23849	38978
3	31435	36247	30837	23795	39616
4	32518	37763	31826	24807	40978
1986					
1	33497	40316	32799	25677	42378
2	34964	43158	34050	26965	43345
3	37993	43946	37346	28305	46739
4	37887	45781	36924	28525	47315

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1968 -

3.2 REGIONS: ALL DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1969	3714	3436	3922	3791	4348	4298
1970	3942	3634	4184	3966	4490	4515
1971	4389	4023	4949	4390	4926	4968
1972	5413	4880	5724	5621	6232	7031
1973	7414	7059	7836	8191	8775	9849
1974	8444	8289	8890	9191	10252	10996
1975	9601	9058	9771	9989	10866	11528
1976	10453	9995	10500	10646	11621	11850
1977	11773	10722	11523	11367	12528	12176
1978	13044	12099	13410	12810	14342	13968
1979	15443	15003	16902	15836	18493	18461
1980	17710	17689	20092	18928	21663	22808
1981	18602	19202	20554	19465	21755	23060
1982	18071	18180	20744	19487	20992	23358
1983	20032	20863	22832	22026	23131	25830
1984	22604	22356	24410	24377	24989	28296
1985	22786	23338	25125	25539	25855	31661
1986	24333	25607	27503	28483	28437	36061
1968 2	3247	3292	3562	3627	4032	4015
3	3481	3384	3769	3873	4190	4008
4	3660	3430	3791	3648	4046	3985
1969 1	3526	3321	3758	3757	4303	4033
2	3693	3436	3934	3767	4351	4165
3	3776	3487	3964	3815	4303	4470
4	3833	3481	4017	3828	4434	4489
1970 1	3679	3476	4138	3724	4447	4113
2	3952	3575	4119	3695	4236	4351
3	4012	3837	4232	4165	4631	4668
4	4033	3590	4230	4154	4618	4795
1971 1	4165	3719	4265	4074	4679	4547
2	4154	3919	4358	4231	4590	4732
3	4433	4189	4554	4505	5112	5065
4	4709	4184	4726	4648	5224	5366
1972 1	4810	4296	5082	4728	5291	5598
2	4955	4514	5395	5190	5643	6359
3	5782	5100	5832	6064	6566	7391
4	6045	5543	6505	6480	7435	8566
1973 1	6588	6011	7106	7396	7854	8782
2	7056	6874	7470	8049	8442	9398
3	7874	7526	8542	8432	9292	10538
4	8241	7887	8461	9135	9658	10868
1974 1	8190	8044	8760	8818	10183	10798
2	8340	8154	8382	9276	9738	10252
3	8353	8226	8949	9718	10285	11375
4	8728	8344	9238	8979	10171	11266
1975 1	8786	8710	9019	9647	10173	10974
2	9537	8627	9622	9926	10596	12235
3	9775	9349	10258	10121	10843	12326
4	10139	9279	9991	10181	10806	11890
1976 1	9812	9255	10305	10076	11384	11189
2	10323	9755	10035	10557	11491	11649
3	10724	10539	10840	11230	11651	11927
4	10859	10307	10825	10659	11924	12563
1977 1	11357	10144	10334	10963	11906	11559
2	11538	10240	11271	11645	12419	11867
3	11721	10782	11700	11633	12525	11994
4	12294	11439	12321	11194	13029	13057

uth st	Greater London	South West	Wales	Scotland	Northern Ireland
792	6195	4496	4168	4609	3941
223	6882	4879	4434	5002	4387
284	7397	5564	4803	5407	4650
914	11113	7771	5935	6233	4934
164	14447	10868	8382	8595	6181
946	14857	11606	9401	9775	8710
664	14918	12096	10083	11139	10023
548	15566	13003	11129	12974	12860
466	16745	13555	11673	14236	15722
915	19160	15503	13373	16147	18395
675	25793	20494	17061	19371	21824
832	30968	25293	19363	21754	23656
975	30757	25365	20155	23014	19890
676	30712	25514	19662	22522	20177
764	34640	28000	22533	23822	20859
334	39346	30612	23665	25865	21455
487	44301	32948	25005	26941	23012
544	54863	38536	27354	28242	25743
339	5990	4212	3791	4189	4290
506	6137	4334	4059	4631	4474
543	6084	4389	4004	4372	4450
564	6271	4322	4105	4492	4478
540	6026	4546	3970	4595	4572
941	6224	4550	4267	4625	4730
963	6254	4541	4282	4688	4754
937	6798	4631	4201	4644	4785
015	6569	4732	4407	5099	4816
404	6923	4942	4624	5056	5108
441	7177	5104	4462	5153	5127
730	7189	5201	4415	4984	5238
908	7860	5307	4732	5042	5393
438	8070	5687	5017	6010	5772
357	8445	5967	4948	5376	5995
199	9392	6297	5391	5570	6326
046	10552	7096	5382	6183	6832
782	11878	8383	6120	6724	7878
902	13109	9114	6822	6542	8451
134	14133	10303	7709	7714	9222
965	14051	10626	7742	7953	9639
182	14774	11252	9047	9289	10337
341	14912	11397	9618	9366	10709
923	15214	11477	9166	9731	10871
743	14722	11297	8600	9838	10778
363	14546	11838	9420	9897	11073
147	14890	11504	10082	9665	11135
141	14473	11779	9223	9958	11180
174	15087	11674	9843	10924	11632
165	15264	12189	10735	11638	12144
794	14774	12027	10305	11788	12024
141	14824	12323	10963	12200	12301
167	13361	13138	10422	12793	11905
908	15649	12980	11444	13258	13964
922	16359	12507	11710	13569	13169
34	16581	13081	11101	13263	16169
24	16318	13166	11787	13773	14587
35	16930	13589	11875	14627	15503
55	17019	14105	11780	14932	16345

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1968 -

3.2 REGIONS: ALL DWELLINGS (continued)

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1978 1	12155	11069	12102	11519	13096	12656
2	12971	11728	12920	12403	13623	13641
3	13340	12551	14300	13529	14502	14116
4	13751	13049	14432	13820	16293	15543
1979 1	13452	13304	15108	14022	16520	17235
2	14680	14290	15932	15716	17761	16663
3	16859	15527	17480	16834	19031	17459
4	16778	16845	18984	16677	20531	20304
1980 1	16792	17074	19202	17859	21186	21361
2	17192	17395	19491	18269	21336	23308
3	18929	17967	20680	19747	22335	23759
4	17804	18209	20810	19701	21810	22635
1981 1	19064	19092	20489	19473	22075	22984
2	19041	19650	20220	19429	22594	23601
3	18640	19610	21250	19745	21849	22742
4	17690	18370	20235	19202	20472	22943
1982 1	17628	17351	19627	19072	20284	20965
2	17605	17666	19543	19226	21376	22748
3	18166	18294	21618	20089	21103	24170
4	18759	19107	21815	19405	20987	24823
1983 1	18680	19593	21551	20942	21623	25333
2	19974	20819	21769	21596	21982	25606
3	20125	21912	24135	22944	24527	25385
4	21662	21153	23838	22680	24459	27043
1984 1	20126	21210	22939	23120	23529	26109
2	22334	21749	23669	24526	24888	27685
3	23615	23690	25738	25000	25847	29352
4	23790	22420	24779	24602	25339	29364
1985 1	22736	21832	23748	24460	24140	29159
2	22969	23401	24806	24252	26257	30641
3	22848	23452	25785	26245	26694	32124
4	22607	24315	25831	26769	25919	33669
1986 1	22591	23856	26195	26185	26675	33760
2	24331	25395	26627	27956	27461	34370
3	26653	25989	28763	29316	29511	36967
4	23724	26751	28079	29834	29563	38502

uth st	Greater London	South West	Wales	Scotland	Northern Ireland
230	17526	14239	12642	14728	16362
645	18374	14821	12570	15615	17835
570	19886	15949	13613	16506	19752
304	20881	17007	14651	17506	19510
229	23037	17922	14516	18529	18471
548	24682	20100	16296	18568	20606
689	26957	20901	18015	20569	23590
403	29059	23062	19016	19793	24629
468	29005	23190	18240	20820	23326
268	30868	24547	18749	20604	23759
314	31954	26507	19065	23161	25399
892	31703	26525	21129	22202	22412
250	30017	24468	19642	22520	20425
990	31564	26354	20411	23384	19635
335	30941	26059	21837	23623	20185
216	30363	24442	18109	22400	19430
584	28398	23858	19150	21298	18885
150	30037	24769	18752	22060	19811
987	30784	25954	19925	22902	20868
922	32934	26752	20676	23399	20831
857	32808	25887	21019	22709	20561
484	33959	27729	21035	23948	20203
497	35370	28660	23648	24130	21885
276	36447	29772	24590	24022	20921
928	36459	28135	23620	24203	21872
601	39304	30381	22955	26144	20686
350	39779	31697	24400	26770	22085
257	41081	31706	23563	25914	21249
880	39753	29509	24272	25531	20990
771	43689	33389	24205	27562	22385
126	44995	33948	25386	26959	24565
602	47593	34207	25942	27438	23735
608	49289	35500	25580	27424	23349
661	53254	37443	26902	27535	25691
696	57816	40316	28667	29065	26871
749	57728	40156	27668	28778	26568

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1969 -

3.3 REGIONS: NEW AND EXISTING DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
NEW DWELLINGS						
1969	4022	3841	4252	4101	4422	4326
1970	4356	4023	4402	4257	4624	4507
1971	4806	4407	4823	4678	5182	4950
1972	5890	5516	5854	5729	6269	6871
1973	8098	7749	8061	8376	9205	9539
1974	8916	8982	9726	9414	10545	10975
1975	10301	9811	10738	10319	11533	11371
1976	11474	10750	11858	11412	12122	12146
1977	13000	12035	13498	12231	13685	12562
1978	15288	14064	15664	14463	16937	14542
1979	17951	18426	19595	17920	20724	18883
1980	21929	21855	25426	22186	25740	25122
1981	24817	25340	27145	25056	26223	26201
1982	27575	24689	27676	25216	25895	25992
1983	28040	26227	28547	27935	28543	28136
1984	29448	28814	29380	29930	30608	31365
1985	33283	30858	31189	32069	32416	34774
1986	36103	35041	37478	38281	41069	43134
EXISTING DWELLINGS						
1969	3598	3266	3765	3606	4313	4276
1970	3797	3495	4098	3830	4436	4521
1971	4220	3875	4362	4244	4820	4979
1972	5206	4593	5670	5568	6217	7139
1973	7078	6738	7743	8094	8620	10028
1974	8266	8007	8632	9085	10166	11008
1975	9397	8842	9550	9888	10715	11592
1976	10156	9759	10245	10444	11504	11743
1977	11502	10424	11168	11149	12307	12042
1978	12552	11665	12971	12418	13817	13793
1979	14934	14301	16435	15335	18037	18333
1980	16900	17035	19332	18266	20885	22197
1981	17966	18443	19828	18538	21030	22321
1982	17352	17458	20092	18658	20257	22905
1983	19160	20249	22232	21155	22343	25379
1984	21827	21638	23883	23610	24144	27684
1985	21847	22691	24539	24620	24989	31112
1986	23369	24771	26692	27234	27071	34887

Year	Greater London	South West	Wales	Scotland	Northern Ireland
2008	7588	4567	4250	4919	4089
2007	7694	4954	4533	5438	4792
2006	8738	5538	4946	5673	5005
2005	11653	7440	5983	6597	5080
2004	15885	10708	7969	8387	6262
2003	17148	11584	9427	10539	8559
2002	18676	11852	10393	11871	11020
2001	19551	12727	12023	13929	14295
2000	18697	13516	12290	16326	17591
1999	23588	15805	14858	16982	20707
1998	27913	20504	18316	20186	23484
1997	37006	27082	23023	24196	27057
1996	35792	27498	25764	27028	25925
1995	33611	27222	26297	27739	25603
1994	35612	30789	31432	30873	25187
1993	41572	32051	32048	31007	25819
1992	45486	35596	33171	33594	27291
1991	56136	43763	34700	35871	31529
1990	6059	4456	4115	4493	3820
1989	6793	4848	4378	4853	4116
1988	7842	5575	4717	5297	4344
1987	11066	7913	5909	6071	4851
1986	14333	10934	8674	8692	6121
1985	14705	11615	9388	9498	8792
1984	14735	12162	9977	10933	9675
1983	15432	13076	10854	12692	12353
1982	16676	13564	11510	13941	15215
1981	18976	15425	13035	15889	17581
1980	25710	20492	16760	19082	21254
1979	30777	24907	18800	21225	22640
1978	30583	25025	19330	22288	18354
1977	30575	25241	18904	21808	18830
1976	34578	27583	21672	22685	19377
1975	39193	30370	22915	24754	19734
1974	44227	32535	24281	25799	21242
1973	54792	37806	26556	27410	23522

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1969 -

3.4 REGIONS: TYPE OF BUYER

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
FIRST-TIME BUYERS						
1969	3376	2970	3461	3347	3771	3779
1970	3456	3138	3687	3536	3925	4020
1971	3843	3411	3977	3769	4226	4336
1972	4694	4084	4818	4724	5399	6034
1973	6098	5635	6408	6556	7270	8213
1974	6984	6846	7407	7728	8219	8980
1975	7743	7387	7885	8069	8584	9508
1976	8333	7996	8228	8442	9124	9726
1977	9144	8319	9002	9113	9622	9970
1978	10423	8899	9926	9769	10754	11296
1979	12017	11170	12602	11496	13321	13852
1980	13565	12820	14641	13915	15746	17366
1981	13972	13889	15554	14111	16659	17548
1982	13224	13353	15340	14518	15658	18045
1983	14743	15647	16744	15978	16582	19765
1984	17001	17253	18387	18135	18429	21753
1985	17295	17604	18984	19044	19188	24449
1986	18187	19253	20447	21367	20744	28076

FORMER OWNER-OCCUPIERS

1969	4188	4018	4552	4460	5160	4997
1970	4554	4353	4876	4773	5340	5252
1971	4969	4897	5209	5246	5995	5852
1972	6454	6136	6844	6851	7467	8525
1973	8986	8513	9415	9827	10418	11468
1974	9954	9880	10725	11084	12091	12996
1975	11258	10513	11475	11784	13011	13247
1976	12557	11937	12641	12751	13965	13842
1977	14116	12812	13851	13687	15011	14330
1978	15786	15088	16414	15635	17455	16436
1979	19178	18433	20367	19567	22664	21978
1980	22374	22200	25211	23553	26596	26778
1981	23836	24197	26014	25036	27216	28169
1982	25231	24443	26972	25732	27541	28055
1983	27208	26707	29555	28766	30800	31629
1984	28926	27631	30998	30806	32382	35029
1985	28949	29555	32093	32900	33658	38393
1986	31448	32059	34775	35685	36650	43283

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South East	Greater London	South West	Wales	Scotland	Northern Ireland
5055	5640	3944	3595	4010	3521
5333	6119	4292	3903	4262	3896
5092	7137	4808	4146	4646	4115
7770	9779	6463	5057	5392	4360
0259	12233	8919	6785	6917	5304
1377	12979	9617	7939	8121	7620
1594	13065	9977	8450	9140	8523
2055	13498	10456	8836	10539	10165
2756	14081	10945	9681	11576	12500
4137	15719	12198	10734	12970	14711
7800	20936	15545	12847	15273	16508
1479	24925	19133	14627	16643	18867
1811	25288	19546	14760	17398	15381
2061	25043	19321	15248	17020	15856
4197	27825	20856	16660	17560	16821
7347	32635	23633	18809	19697	17618
7855	36829	25313	19635	20572	18863
5835	45221	29052	21126	22085	21223
5726	7186	5186	4963	5248	4813
7156	8061	5547	5095	5821	5349
3547	9215	6448	5751	6287	5510
1935	12933	9115	7264	7375	5936
5253	17060	12376	10147	10312	7840
5022	17671	13501	11294	11744	10379
5805	17431	13957	12054	13234	11720
3393	19343	15244	13641	15362	15562
7436	20777	15816	13956	16765	18323
2491	24345	18101	15763	19120	20990
7256	32085	23866	20548	23323	26009
5705	39092	29657	24113	26904	29276
5130	38552	30157	25793	28538	28907
5668	40408	31460	26651	29918	29621
1801	45856	34414	30154	32858	29777
5608	51569	37082	30084	34109	30821
0128	56972	39849	32599	35443	31192
3496	68981	45666	34565	37322	33734

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1979 -

3.5 UNITED KINGDOM AND REGIONS: TYPE OF DWELLING

Year	United Kingdom	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
BUNGALOW							
1979	21803	19109	17556	21547	18035	21618	17774
1980	25811	22959	21119	24899	22384	26160	22375
1981	27999	25018	23799	27500	24733	26778	24408
1982	28456	25102	25384	26021	24258	26769	24201
1983	31435	29736	27540	29403	26660	29918	28014
1984	34701	31755	28769	32582	31611	33161	29863
1985	37696	32199	31560	34902	33118	34952	33367
1986	41991	34637	33757	37512	35911	36342	37826
DETACHED HOUSE							
1979	30108	26257	24544	27574	23681	27854	25400
1980	37041	30457	30463	35520	29258	33089	32424
1981	38099	31934	32685	36115	30371	34169	32826
1982	39008	36390	32711	38864	31188	34658	34772
1983	43615	37283	36124	41563	34992	39591	38238
1984	46829	39415	38653	43882	37544	40430	42040
1985	50903	40187	41648	45631	41125	42050	46770
1986	57707	42399	44867	49851	44760	46002	53291
SEMI-DETACHED HOUSE							
1979	17890	16238	13851	16085	12929	15906	15995
1980	21648	19073	17055	19388	16203	18832	19787
1981	22662	19368	18479	20425	16880	20001	19954
1982	22103	17992	16705	21039	16932	18932	20010
1983	24244	19802	19483	22615	18543	20346	21534
1984	26989	23584	21956	23656	21109	21921	24475
1985	28832	23650	22752	24642	21990	23129	26863
1986	33321	25570	24549	26982	23342	24670	31136
TERRACED HOUSE							
1979	14879	11085	9256	10124	9690	11407	12518
1980	17337	12522	11539	12474	11686	13590	15964
1981	18236	13321	12676	13387	12238	14245	17163
1982	17774	13096	12777	13906	12978	14400	17058
1983	19346	14652	14157	14407	14201	15114	18120
1984	22018	16671	15231	15977	15861	16159	20524
1985	23849	17148	16570	16615	17026	17090	23170
1986	28016	18321	17936	17648	19222	18693	26574
PURPOSE-BUILT FLAT							
1979	16010	9152	14701	14519	11202	14303	11775
1980	19073	12298	15409	15655	13008	15706	15280
1981	20235	13033	17839	16987	14136	15519	18293
1982	19535	12734	12950	14730	12311	14468	17413
1983	21617	13199	16548	16867	11994	14535	17491
1984	24137	13991	17430	19094		17431	18777
1985	26230	14818	18401	20126		17418	21777
1986	31157	16787	18483	21671	18922	18472	26442
CONVERTED FLAT							
1979	17531						
1980	21643						
1981	21232						
1982	21704						
1983	24795	13973	17490	21075	15400	16142	15867
1984	27147	16427					24375
1985	30059	19234					
1986	36701	16286					

Note: gaps indicate small samples

uth st	Greater London	South West	Wales	Scotland	Northern Ireland
339	29647	23719	18066	22769	23039
551	40102	28536	21454	24436	25703
910	43155	29634	23460	28575	25744
465	45467	31011	22785	28547	25160
238	47331	34526	27328	30949	27406
937		36851	28746	34770	27401
385		41637	32427	36793	28790
730	70824	46016	37754	37120	31066
399	49994	29736	25334	26434	30363
515	60433	37851	29627	33124	34479
084	60793	38441	32136	33200	33279
029	59082	38608	33671	35864	34430
000	71363	43279	37637	38246	36109
342	77488	46921	38619	40225	34725
119	93875	52018	43209	42544	39854
382	108365	60643	42422	45846	41734
542	29509	18215	15373	19183	16587
567	35420	23161	18221	21425	19485
521	36777	23498	18718	23039	17563
552	36754	23695	18335	22834	18551
590	41531	25541	20921	23289	18647
754	47753	28454	22486	25188	20291
760	52528	30607	23059	26567	21597
851	65805	35459	25462	29492	23389
005	24243	15001	11471	16404	14439
011	29814	18442	13522	19205	13504
049	29455	19262	14530	18292	10041
018	29012	19545	14587	17458	10779
032	32307	20990	16034	17031	11611
043	38850	22967	17870	19067	11240
009	43607	25386	18401	21211	13362
090	53257	29002	19766	22419	15011
069	19764	15750		13106	
002	24903	17666		14714	
015	24742	18366		16424	
004	24741	18342	13082	17357	
022	27636	19530	16925	18535	21956
031	31971	21719	19423	20104	
035	36019	24895	20154	20731	23212
026	44897	27318	25168	22353	21436
001	20622	14051		15890	
039	26015	19262		16606	
035	24616	19484		18276	
067	24941	20491		19827	
034	28934	20270	24127	22114	18500
	32424	23294	23236		
056	37299	25382		23207	
008	48001	28670		25442	

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1969 -

3.6 UNITED KINGDOM: TYPE OF DWELLING - ALL, NEW, NON-NEW

Year	BUNGALOW			DETACHED HOUSE			SEMI-DETACHED HOUSE		
	All	New	Non-new	All	New	Non-new	All	New	Non-new
1969	4619	4396	4819	6722	6315	6952	4217	4034	4288
1970	4917	4603	5119	7166	6684	7406	4480	4212	4569
1971	5472	5052	5743	8171	7439	8568	4988	4644	5113
1972	7093	6127	7763	10768	9131	11824	6547	5694	6851
1973	9728	8427	10515	14457	12654	15811	8918	7688	9345
1974	10949	10388	11206	15978	14623	16746	9715	8763	9994
1975	11969	11529	12102	16885	15660	17364	10257	9155	10474
1976	13406	12855	13586	18587	17171	19121	11259	10310	11445
1977	14405	14077	14497	20323	18728	20892	12158	11402	12281
1978	16917	16493	17040	23422	21911	24079	13848	13220	13952
1979	21802	19515	22627	30108	26976	31550	17889	16567	18095
1980	25811	24319	26235	37041	33330	38670	21647	20046	21848
1981	27999	27389	28164	38010	36008	38733	22665	21961	22733
1982	28456	27753	28616	39010	37988	39307	22107	22963	22029
1983	31435	30723	31600	43615	41741	44137	24244	24653	24206
1984	34701	33509	34990	46829	46084	47033	26989	25976	27100
1985	37696	35984	38092	50903	49311	51353	28832	28250	28888
1986	41991	41744	42044	57707	57051	57897	33321	31220	33480

L	RRACED HOUSE		FLAT OR MAISONETTE		
	New	Non-new	All	New	Non-new
505	4568	3390	4479	4994	4304
867	4974	3645	4733	5350	4493
346	5339	4161	5519	5796	5438
864	6798	5729	7347	7332	7351
889	9324	7634	8929	9489	8787
557	10040	8292	9164	9100	9178
175	10291	9013	9990	10388	9914
573	10753	9408	10624	10847	10586
273	11705	10081	11211	11414	11180
576	13408	11463	13030	13100	13020
877	17014	14656	16414	16521	16401
338	20796	17067	19769	20316	19718
234	21816	17992	20533	22585	20331
776	22279	17482	20108	21579	19924
346	24326	18976	22514	23207	22415
018	27333	21604	25077	25398	25028
849	29671	23432	27550	29291	27343
016	35218	27621	33043	36772	32647

DOE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1983 -

3.7 FIRST-TIME BUYERS: UNITED KINGDOM AND REGIONS

Year	United Kingdom	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
ALL FIRST-TIME BUYERS							
1983	19513	14743	15647	16744	15978	16582	19765
1984	22174	17001	17253	18387	18135	18429	21753
1985	23742	17295	17604	18984	19044	19188	24449
1986	27444	18187	19253	20447	21367	20744	28076
FORMER LOCAL AUTHORITY SITTING TENANTS							
1983	11351	8996	9385	9382	8529	9985	11912
1984	11959	10332	9260	9775	9856	9820	11518
1985	12698	10220	9525	9506	10141	10266	12307
1986	14060	10415	10143	10377	10816	10050	14206
OTHER FIRST-TIME BUYERS							
1983	21397	17318	16962	17965	17352	18319	21390
1984	23566	18187	17941	19024	18946	19674	23235
1985	25154	18483	18490	19738	20003	20139	26105
1986	28979	19507	20137	21208	22583	21949	29866

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uth st	Greater London	South West	Great Britain	England	Wales	Scotland	Northern Ireland
325	24197	20856	19591	19950	16660	17560	16821
347	32635	23633	22321	22784	18809	19697	17618
355	36829	25313	23886	24440	19635	20572	18863
335	45221	29052	27616	28485	21126	22086	21223
378	15139	12268	11477	11739	9695	10575	8287
556	18703	13309	12249	12734	10492	10518	7891
199	20081	13096	12946	13415	10224	11264	8616
397	23486	14863	14287	14564	10719	12309	9009
036	26123	22529	21437	21671	18514	20303	19859
122	33683	25038	23637	23963	19900	22053	20935
501	38316	26662	25238	25693	21058	22520	21873
532	46879	30354	29070	29883	22326	24238	23636

THE FIVE PER CENT SAMPLE SURVEY

AVERAGE PRICES (at completion stage) 1983 -

FIRST-TIME BUYERS: UNITED KINGDOM - TYPE AND AGE OF DWELLING

E

Year	TYPE OF DWELLING					AGE OF DWELLING		
	Bungalow	Detached House	Semi-detached House	Terraced House	Flat/Maisonette	Pre-1919	1919-39	Post-1939
FIRST-TIME BUYERS								
3	24171	32307	19302	17109	21071	19067	19921	19648
4	26320	35526	22070	19461	23737	21100	22962	21703
5	28840	38657	23060	20989	26069	22799	24552	23225
6	31486	44026	26258	24259	30735	26428	29344	27563
UNDER LOCAL AUTHORITY SITTING TENANTS								
3	14239	19072	11015	11154	12598	15592	10636	11185
4	11482	20006	11684	11898	12696	15932	11570	11864
5	14010	21033	11911	12881	14099	15397	12272	12663
6	14481	19077	13226	14335	16180	18676	13230	14022
UNDER FIRST-TIME BUYERS								
3	24743	33052	22051	18725	21810	19196	22221	22801
4	26953	36027	24178	20726	24128	21169	24825	24728
5	29564	39321	25392	22156	26509	22890	26507	26224
6	32177	44504	28675	25557	31291	26524	31744	30094

DOE FIVE PER CENT SAMPLE SURVEY

WEIGHTED INDEX (at completion stage) 1969 -

3.9 UNITED KINGDOM: ALL, NEW AND NON-NEW DWELLINGS
REGIONS: ALL DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia	South East
1969	19.5	18.9	18.6	19.1	20.3	19.0	18.7
1970	20.5	19.8	19.4	20.0	20.8	20.0	20.1
1971	22.7	21.7	21.1	22.0	22.4	21.7	23.3
1972	28.2	26.5	26.7	28.2	28.7	30.8	32.7
1973	38.4	38.0	37.0	41.4	40.7	43.0	43.4
1974	43.6	44.0	42.4	45.6	45.7	46.7	44.8
1975	48.7	48.4	45.2	49.0	48.5	48.4	46.7
1976	54.4	53.8	49.7	53.0	52.6	51.4	49.8
1977	61.9	57.9	54.5	56.6	57.1	53.4	53.0
1978	69.2	65.1	63.2	64.0	65.9	61.5	62.1
1979	84.6	81.6	81.6	80.9	84.3	79.2	82.6
1980	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1981	106.9	112.2	106.1	107.9	104.4	105.4	104.5
1982	111.5	112.8	108.9	111.3	106.1	109.1	106.1
1983	124.1	126.7	120.2	122.5	115.2	119.0	120.3
1984	134.3	135.5	127.0	135.0	123.5	130.9	136.0
1985	134.9	143.4	132.8	145.3	128.5	146.5	149.9
1986	146.0	156.0	146.0	161.0	141.0	171.0	176.0
1968 2							
3							
4							
1969 1	18.6	18.4	18.2	18.9	20.5	17.7	18.2
2	20.3	18.9	18.6	18.9	20.2	18.9	18.5
3	20.0	19.5	18.7	19.2	19.7	19.7	18.9
4	19.5	18.9	18.8	19.3	21.0	19.4	19.2
1970 1	19.4	19.2	19.0	19.2	20.6	18.4	19.1
2	20.3	19.6	19.1	19.0	20.0	19.4	19.8
3	21.0	20.4	19.9	20.5	21.2	20.2	20.5
4	20.9	19.8	19.6	20.9	21.0	21.2	20.5
1971 1	24.2	20.2	20.1	20.8	21.4	19.8	21.4
2	21.7	21.0	20.6	21.4	21.4	20.6	22.2
3	22.9	22.2	21.3	22.3	22.7	22.0	23.7
4	24.1	22.7	21.9	23.1	23.6	23.6	25.2
1972 1	25.0	23.3	23.6	24.0	24.5	24.1	26.8
2	26.2	24.9	24.9	26.1	25.9	27.6	30.0
3	29.9	27.2	27.5	29.9	30.2	33.2	35.4
4	31.8	30.2	30.6	32.7	34.0	38.2	39.2
1973 1	33.7	32.7	33.5	37.7	36.8	39.9	41.9
2	37.3	36.7	35.9	40.1	39.5	42.3	43.1
3	41.2	40.3	40.0	43.6	42.8	44.6	44.2
4	42.6	42.2	39.8	45.6	44.3	45.7	44.7
1974 1	41.6	42.8	41.4	43.8	44.6	46.9	44.9
2	42.3	44.3	41.3	45.7	44.3	45.2	45.4
3	43.4	43.8	42.6	47.7	46.3	46.8	44.3
4	45.5	44.7	44.0	45.2	46.7	47.1	45.0
1975 1	45.0	45.7	43.3	48.3	46.7	46.4	45.2
2	49.1	46.8	44.2	48.1	47.9	47.9	46.4
3	48.9	49.4	45.9	49.3	48.7	48.7	47.3
4	48.7	50.8	46.8	50.7	50.3	50.6	47.4
1976 1	52.4	51.2	48.2	51.4	51.3	48.6	48.3
2	53.0	52.5	49.3	51.7	51.5	51.0	49.5
3	55.4	55.8	50.4	54.5	53.2	51.6	50.1
4	56.5	55.2	51.2	54.1	54.0	53.8	51.2
1977 1	59.6	55.7	50.7	54.4	54.4	50.8	51.7
2	60.5	55.5	52.6	56.7	56.6	51.9	52.2
3	61.9	58.3	55.6	58.0	57.7	52.6	52.7
4	65.4	60.8	56.8	57.2	58.7	57.2	54.7

1980 = 100

Region	South West	Wales	Scotland	Northern Ireland	United Kingdom		
					All	New	Non-new
	17.6	20.2	20.7	17.7	18.9	19.9	18.7
	18.7	21.6	22.1	19.1	20.1	20.9	19.6
	21.2	23.3	24.0	20.4	22.5	22.7	22.4
	30.3	29.4	28.3	22.1	30.1	28.9	30.4
	42.2	40.6	38.4	25.8	41.0	39.3	41.6
	45.1	45.1	43.7	34.4	44.4	44.5	44.4
	46.4	48.9	49.5	42.1	47.0	47.4	46.7
	49.5	54.0	59.2	53.3	51.2	52.1	50.9
	52.7	56.8	64.7	65.1	55.1	56.4	54.7
	60.8	65.7	72.9	75.1	63.8	65.4	63.1
	80.1	83.8	87.2	90.0	82.5	81.0	82.7
	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	103.2	108.5	109.4	97.2	105.5	107.0	104.7
	106.9	114.5	116.7	101.2	108.1	112.0	107.0
	118.4	126.0	131.0	108.9	120.6	122.0	121.0
	127.4	131.0	139.0	112.7	132.3	133.0	132.0
	139.8	141.0	147.0	120.5	143.6	143.0	144.0
	161.0	150.0	155.0	129.0	164.0	165.0	163.0
					17.4		
					17.8		
					17.8		
	17.3	19.7	20.7	17.5	18.5		
	17.8	19.2	20.9	18.5	18.8		
	17.7	19.8	20.7	17.2	19.0		
	17.8	21.4	20.5	17.6	19.2		
	17.6	20.6	21.2	19.0	19.3		
	18.4	21.4	22.5	18.8	19.6		
	19.1	22.4	22.1	19.5	20.5		
	19.5	22.0	22.9	18.9	20.5		
	20.2	21.6	22.5	20.4	21.0		
	20.2	23.0	22.9	20.4	21.6		
	21.5	24.1	25.4	21.3	22.9		
	22.7	24.0	24.3	19.6	23.9		
	24.3	26.1	25.5	21.2	25.4		
	27.4	27.1	28.1	21.5	27.8		
	32.5	30.2	29.8	25.0	32.0		
	35.9	33.9	30.0	22.5	35.3		
	39.6	36.6	34.6	23.3	38.2		
	41.2	38.5	35.9	24.3	40.1		
	44.4	42.9	41.8	25.7	42.8		
	43.9	44.9	41.3	30.2	43.3		
	45.3	43.1	42.6	33.0	43.9		
	44.1	43.7	43.7	35.6	44.0		
	45.7	45.3	44.1	36.0	44.4		
	45.1	47.8	44.0	34.8	45.0		
	46.1	46.7	45.7	38.3	45.2		
	45.6	47.8	47.7	39.0	46.4		
	46.7	50.8	51.4	43.7	47.8		
	47.1	49.8	52.3	44.7	48.3		
	49.7	52.5	55.3	49.9	49.3		
	49.8	52.7	58.6	50.0	50.6		
	49.6	54.2	60.7	58.6	51.8		
	50.6	55.5	60.8	54.7	52.6		
	50.1	54.3	61.6	61.1	53.0		
	51.1	56.6	62.7	64.1	53.8		
	52.6	56.9	65.7	65.0	55.4		
	55.5	58.6	67.3	67.0	57.1		

DOE FIVE PER CENT SAMPLE SURVEY

WEIGHTED INDEX (at completion stage) 1969 -

3.9 UNITED KINGDOM: ALL NEW AND NON-NEW DWELLINGS
REGIONS: ALL DWELLINGS (continued)

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia	South East
1978 1	64.4	60.1	57.1	58.6	60.2	54.9	57.1
2	68.6	63.2	60.9	62.9	62.6	60.9	58.1
3	69.6	67.4	66.2	65.7	66.4	63.6	64.0
4	74.8	69.8	68.5	69.1	75.1	66.4	69.5
1979 1	74.1	72.1	73.2	73.1	74.5	72.8	73.7
2	80.7	80.2	77.7	79.2	81.9	73.5	79.3
3	89.1	85.3	84.2	84.3	87.1	82.0	85.5
4	93.2	88.3	91.2	87.4	93.4	87.6	92.6
1980 1	93.5	93.1	94.4	94.1	96.3	94.0	95.8
2	97.8	99.4	98.5	98.8	98.0	101.5	99.3
3	105.3	103.4	103.0	105.6	102.7	102.7	101.3
4	102.0	104.0	103.6	102.0	103.3	100.7	102.6
1981 1	104.5	108.4	103.8	103.5	103.4	103.0	104.0
2	107.6	113.2	106.6	108.2	105.0	104.8	103.8
3	109.2	114.9	108.5	110.8	105.9	105.4	105.4
4	105.8	113.2	105.2	108.6	101.2	107.4	105.4
1982 1	108.3	108.6	104.3	109.6	102.2	103.0	99.8
2	108.7	111.0	106.1	113.0	106.7	107.2	105.4
3	110.7	113.8	111.8	114.8	106.8	112.1	109.0
4	117.6	117.2	113.6	108.5	108.2	112.7	109.5
1983 1	117.0	119.0	116.1	117.3	111.6	114.3	114.4
2	121.3	124.8	114.9	120.3	113.2	117.1	116.5
3	124.8	130.2	122.1	123.4	118.3	118.8	124.3
4	125.9	130.9	121.8	127.8	115.9	119.2	125.4
1984 1	125.0	130.1	123.5	130.7	118.6	125.0	128.2
2	127.8	132.3	123.8	134.8	121.4	127.7	132.9
3	135.2	139.8	128.7	136.7	124.7	133.0	138.9
4	135.3	135.9	129.2	136.6	125.4	136.6	142.7
1985 1	134.2	139.6	129.5	140.8	122.1	139.2	141.4
2	133.5	142.1	130.4	137.9	127.6	141.2	148.0
3	137.5	141.8	133.7	148.7	132.0	146.5	151.9
4	133.2	149.7	137.2	152.1	130.8	155.3	156.3
1986 1	140.0	147.4	141.5	150.2	134.5	163.5	161.9
2	145.1	154.7	141.7	161.6	136.4	167.0	169.0
3	152.0	156.0	149.0	161.0	145.0	171.0	180.0
4	142.0	162.0	149.0	168.0	147.0	178.0	188.0

1980 = 100

Water London	South West	Wales	Scotland	Northern Ireland	United Kingdom		
					All	New	Non-new
5	55.8	62.4	66.7	69.0	58.4		
7	58.3	63.1	70.2	71.9	61.2		
3	61.7	67.1	75.0	76.2	65.5		
5	67.4	70.6	78.7	81.1	70.1		
8	71.0	73.1	80.7	79.4	73.8		
7	77.3	80.7	84.1	85.6	79.5		
4	82.6	87.5	91.7	95.0	85.6		
0	90.0	93.1	91.5	101.6	91.3		
2	93.7	93.9	95.9	95.0	94.9		
1	95.9	98.8	96.7	99.3	98.7		
8	105.4	101.6	103.6	106.3	102.7		
7	103.7	106.6	102.0	99.7	102.9		
5	99.3	102.9	104.9	96.5	103.1		
0	104.3	108.3	110.2	95.0	105.9		
0	107.6	117.5	111.3	97.9	107.6		
6	100.8	105.3	111.8	99.3	105.5		
3	103.1	105.9	111.3	96.8	102.9		
6	106.2	115.0	116.3	102.4	107.4		
5	107.1	117.6	117.3	100.5	110.1		
0	111.3	118.1	121.1	105.1	111.7		
0	110.0	117.8	121.7	97.4	115.0	116.0	115.0
8	116.7	125.6	126.6	105.7	119.0	122.0	118.0
6	118.6	134.1	124.8	113.3	124.0	122.0	124.0
1	122.2	134.8	129.5	112.9	125.0	127.0	125.0
8	120.9	131.0	128.4	115.2	125.8	129.0	125.0
5	126.0	133.8	134.0	110.9	130.3	130.0	130.0
5	129.7	135.9	138.6	113.0	134.9	136.0	135.0
2	131.7	137.8	139.1	113.3	136.7	136.0	137.0
3	129.6	141.4	137.9	116.4	136.4	140.0	136.0
9	139.1	144.1	142.9	114.0	141.6	140.0	142.0
0	141.3	147.6	141.9	124.1	145.1	143.0	146.0
8	146.8	146.0	145.2	125.3	149.3	149.0	150.0
8	151.5	141.5	149.4	125.5	153.2	154.0	153.0
7	157.8	144.1	152.5	131.8	159.6	163.0	159.0
0	164.0	157.0	155.0	131.0	167.0	165.0	167.0
0	169.0	155.0	158.0	133.0	172.0	174.0	172.0

4. Bank of England Survey of Banks' Mortgages

4.1 TECHNICAL DETAILS

(a) Source of data and timing

Based on returns for mortgages recorded at the approval stage from a sample of banks accounting at the end of 1986 for about 82% of total monetary sector (that is, the UK offices of institutions either recognized as banks or licensed to take deposits under the Banking Act 1979, including the Trustee Savings Banks) loans for house purchase.

(b) Types of data and periods covered

Estimated average prices: 1983 to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES

HOUSE DATA

All houses *
New/Non-new
Type
Size
Age

LOCAL DATA

Regions
Sub-regions
Towns

BUYER DATA

First-time buyer
Former owner-occupier

(c) Frequency

Annual

(d) Geographical coverage

United Kingdom

(e) Method of analysis

The published average prices are *estimates* derived from the distribution of purchase prices provided by the responding banks - see (a) above. All properties, including any sold at non-market prices, are covered.

LIST OF TABLES

Estimated average prices

4.1 United Kingdom: all dwellings. 1983-

CROSS-CLASSIFICATIONS OF DATA

None

PUBLICATIONS

(a) Data

Housing and Construction Statistics, HMSO, London. Annual

(b) Description of methodology

None

(c) Supplementary studies

None

BANK OF ENGLAND SURVEY OF BANKS' MORTGAGES

ESTIMATED AVERAGE PRICES (at approval stage) 1983-

4.1 UNITED KINGDOM: ALL DWELLINGS

£

Year	All
1983	35100
1984	45300
1985	47100
1986	49100

DOE/ABI Survey of Insurance Companies

TECHNICAL DETAILS

(a) Source of data and timing

Based on returns made to the DOE at the mortgage completion stage by a sample of insurance companies, which generally account for about 50% of insurance company mortgage advances. These show the number of primary loans made for house purchase broken down according to the price band of the house.

(b) Types of data and periods covered

Estimated average prices: 1968 to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES

HOUSE DATA

All houses

*

New/Non-new

*

Type

Size

Age

LOCAL DATA

Regions

Sub-regions

Towns

BUYER DATA

First-time buyer

Former owner-occupier

(c) Frequency

Quarterly

(d) Geographical coverage

United Kingdom

(e) Method of analysis

The published average prices are *estimates* derived from the distribution of purchase prices returned by the responding insurance companies - see (a) above. All properties, including any sold at non-market prices, are covered.

DOE/ABI SURVEY OF INSURANCE COMPANIES

5.2 LIST OF TABLES

Estimated average prices

5.1 United Kingdom: all, new and existing dwellings. 1968-

5.3 CROSS-CLASSIFICATIONS OF DATA

None

5.4 PUBLICATIONS

(a) Data

Housing and Construction Statistics. HMSO, London. Quarterly

(b) Description of methodology

None

(c) Supplementary studies

None

E/ABI SURVEY OF INSURANCE COMPANIES

ESTIMATED AVERAGE PRICES (at completion stage) 1968 -

UNITED KINGDOM: ALL, NEW AND EXISTING DWELLINGS

£

Year	1968			Year	1969		
	All	New	Existing		All	New	Existing
1968	5574	5302	5705	1969	19440	19830	19360
2	6340	5850	6570	2	19970	20470	19850
3	6850	6410	7010	3	21770	20810	21930
4	7160	6850	7270	4	22970	21200	23310
1969	9280	8360	9540	1970	24170	24990	24060
2	14600	12860	15060	2	26780	24520	27210
3	15390	14830	15540	3	30030	28430	30300
4	15790	15880	15780	4	30250	30810	30170
1970	16550	16850	16480	1971	29470	31730	29150
2	17930	18140	17900	2	29410	31660	29020
3	21140	20590	21240	3	32090	32950	31960
4	27980	27230	28090	4	31400	34350	30980
1971	30570	32510	30280	1972	31390	34660	30940
2	32230	35050	31860	2	31790	33010	31630
3	32770	37210	32210	3	32770	35820	32370
4	37000	41400	36500	4	32830	36490	32340
1972	39600	46600	38800	1973	30780	36730	30080
2	41300	47100	40600	2	33140	36640	32680
3	46200	51400	45700	3	33490	36950	33050
4				4	33350	38360	32680
1973	5199	5028	5293	1974	34600	38100	34100
2	5454	5142	5606	2	35600	41000	34900
3	5675	5435	5783	3	39100	43200	38600
4	5830	5504	5987	4	37700	42100	37100
1974	5928	5462	6153	1975	39700	44900	39100
2	6393	5866	6637	2	39300	46900	38300
3	6544	6062	6755	3	39500	45500	38900
4	6515	6021	6732	4	40000	49100	38800
1975	6702	6120	6932	1976	38700	44500	38100
2	6557	6289	6660	2	39900	45200	39900
3	6948	6483	7118	3	43200	49900	42400
4	7120	6718	7262	4	42500	47400	41800
1976	7085	6582	7281	1977	44100	49300	43500
2	6826	6637	6900	2	45800	48300	45600
3	7235	6888	7357	3	47000	54100	46200
4	7447	7255	7520	4	47200	52600	46600
1977	7571	7334	7665	1978	46900	55200	46100
2	8170	7930	8260	2			
3	10130	8770	10490	3			
4	11590	9830	11950	4			
1978	12500	10940	12950	1979			
2	14210	12790	14560	2			
3	15280	13360	15730	3			
4	16180	14230	16750	4			
1979	15670	14280	16100	1980			
2	14830	14570	14900	2			
3	15390	14970	15480	3			
4	15670	15490	15700	4			
1980	15110	15490	15000	1981			
2	15410	15870	15300	2			
3	16110	15800	16190	3			
4	16500	16360	16530	4			
1981	16180	16560	16090	1982			
2	15850	16530	15690	2			
3	16960	16690	17010	3			
4	17160	17680	17050	4			
1982	16990	17860	16830	1983			
2	17400	17180	17440	2			
3	18460	18350	18480	3			
4	18720	19100	18650	4			

6. Inland Revenue: Survey of Conveyances

6.1 TECHNICAL DETAILS

(a) Source of data and timing

Based on the "particulars deposited" on the transfer of interest in real property (land and buildings), covering all transactions in one week only, either in October or November, each year.

(b) Types of data and periods covered

Average prices: 1973 to date (latest data available at the time of writing (April 1987) relate to 1984 owing to time lag in publication)

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES
HOUSE DATA	
All houses	*
New/Non-new	
Type	
Size	
Age	
Freehold/leasehold	*
LOCAL DATA	
Regions	*
Sub-regions	
Towns	
BUYER DATA	
First-time buyer	
Former owner-occupier	

(c) Frequency

Annual

(d) Geographical coverage

England and Wales, subdivided into official standard regions (defined in Appendix B)

(e) Method of analysis

These surveys are not intended to provide information about house prices as such, but information about the number of transactions and their total market value in one week of each year enables average values to be calculated. It is these figures that are presented in the tables below. The surveys cover *all* transactions, including those carried out at non-market prices.

LIST OF TABLES

Average prices

6.1 England & Wales and regions: freehold, leasehold and all dwellings. 1973 - 1984

CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

See Section 6.2 above for details

(b) Three-way classifications

None

PUBLICATIONS

(a) Data

Inland Revenue Statistics. HMSO, London. Annual

(b) Description of methodology

Economic Trends. HMSO, London.

Articles published irregularly in *Economic Trends* are as follows:

Dunn, A.T. and Astin, J.A. "Surveys of Conveyancing". May 1974

Dunn, A.T. "Conveyancing Since 1973". September 1976

Dunn, A.T. and Ganguly, A. "Recent Trends in Sales of Land and Buildings".
February 1978

Dunn, A.T. and White, G.C. "Trends in Sales of Land and Buildings, 1973-79".
March 1979

Dunn, A.T. and White, G.C. "Trends in Sales of Land and Buildings, 1973-79".
March 1980

Dunn, A.T. and Rizki, U.M. "Trends in Sales of Land and Buildings, 1977-81".
May 1983

(c) Supplementary studies

See references in (b) above.

INLAND REVENUE: SURVEY OF CONVEYANCES

AVERAGE PRICES (at completion stage) 1973 -

6.1 ENGLAND & WALES AND REGIONS: FREEHOLD, LEASEHOLD AND ALL DWELLINGS

Survey Month	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia	South East
FREEHOLD DWELLINGS							
1973 Oct	5540	5117	5769	6801	6960	9119	12818
1974 Oct	6038	6404	6271	7878	8012	9752	13759
1975 Nov	6697	7392	7587	8603	9068	9739	13777
1976 Nov	8300	8587	8166	8663	8996	10101	14262
1977 Nov	9226	8972	9046	9768	10197	11603	16162
1978 Nov	10204	10303	11769	11353	12132	13656	19486
1979 Nov	12374	12996	14627	14370	16076	18171	26882
1980 Nov	15081	14799	15452	16836	18295	21133	28537
1981 Nov	13525	15318	16792	18133	18523	21823	28008
1982 Nov	13289	15289	18318	17006	16885	21667	30442
1983 Nov	17966	17759	20566	20833	20536	25625	33775
1984 Nov	19388	21250	21889	23243	22936	26977	42374
LEASEHOLD DWELLINGS							
1973 Oct	5525	4682	4597	2907	4800	4902	7353
1974 Oct	7429	4800	4804	5495	6573	10000	11840
1975 Nov	6849	6116	5732	4831	6515	7519	7791
1976 Nov	8186	6385	7008	7916	7084	11236	9244
1977 Nov	10811	7064	6734	4464	5316	7353	11157
1978 Nov	9101	7874	7215	6469	7850	11628	11788
1979 Nov	12972	9136	10656	6734	11826	9950	17664
1980 Nov	13812	11680	12401	11885	11668	11673	14859
1981 Nov	14723	13740	14782	10727	13973	8418	16703
1982 Nov	13636	14000	14000	12000	12800	12500	17818
1983 Nov	17000	14706	15769	12500	12143	25000	20000
1984 Nov	18182	16000	17174	20000	16296	20000	23077
ALL DWELLINGS							
1973 Oct	5538	5062	5343	6595	6426	8847	12175
1974 Oct	6239	6142	5684	7803	7626	9762	13547
1975 Nov	6722	7219	6893	8487	8350	9641	13058
1976 Nov	8282	8290	7770	8627	8520	10167	13698
1977 Nov	9462	8733	8130	9487	8763	11434	15670
1978 Nov	10021	9965	9899	11163	11106	13553	18540
1979 Nov	12471	12469	13163	14083	15022	17721	25825
1980 Nov	14861	14408	14325	16307	16512	20153	26722
1981 Nov	13659	15131	16148	17306	17626	19934	26524
1982 Nov	13333	15147	17039	16852	16190	21143	28680
1983 Nov	17826	17368	18987	20500	18857	25600	31818
1984 Nov	19167	20667	20294	23117	21618	26522	38360

£

Iteration	South West	Wales	England & Wales
1	11033	5801	8584
8	11479	7386	9975
5	11784	7533	10356
2	12359	9009	10938
4	13742	10356	12448
0	16558	11812	14975
5	22851	13788	19727
7	23334	15297	21851
5	26221	14635	21757
1	25591	15897	22297
7	28125	17794	26047
3	30556	19028	29646
6	7958	5591	6530
4	8368	6020	7243
6	6221	6855	7160
8	9544	7897	8289
6	10690	9590	8923
8	12548	10886	10364
8	17241	10043	15286
6	15251	11494	15456
5	17735	12484	17103
4	21667	13125	18086
3	20000	12941	19815
2	20769	13158	23598
6	10631	5752	8184
7	11226	6967	9411
0	11248	7351	9714
2	12073	8703	10419
9	13451	10184	11758
3	16166	11606	14001
3	22355	12891	18848
5	22478	14390	20477
0	25556	14200	20861
4	25252	15426	21562
9	27273	16824	24859
0	29320	17802	28311

Inland Revenue: Valuation Office Property Market Report

TECHNICAL DETAILS

(a) Source of data and timing

Based on reports made by Inland Revenue District Valuers using information derived from the "particulars of deposit" of house sales, coupled with knowledge and experience of local property markets.

(b) Types of data and periods covered

Price ranges: 1983 to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES

HOUSE DATA

All houses

New/Non-new *

Type *

Size *

Age *

LOCAL DATA

Regions

Sub-regions

Towns *

BUYER DATA

First-time buyer

Former owner-occupier

(c) Frequency

Biannual (information published at end-March and end-October each year)

(d) Geographical coverage

A large number of representative towns in Great Britain located in the following regions: Northern, Yorkshire and Humberside, North West, East Midlands, West Midlands, East Anglia, South East, Inner London, Outer London, South West, Wales, Scotland (included since Spring 1984 only).

(e) Method of analysis

District Valuers throughout Great Britain provide information about *typical* properties, based on all house sales (but excluding those sold at non-market prices). Detailed

descriptions of the "typical" properties are given in an Appendix to these technical details. The information is extracted from particulars of deposit (PD) which are approximately three months out of date when received. The Valuers therefore may allow for subsequent market trends when reporting, using such other evidence and impressions as they have, rather than simply adhering to PD data. Data are rounded to nearest £500.

Percentage price changes for individual regions are also published (though these are not reproduced here). The percentage figures for each region are based on a simple average of the mid-points of price ranges for principal towns (no weighting is applied).

7.2 LIST OF TABLES

Price ranges - new dwellings

- 7.1 -7.7 Great Britain - towns: Yorkshire and Humberside, North West, Northern by house type/size. Autumn 1983-
- 7.8 -7.14 Great Britain - towns: East Midlands, West Midlands, East Anglia by house type/size. Autumn 1983-
- 7.15-7.21 Great Britain - towns: Inner London, Outer London by house type/size. Autumn 1983-
- 7.22-7.28 Great Britain - towns: South East by house type/size. Autumn 1983-
- 7.29-7.35 Great Britain - towns: South West, Wales by house type/size. Autumn 1983-
- 7.36-7.41 Great Britain - towns: Scotland by house type/size. Spring 1984-

Price ranges - secondhand dwellings

- 7.42-7.48 Great Britain - towns: Yorkshire and Humberside, North West, Northern by house type and age. Autumn 1983-
- 7.49-7.55 Great Britain - towns: East Midlands, West Midlands, East Anglia by house type and age. Autumn 1983-
- 7.56-7.62 Great Britain - towns: Inner London, Outer London by house type and age. Autumn 1983-
- 7.63-7.69 Great Britain - towns: South East by house type and age. Autumn 1983-
- 7.70-7.76 Great Britain - towns: South West, Wales by house type and age. Autumn 1983-
- 7.77-7.82 Great Britain - towns: Scotland by house type/size and age. Spring 1984-

7.3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

None

(b) Three-way classifications

New dwellings by town by house type/size - Tables 7.1-7.41

Secondhand dwellings by town by house type and age - Tables 7.42-7.82

7.4 PUBLICATIONS

(a) Data

Valuation Office Property Market Report. Biannual (Surveyors Publications, London)

(b) Description of methodology

None

(c) Supplementary studies

Valuation Office Property Market Reports include commentaries provided by District Valuers on developments in their districts.

APPENDIX: PROPERTY TYPE DESCRIPTIONS

ew dwellings: England and Wales (current)

1 bed starter house, estate type

Starter home usually built in blocks of four, back to back on an estate; central heating; very small front and rear gardens; car parking space in communal area.

Ground Floor - living room, kitchen

1st Floor - 1 bedroom, bathroom/wc

Floor area 50 m sq

1 bed terraced house, estate type

Terraced house on an estate; single fronted; full central heating; small front and rear gardens; car parking space in communal area.

Ground Floor - living room, kitchen

1st Floor - 2 bedrooms, bathroom/wc

Floor area 70 m sq

1 bed semi-detached house, estate type

Semi-detached house on an estate; single fronted; full central heating; front and rear gardens; single car garage.

Ground Floor - living room/dining room, kitchen

1st Floor 3 bedrooms, bathroom/wc

Floor area 80 m sq

1 bed detached house, estate type

Detached house on an estate; full central heating; front and rear gardens; double garage.

Ground Floor - 2/3 living rooms, kitchen, wc

1st Floor - 4 bedrooms, bathroom/wc, en suite shower/wc

Floor area 135 m sq

1 bed flat in 2/3 storey block

First floor self contained flat in a two or three-storey block; full central heating; car parking space in communal area.

1st Floor - living room, 2 bedrooms, kitchen, bathroom/wc

Floor area 40 m sq

Note: Floor areas

For all the types of house described above, the floor area shown is the reduced covered area, which is the area of the Ground and First floors based on external measurements.

For the flat described above the floor area shown is the effective floor area, which is the area of the living room, bedrooms, kitchen and bathroom/wc and excludes the hallway area.

ew dwellings: Scotland (current)

1 bed semi-detached house, estate type

Typical 2 storey semi-detached 3 bedroom house built by private developers; front and rear garden; full central heating. Overwalls area around 95 m sq. Single garage.

1.4 bed detached house, estate type

Detached house, similar to semi-detached house described above, but larger. Overwalls area around 110 m sq.

INLAND REVENUE VALUATION OFFICE PROPERTY MARKET REPORT (VOPMR)

Better quality estate detached house

Better quality estate detached house, generally on good plot; full central heating; may have 2 bathrooms, cloakroom and wc. Overwalls area around 160 m sq. Double garage.

2 bed flat in 3 (or more) storey block

First floor 2 bedroom flat in purpose built 3 or more storey blocks or terraces; full central heating. Single garage/parking.

Secondhand dwellings: England and Wales (current)

Pre-1919 terraced house (modernized)

Terraced house with two-storey wing at rear; built about 1875; small forecourt and rear garden; rear access. Modernisation includes rewiring, new roof, and modern fittings in the kitchen and bathroom/wc.

Ground Floor - 2 living rooms, kitchen

1st Floor - 3 bedrooms, bathroom/wc

Floor area 100 m sq

Inter-war semi-detached house (modernized)

Semi-detached house, single fronted with 2 bay windows; built mid-1930s; front and rear gardens; single garage. Modernisation includes rewiring, full central heating and modern fittings in the kitchen and bathroom/wc.

Ground Floor - 2 living rooms, kitchen

1st Floor - 3 bedrooms, bathroom/wc

Floor area 95 m sq

Post-1960 semi-detached house

Semi-detached house, single fronted; built early 1960s; full central heating; front and rear gardens; single garage.

Ground Floor - living room/dining room, kitchen, wc

1st Floor - 3 bedrooms, bathroom/wc

Floor area 95 m sq

Post-1960 detached house

Detached house on a good estate; built in 1960s; full central heating; good sized front and rear gardens; double garage.

Ground Floor - 2/3 living rooms, kitchen, wc

1st Floor - 4 bedrooms, bathroom/wc

Floor area 160 m sq

Post-1960 flat in 3 (or more) storey block

First floor flat in 3 or more storey block; built early 1960s; lift; full central heating; car parking space in communal area.

1st Floor - living room, 2 bedrooms, kitchen, bathroom/wc

Floor area 50 m sq

Note: Floor areas

For all the types of house described above, the floor area shown is the reduced covered area, which is the area of the Ground and First floors based on external measurements. For the flat described above the floor area shown is the effective floor area, which is the area of the living room, bedrooms, kitchen and bathroom/wc and excludes the hallway area.

condhand dwellings: Scotland (current)

bed tenement flat, c1900

Typical 2 bedroom first floor tenement flat built around 1900.

'4 bed semi-detached or terrace house, c1900

Typical 3/4 bedroom semi-detached or terrace house built around 1900.

id-1960s 3 bed semi-detached house, estate type

Typical 2 storey semi-detached 3 bedroom house built by private developers; front and rear garden; full central heating. Overwalls area around 95 m sq. Single garage.

id-1960s 3/4 bed detached house, estate type

Detached house, similar to semi-detached house described above, but larger. Overwalls area around 110 m sq.

id-1960s better quality estate detached house

Better quality estate detached house, generally on good plot; full central heating; may have 2 bathrooms, cloakroom and wc. Overwalls area around 160 m sq. Double garage.

id-1960s 2 bed flat

First floor 2 bedroom flat in purpose built 3 or more storey blocks or terraces; full central heating. Single garage/parking.

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1983

7.1 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE								
Harrogate	25000	33000	34000	43000	53000	65000	27000	36500
York	22500	27500	32500	37500	45000	65000		
Bradford	18500	25000	23750	30000	39000	50000	16000	22500
Calderdale	18000	24000	31000	37500	42500	55000	22000	30000
Kirklees	20000	25000	28000	34000	43000	53000		
Leeds	23000	31000	31000	38000	50000	65000	20000	35000
Wakefield	21000	26000	27000	35000	43000	55000		
Barnsley	18500	21500	24000	26000	41000	45000	12500	14500
Doncaster	21000	24000	25000	30000	50000	65000		
Grimsby	17450	20000	22000	27500	45000	55000		
Hull	23000	25000	29500	31500	45000	47500	15000	22500
Humberside	18000	29500	25000	36000	37500	57000	15000	25750
Rotherham	26500	28500	32000	40000	46000	55000	24000	30000
Sheffield	23000	27000	29000	36000	48000	53000	18000	25000
NORTH WEST								
Bolton	28000	32500	34850	44500	67000	74250	17500	21000
Manchester	22500	26250	25000	29500	45500	55000	19000	25000
Oldham	25000	30000	31000	36000	50000	55000	23000	28000
Rochdale	25000	30000	40000	45000	55000	60000		
Salford	26000	28000	31000	40000	53000	60000	19000	32000
Stockport	28000	32500	35000	46000	51500	65000	20000	28500
Wigan	21500	25500	28500	31500	45000	55000		
Blackburn	20500	24500	25750	31000	46500	60000		
Burnley	20000	27500	23000	36000	37500	60000	11000	14750
Lancaster	20750	25750	28000	39000	46000	62000	23500	36000
Preston	21000	25000	29500	34000	45000	52000	17500	20000
Chester	24250	25250	30000	40000	46000	55000	22250	24250
East Cheshire	22500	31000	30000	42000	42000	63000		31000
Liverpool	23000	27000	27000	32000	46000	57000	18500	22000
St Helens	23000	28000						
Sefton	28000	33000	35000	45000	65000	70000	20000	31000
Warrington	26000	28000	36000	38000	55000	57000	20500	23500
Wirral	21500	25000	29500	36000	49000	62500	20000	26000
NORTHERN								
Newcastle	25000	30000	30000	35000	40000	50000	25000	35000
Northumberland	22500	30000	28000	34000	45000	65000	23500	28000
Sunderland	26000	32500	30000	40000	45000	60000	18000	22000
Tyneside			32000	37000	47000	55000		
North Cleveland	25000	30000	30000	35000	45000	54000	14250	19000
South Cleveland	19500	20500	27000	28000	40000	41000	13500	14000
Darlington	25000	28500	30000	38000	50000	60000	23000	28000
Durham	21000	25500	25000	35500	40000	64500		
Carlisle	21000	26000	30000	37000	38000	48000		
South Lakeland	22000	26000	28000	35000				

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: SPRING 1984

REAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
IRE AND HUMBERSIDE								
ate	26000	34000	35000	44000	54000	66000	27000	36500
	22500	27500	32500	37500	45000	65000		
rd	18500	25000	24000	30000	39000	50000	16000	22500
dare			31000	37500	50000	60000	22000	30000
es	20500	25000	28500	34500	44000	54000		
	23000	32000	32000	42000	50000	60000	20000	35000
eld	21500	26000	27500	38000	44000	56000		
ey	19500	22500	24000	27500	42000	46000	13000	15000
ter	22000	25000	26000	31250				
y	18000	24500	22000	29500	45000	55000	25000	27000
	23000	25000	29500	31500	45000	47500	15000	22500
side	25000	30000	37500	43000	70000	85000	22000	27500
am			32000	38000				
eld	23000	27500	30000	37000	48000	54000	18000	25000
WEST								
	29750	32500	34850	44500	67000	74250	17500	21000
ster	23000	27000	25500	30000	45500	55000	19000	25000
	25000	30000	31000	36000	50000	55000	23000	28000
le	27000	31000	42000	46000	57000	60000		
d	26000	28000	31000	40000	53000	60000	19000	32000
ort	31000	34000	43500	48500	62500	67500	25000	28500
	21500	25500	28500	31500	45000	55000		
urn	20500	26000	25750	31000	46500	63000		
y	21000	28000	25000	37500	40000	60000		
ter	23000	27000	30000	35000	45000	65000	27500	35000
n	25000	28000	34000	40000	50000	55000	20000	22000
r	24250	25250	30000	40000	50000	60000	22250	24250
heshire	22500	25000	35000	40000	47500	52500		
ool	24000	28000	23000	33000	46000	57000	19000	22500
ens	25000	30000	40000	45000				
	28000	33000	35000	45000	65000	70000	25000	32000
gton	27250	29500	37000	39000	55000	57000	20500	23500
	22000	25500	30000	36000	49500	63000	20000	26000
RN								
tle	25000	30000	35000	40000	50000	70000	25000	35000
mberland	31000	32500	34000	37000	43000	70000		
land	27000	36000	34000	41000	48500	66000		
de	25000	30000	33000	38000	50000	58000		
Cleveland	25000	27750	30000	32000	45000	52000	14250	19000
Cleveland	19500	21000	27000	28500	40000	42000	13500	14000
gton	25000	30000	30000	38000	52000	64000	24000	29000
	25000	26000	33000	36000	65000	67000		
le	23000	25000	27000	33000	38000	42000		
Lakeland	22000	26000	28000	36000				

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1984

7.3 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE								
Harrogate	27000	35000	36000	44500	55000	67000	27500	36500
York	24000	28000	32500	37500	50000	65000		
Bradford	19250	26000	25000	31500	40000	51500	16500	23000
Halifax			32000	39000	50000	65000		
Huddersfield	21000	25500	29000	35000	46000	56000		
Leeds	23500	33000	33000	43000	50000	61000	21000	36000
Wakefield	22000	26000	28000	39000	44000	56000		
Barnsley	19500	22500	24000	27500	42000	46000	13000	15000
Doncaster	23000	26000	27000	32500				
Grimsby	19000	25000	25000	34000	45000	55000	27000	28000
Hull	23500	26000	29500	34500	45000	47500	15500	23000
Beverley	25000	32500	37500	45000	70000	85000	22000	30000
Rotherham			31000	38000				
Sheffield	24000	28250	32500	39000	48000	55000		
NORTH WEST								
Bolton	30000	32750	35000	45000	69000	78000	17750	21250
Manchester	23500	28000	26000	30750	47000	56750	18000	24000
Oldham	25500	31000	32000	39000	50000	55000	23000	28000
Bury	29000	33000	44000	47500	60000	70000		
Salford/Trafford	26500	28500	31500	40000	55000	65000	19000	32000
Stockport	32250	35250	46500	51500	70000	75000	25000	28500
Wigan	22500	27000	29500	33000	50000	57500		
Blackburn	21500	27000	26500	32000	48000	65000		
Burnley	21000	28000	25000	37500	40000	60000		
Lancaster	23000	27000	30000	35000	45000	65000	27500	35000
Preston	25000	28000	34000	40000	50000	55000	20000	22000
Chester	25250	25400	35000	43000	57000	65000	22250	24250
Crewe	22500	25000	35000	40000	48500	53500		
Liverpool	24500	29000	26000	35000	46000	57000	19000	25000
St Helens	30000	35000	40000	45000				
Southport	29000	33000	36000	45000	65000	70000	26500	34000
Warrington	27000	29000	38000	41000	56000	58000	21500	24500
Wirral	22000	26000	30000	36500	50000	64000	20000	26000
NORTHERN								
Newcastle	25000	30000	35000	42000	50000	70000	30500	40000
Leamington	31000	33500	34000	38000	43000	72000		
Derbyshire	28000	36500	35000	42750	48500	69750		
Whitby Bay	25500	31000	34000	39000	50000	60000		
Stockton	27000	30000	31000	33000	45000	52000	14250	19000
Leeds/Brough	20000	21500	27500	29000	42000	44000	13500	14500
Leamington	25000	32000	30000	38000	55000	67000	24000	29000
Leamington	25000	27000	33000	37000	65000	67000		
Leamington	23500	25500	27500	33500	38000	42000		
Leamington	24000	28000	30000	38000				

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

E

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
HIRE AND HUMBERSIDE								
gate	27500	36000	36000	44500	57000	72000	28000	37000
	26000	28000	33000	37500	52500	65000		
ord	19750	27000	25750	32500	41000	52750	16750	23000
ax			32000	39000	50000	65000		
rsfield	22000	26500	30000	36000	47000	57000		
	23500	34000	33000	44000	51000	62000	22000	36000
ield	22500	26500	28000	39000	44000	56000		
ley	19500	23000	24000	28000	42000	46000	13500	15000
ster	24000	27000	32000	35000				
by	19000	27000	27000	40000	45000	60000	27000	30000
	24000	26500	31000	36000	46000	48500	15500	23000
ley	25000	35000	37500	47500	70000	85000	22000	32500
rham			32000	39000				
ield	25000	30000	32500	39000	48000	55000		
WEST								
n	30000	32750	35000	45000	69000	78000	17750	21250
ester	23750	28500	26250	31250	47000	56750	18000	24000
n	25500	32000	32000	43000	50000	56000	23000	28000
	30000	35000	44000	50000	65000	75000		
rd/Trafford	26500	30000	33000	41000	55000	70000	19000	33250
port	33250	36250	47750	53000	70000	75000	25500	29500
	23000	27500	30000	33500	50000	58000		
burn	23000	27000	27000	33000	48000	65000	23500	34000
ey	22000	30000	27000	39000	40000	60000		
ster	25000	30000	32000	37000	45000	65000	19000	26000
on	26000	29000	35000	42000	52000	58000	20000	22000
er	25500	28000	35000	43000	57000	68000	22250	24250
	23000	25500	36000	41000	49500	54500		
pool	24500	30000	26000	35000	47500	58000	19000	25000
lens	30000	35000						
port	29000	33000	36000	45000	65000	70000	27500	35000
ngton	27000	29000	38000	41000	56000	58000	21500	24500
nhead	22500	27500	30000	37500	50000	64000	20000	26000
ERN								
stle	25000	30000	32500	42000	50000	75000	30500	42000
th	31500	34000	34500	38500	44000	73000		
rland	28500	36500	35500	43000	49500	72000		
ey Bay	25500	31000	34000	39000	50000	60000		
ton	27000	30000	31000	33000	45000	52000	14250	19000
esbrough	20000	22000	28000	30000	42500	44500	13500	15000
ngton	25000	32000	31000	38000	55000	67000	24000	29000
m	25500	27500	35000	39000	67000	69000		
sle	25000	27500	24000	35000	38500	42500		
w	25000	29000	30000	38000				

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: AUTUMN 1985

5 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE										
Arrogate	20500	23500	23500	28000	28000	33000	57000	65000	21000	24000
Barnsley	16500	19750	21250	24500	26250	32250	48500	54000	33000	40000
Bradford	15000	16000	18000	21000	18500	25500	42500	54000	17000	24000
Califax	17000	20000	18000	24000	22500	25000	55000	60000		
Doncaster			16000	20000	20250	25500	44500	50000		
Leeds	19500	23000	22000	28000	25500	35500	50000	66000	21000	32000
Sheffield	16500	17500	18500	20500	22500	26000	42500	58000	18000	23000
Thamesley	16000	18000	20250	22250	23500	25500	47000	49000	16500	18500
Wakefield	17350	21000	21500	24000	23500	27500	38500	60000	18000	22000
Wetherby	14000	15000	18500	20500	20000	22000	34000	38000	26000	30000
Widley	16000	17000	20000	21000	25000	28000	42000	47000	25000	28000
Wetherley	14000	15000	20000	22000	27000	33000	50000	55000	27000	30000
Wharfedale	16500	18000	20000	22500	25500	28500	42000	44000	18500	19500
Wharfedale	15500	19000	17000	22000	25000	30000	44000	52000	17500	23000
MIDLANDS WEST										
Leicester	13500	17250	17000	20000	17000	22500	46750	60500	11500	13250
Nottingham	20850	24000	25000	32950	25500	33500	40500	44500	17000	23600
Sheffield			21000	23000	27000	31500	60000	65000		
Wolverhampton	14500	18500	20500	24250	26500	29000	55000	65000	21000	23500
Stafford	20000	21000	23000	28000	27000	30500	50000	70000	17000	28000
Stoke-on-Trent	20200	23500	26000	28000	30500	32000	62500	67500	21000	28000
Walsley	13500	17000	20000	25000	25000	30000	47500	55000	32500	32500
Walsley			17950	18995	18500	23500	40000	52000	15000	23200
Walsley	18000	20000	21000	25000	23000	30000	42000	54000	17000	19500
Walsley	17000	19000	21000	23000	25000	27000	43500	48500	17500	24500
Walsley	17500	18500	22750	23250	27000	29995	64500	66000	23000	25000
Walsley	18500	22500	25500	27500	24000	29500	46000	52000	19500	22500
Walsley	18000	18000	19000	19850	19950	23995	50300	50300	18300	18300
Walsley	14500	15500	17000	23000	24000	29500	44500	60000	16500	21500
Walsley	18750	19500	21000	25000	27000	28500	47000	50000		
Walsley	18250	19000	23000	25500	27000	29950	52500	56500	24000	28000
Walsley	14500	15000	23000	25000	25000	27000	50000	55000	15000	16000
Walsley	18500	22000	23000	25500	27500	29500	49500	57250	24500	25500
MIDLANDS EAST										
Leicester	19000	23000	21000	25000	27000	32250	55000	80000	30500	43000
Leicester	17500	19000			31500	34000	44000	73000		
Leicester	17000	22500	25500	28000	26000	32000	55000	62500	21000	29000
Leicester			21000	24500	26500	27500	41000	49750	14000	14500
Leicester	16000	18000	20000	22000	27000	28000	50000	55000	12500	15000
Leicester	16500	18750	19000	20000	23000	26000	42000	46000	16500	22000
Leicester					30000	30000	60000	65000		
Leicester			22000	24000	23000	25000	49000	51000	21000	23000
Leicester	15000	16250	19500	20500	26000	30000	45000	52000		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1986

REAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
RE AND HUMBERSIDE										
te	21000	25000	23500	28000	27000	33000	52500	60000	20000	30000
	16500	19750	21500	25500	26250	32250	48500	58000		
d	15750	17000	18000	22500	19500	28000	45000	57000	17000	24000
	17000	21500	19000	24000	23000	26500	56000	62000		
field			16500	20500	24000	27250	47000	52500		
	16500	23000	22000	28000	27000	35500	50000	66000	21500	32000
ld	17000	17500	19000	21000	24000	27000	45000	60000	18000	23000
y	16000	18000	20250	22250	24500	26500	48000	52000	17500	19000
er	16250	19500	19500	22750	25500	29000	38500	60000	17750	26750
	14000	15000	18500	21000	20000	22000	34000	40000	25000	30000
	16500	17500	21000	22500	25000	28500	42000	47000	25000	28000
y	14000	15000	20000	22000	27000	33000	50000	55000	27000	30000
m	16500	18000	20000	22500	25500	28500	42500	48000	19250	20000
ld	16000	19000	19000	25000	26000	32000	44000	52000	17500	23000
EST										
	14000	17250	17000	20750	18000	23500	47500	61000	12000	14500
ter	16000	22000	20000	34500	25500	33500	40500	44500	17000	23600
			21000	23000	27000	31500	60000	65000		
	14500	18500	21000	25000	26500	29500	55000	67500	21000	24000
/Trafford	19000	25000	21000	28000	29500	40000	52500	75000	17000	28000
rt	20500	24250	26250	28750	31500	33500	62500	68250	23000	30000
	15000	17000	13500	18250	24000	27000	60000	64000		
rn	16500	18000	18250	19500	18950	24500	42000	55000	15250	25000
	18000	20000	21000	25000	23000	30000	42000	55000	17000	20000
er	17500	19500	21500	23500	26000	28000	47000	53000	18000	25000
	17500	18500	23000	23500	27000	30000	64500	67000	23000	25000
	18500	22500	25500	28500	25000	30000	50000	62500	19500	25000
	18000	18000	18500	21000	20500	24000	50000	53000	18000	18500
ol	15000	17000	18000	24000	23500	30000	44500	64000	16500	25000
ns	18750	19500	23000	25000	27000	29000	47000	50000		
rt	18500	19250	23500	25500	27250	30250	52500	56500	24000	28000
ton	14500	15000	23000	25000	25000	28000	50000	60000	16000	17500
ead	18500	22000	23000	25500	27500	29500	49500	57250	24500	25500
N										
le	19000	23000	21250	26950	27000	32500	55000	80000	30500	46500
	17500	19500			32500	35000	45000	75000		
and			20000	24550	27500	28500	44250	58000		
Bay	17000	23500	25500	28000	26000	32000	55000	63000	22000	30000
n			21000	25000	27000	29000	45000	56000	14000	15000
brough	16000	18000	20000	22000	27000	28500	50000	55000	12500	15000
ton	16500	18750	19250	20750	24000	27500	42500	47500	16500	22000
	18000	20000	21000	23000	29500	31000	60000	65000	16000	18000
e			22000	24000	24000	27500	50000	55000	22000	25000
	15750	17000	20500	23000	28000	31000	48000	55000	20000	21000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: AUTUMN 1986

7 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

E

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE										
Arrogate	21000	25000	24000	28000	28000	34000	55000	60000	22000	32000
Barnsley	16750	19750	22750	26250	30000	34000	52500	63500		
Bradford	16500	18000	18000	24000	20500	29000	47500	60000	17000	24000
Califax	18000	22500	20000	24000	24250	27500	57500	64500		
Claydonfield			18000	22000	25500	28000	47500	55000		
Doncaster	17000	23000	22000	28000	28000	36000	52500	67500	21000	35000
Embsay	17000	17500	20000	22000	25000	29000	45000	62500	18000	23000
Halifax	16500	18500	20250	22500	24500	27000	49000	55000	18000	20000
Leeds	17000	20000	19500	23000	25500	29000	40000	65000	17750	26750
Thorncliffe	15500	16500	18500	21000	21000	24000	34000	41000	27500	31000
Wetherby	16500	17500	21500	23000	25500	31500	43500	48500	25000	28000
Wharfedale	14000	16000	21000	23500	27000	33000	50000	55000	27000	30000
Wetherham	16500	18000	20500	23000	26000	29000	45000	52000	19250	20000
Wharfedale	16000	19000	20000	26500	27000	33000	45000	53000	17500	23000
NORTH WEST										
Blackburn	14000	17250	18000	21500	19000	24750	48500	60500	12000	14500
Manchester	16000	22000	17500	36500	22500	37500	45000	60000	17000	25000
Oldham			21000	23000	27000	31500	60000	65000		
Rochdale	14500	18000	21500	26500	27000	30000	55000	67500	21000	24000
Salford/Trafford	19000	25000	21000	28000	32000	37000	52500	76000	17000	28000
Skelton	20950	25000	26500	29500	32500	34250	64000	72250	23500	31000
Stamley	15000	17500	13750	18500	25000	27500	60000	64000		
Tackburn	16500	18500	18750	20000	19500	25000	42000	56000	15750	25500
Thornley	18500	20500	21500	25500	24000	31000	46000	60000	17000	20000
Wharfedale	18000	20000	22000	24000	26500	28500	48000	56000	18500	25000
Wharfedale	18000	20000	23500	24000	28000	31500	65000	67500	23000	25000
Wharfedale	18500	22500	26000	30000	25000	32000	60000	70000	22000	26000
Wharfedale			19750	21500	22500	25500	50000	58000	20000	20500
Wharfedale	15000	17000	18500	25000	23500	30000	44500	64000	16500	25500
Wharfedale	18750	19500	23000	25000	27000	29000	47000	50000		
Wharfedale	19250	20000	25000	28000	28000	32000	48500	57500	25000	29000
Wharfedale	14500	15000	23000	25000	27500	30000	57500	67500	17500	20000
Wharfedale	18500	22000	23000	25500	27500	29500	49500	66500	22500	25500
NORTHERN										
Blackburn	19500	23500	22000	30000	37500	45000	50000	75000	25000	35000
Blackburn	17900	21000			32500	36000	47500	80000		
Blackburn	17600	18000	20500	25000	27500	30000	46000	60000		
Blackburn	17000	23500	25500	28000	26000	32000	55000	63000	22000	30000
Blackburn			21000	25000	27000	29500	46000	56000	14000	15000
Blackburn	16000	18000	20000	22000	27000	28500	50000	55000	12500	15000
Blackburn	16500	18750	19250	25750	24000	27500	42500	47500	16500	22000
Blackburn	18500	20500	21500	23500	31000	31000	61500	67000	16400	18500
Blackburn			26000	28000	27000	30000	52000	57000	24000	27000
Blackburn			20500	24000	28500	31500	51000	58000		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1983

REAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
IDLANDS								
	20000	25000	23500	32500	37500	52500		
n	21000	25000	26000	32500	40000	55000		
eld	19500	23500	24000	27500	45000	54000		
Notts C	19000	28000	26500	38000	55000	85000	14000	20500
rfield	21500	27500	31000	38000	46000	57000		
	19500	24000	21500	35000	35000	65000	13000	17000
ing	20000	24000	30000	35000	48000	60000		
ter	23000	25000	28000	37000	35000	50000		
mpton	21000	28000	28000	32000	49000	57000		
estershire	22500	24000	29000	34000	46500	65000		
estershire	23000	28000	33000	38000	42000	55000		
yshire	20500	28500	24500	35000	40000	50000	16500	27500
IDLANDS								
gham	28500	32000	34000	37000	62000	75000	20000	23000
ry	21000	32500	25000	39000	39000	61000	13500	32500
	24000	28000	28000	38000	50000	75000	16500	27500
ll							13000	16000
l	22000	26500	27000	33000	41500	48500	13500	18500
rampton	21500	25000	27500	35000	50000	65000		
eld	21500	27000	25500	37000	47500	72500	20000	37500
ickshire	19500	24000	25000	34000	33000	55000	12000	13000
ire	20000	25500	23000	29500	47500	63000		
rd	21000	25000	30000	35000	50000	65000		
on-Trent	19500	24000	25500	31500	43500	56000		
<			36500	42000	57500	65000		
& W Worcs	24000	29000	35000	40000	55000	60000	22000	25000
ester	20000	25000	25000	42500	45000	73500	16000	27500
GLIA								
dge	23000	35000	29500	40000	48000	69000	24500	40000
rough	18000	25000	22000	35000	38000	64000	15000	25000
r	23500	28000	29000	35500	50000	60000		
t Edmunds	22500	30000	27500	37500	40000	55000	17500	22500
olk	19500	26000	25000	35000	42500	60000		
olk	21000	25000	28000	30000	41000	44000	25000	36000
r	25000	29000	29950	40000	47500	60000		

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1984

7.9 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
EAST MIDLANDS								
Boston	20500	23500	22500	28500	40000	52500		
Lincoln	22000	25000	28000	33000	45000	55000		
Mansfield	20000	24500	25000	29000	46500	56250		
Nottingham	23000	25000	36000	38500	52500	85000		
S Nottinghamshire	24000	28000	32000	38000	55000	75000	16000	19500
Chesterfield	26350	29000	37500	40000	48500	56000		
Derby	20000	25000	23000	35000	38000	65000	13000	17000
Kettering	21000	25000	32000	38000	48000	62000		
Leicester	24000	26000	29000	38000	47000	50000		
Northampton	22000	30000	30000	40000	50000	62500		
N Leicestershire	25000	27500	32000	36000	55000	70000		
S Leicestershire	23500	28500	33500	38000	45000	60000		
W Derbyshire	27500	29500	30000	35000	50000	53500	25000	27500
WEST MIDLANDS								
Birmingham	28500	32000	34000	37000	62000	75000	20000	23000
Coventry	20000	32500	27000	39000	40000	65000	14500	32500
Dudley	24500	30000	28500	39000	55000	80000	17000	27000
Sandwell	22000	25000	25000	30000	32500	35000	13000	18000
Walsall	22000	26500	27000	33000	41500	52000	13500	18500
Wolverhampton	22000	25500	27500	35500	50000	65000		
Lichfield	26000	28000	35000	40000	50000	60000	25000	28000
N Warwickshire	20000	25000	25000	34000	35000	55000		
Shropshire	22000	26000	25500	29500	52000	63000		
Stafford	24000	28000	33000	38000	50000	65000		
Stoke-on-Trent	20000	25000	26000	32000	44000	56500		
Warwick			37250	43000	60000	67500		
H'ford & W Worcs	24000	27000	30500	36000	55000	75000	22000	25000
E Worcester	20000	25000	25000	40000	47500	60000	18000	27500
EAST ANGLIA								
Cambridge							32000	38000
Peterborough	20000	30000	25000	44500	45000	65000	15000	25000
Ipswich	25000	30000	30500	38000	52500	65000	18500	27500
Bury St Edmunds	22500	31500	27500	39000	40000	57500	18500	23500
N Norfolk	20500	28000	26500	37000	47500	69000	28000	32000
W Norfolk	24500	26000	30000	33000	44000	49000	25000	36000
Norwich	27500	30000	35000	42500	50000	60000	25000	30000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIOD RANGES: AUTUMN 1984

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
MIDLANDS								
Barrow	20500	24000	22500	28500	40000	52500		
Blithfield	23000	25000	29000	34000	45000	55000		
Coventry	20000	25000	25000	36500	46500	60000		
Derby	24000	26000	35000	45000	55000	95500		
Leicester (Notts)	25000	28000	33000	39000	60000	80000	17500	21000
Leicester	26750	29750	28500	33500	50000	59500		
Leicester	21000	25500	26000	35000	40000	65000	13000	17000
Leicester	23000	28000	33000	39000	50000	65000		
Leicester	25000	27000	30000	39000	45000	55000		
Leicester	24000	31000	32000	45000	52500	65000		
Leicester			32000	36000	55000	70000		
Leicester	25000	30000	35000	39500	46500	61500		
Leicester	28250	30000	32500	35000	51000	55000	25000	27500
MIDLANDS								
Derby	29000	32500	34500	37500	62000	75000	20000	23000
Derby	20000	34000	27000	39000	40000	65000	15000	34000
Derby	25000	31000	30000	40000	57000	80000	17500	28000
Derby	22000	25000	25000	30000	32500	35000	13000	18000
Derby	22000	26500	27000	33000	41500	52000	13500	18500
Derby	22250	25750	27500	36500	50000	67500		
Derby	27250	28750	36750	42500	52500	61500	26000	29000
Derby	20000	27500	28000	35000	35000	55000		
Derby	23000	27000	26000	31000	54000	65000		
Derby	24500	29000	34000	38000	50000	65000		
Derby	20000	25000	26000	32000	42000	56500		
Derby			38500	44500	62000	70000		
Derby	25000	28000	31000	38000	55000	75000	22000	25000
Derby	20000	25000	27500	40000	50000	60000	19000	27500
WILTSHIRE								
Salisbury	35000	45000	45000	55000	80000	95000	35000	55000
Salisbury	20000	30000	30000	45000	50000	65000	18500	25000
Salisbury	26000	31500	32000	40500	56000	70000	20000	29000
Salisbury	23500	32000	28000	39000	40000	58000	19000	24000
Salisbury	25000	31000	37500	39500	49000	51000		
Salisbury	29000	31000	37500	45000	50000	60000	26000	30000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1985

7.11 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
EAST MIDLANDS								
Boston	22000	25000	25000	30000	45000	55000		
Lincoln	23000	25000	29000	35000	45000	55000		
Mansfield	22500	26000	25000	36500	46500	60000		
Nottingham	24000	26000	35000	45000	55000	96500	24500	26500
Carlton (Notts)	26000	29000	34000	40000	60000	80000	18000	22000
Chesterfield	27250	29750	29250	34000	50000	52000	17000	25000
Derby	22000	25500	26000	35000	45000	67500	14000	17500
Kettering	23000	28000	33000	39000	50000	65000		
Leicester	25500	27500	30600	39750	46000	56500		
Northampton	25000	32000	35000	47500	55000	70000		
Loughborough			32000	36000	55000	77000		
Wigston	26500	31500	41500	43000	49000	61500		
Buxton	28000	30000	32500	35000	51000	57500	25000	28000
WEST MIDLANDS								
Birmingham	29000	35000	35000	42500	60000	80000	21000	27500
Coventry	22000	34000	30000	44000	44000	67000	15000	34000
Dudley	25000	31000	30000	40000	57000	80000	17500	28000
Sandwell	25000	30000	30000	37000	40000	45000	13000	18000
Walsall	22750	27500	28000	34000	42000	52000	13500	18500
Wolverhampton	22250	26000	27500	36500	50000	67500		
Lichfield	27250	29000	36750	43000	52500	62500	26000	29500
Luneaton	20000	28000	28000	36000	38000	60000	15000	18000
Shrewsbury	24000	27000	28000	33000	55000	65000		
Stafford	24500	29000	34000	39000	50000	65000		
Stoke-on-Trent	20000	25000	26000	32000	45000	60000		
Leamington Spa			39500	46000	64000	72000		
Lorchester	26000	30000	31000	40000	56000	75000	22000	25000
Cidderminster	20000	25000	25000	42500	50000	65000	19000	30000
EAST ANGLIA								
Cambridge	37000	48000	47500	59000	83000	90000	36500	57000
Peterborough	23000	31000	26000	47000	40000	77000		
Ipswich	28000	33000	33000	41500	58000	75000	22000	30000
Sury St Edmunds	29000	33000	31500	40000	40000	60000	20000	25000
King's Lynn	25000	29000	33000	39000	48000	60000		
Orwich	29500	31500	37500	45000	52500	67500	26000	32500

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIOD RANGES: AUTUMN 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
MIDLANDS										
Leicester	16000	17000	18000	19000	19000	21000	37500	40000	15000	16500
Lincoln	16000	16500	19000	19500	23000	24000	47000	48000		
Leicester Field	16500	17250	23500	24250	24000	26000	47500	60000		
Leicester (Notts)	16250	17000	20250	21250	32250	33250	70000	77500	16500	17000
Leicester (Notts)	20000	21000	22000	24000	27000	30000	47500	67500	19500	23000
Leicester (Notts)	17000	20000	19750	23750	26500	29750	43000	60000	17000	25000
Leicester (Notts)	13750	15250	18000	22000	22000	25500	45000	72500	15000	18500
Leicester (Notts)			21000	22000	25000	28000	55000	67000	33000	35000
Leicester (Notts)	18000	19000	22000	24750	27000	29000	55000	60000	17000	18000
Leicester (Notts)	16000	21000	18500	22500	24000	34000	50000	65000	17500	20500
Leicester (Notts)	16950	18950	20000	23000	24000	27500	54000	59000		
Leicester (Notts)	15750	17750	19000	22000	29000	31000	52500	58000	26000	30000
MIDLANDS										
Leicester (Notts)	17750	22000	22500	27750	25000	34500	42500	62500	15000	25000
Leicester (Notts)	15750	17750	21500	23500	28000	33500	60000	65000	25000	26000
Leicester (Notts)	16500	20000	20000	23000	25500	29500	47500	57500	15000	25000
Leicester (Notts)	15500	17000	23000	24500	27000	30000	45000	50000	15000	18000
Leicester (Notts)	18250	19750	19750	21250	23500	30000	44000	54000	14000	19500
Leicester (Notts)	15000	16250	17500	21000	20000	25000			17500	20500
Leicester (Notts)	17250	19500	19750	23750	26500	30000	51000	61000	16350	19000
Leicester (Notts)	16000	18500	18000	22000	23500	30000	44000	55000	16000	20000
Leicester (Notts)	13500	16000	19500	21000	22500	27000	40000	46000	18500	21000
Leicester (Notts)	16000	18000	18000	20000	21000	24000	45000	55000	15000	17000
Leicester (Notts)	15000	17500	17500	19000	21000	25000	39000	55000	15000	17500
Leicester (Notts)			22500	25000			63000	68000		
Leicester (Notts)	19500	21000	22000	24250	25750	28000	52500	65000	22000	24000
Leicester (Notts)	16000	18000	18000	21250	19000	24000	40000	60000	15500	17000
ENGLIA										
Leicester (Notts)	22500	32500	31000	34500	38500	40000			34500	48500
Leicester (Notts)	15000	22000	20000	25000	25000	28000	46000	60000	22000	42000
Leicester (Notts)	20750	21500	22000	27500	27500	34500	48500	65000	23000	27500
Leicester (Notts)	20000	23000	26500	29000	29500	32500	43000	50000	28500	32500
Leicester (Notts)	18500	21000	19000	25000	27000	33000	50000	60000	24000	28000
Leicester (Notts)	20000	22000	25500	28000	30000	32500	52500	67500	26500	31000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1986

3 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
MIDLANDS										
Don	16000	17000	18500	19500	19500	21500	37500	40000	16000	17500
Coln	16000	16500	19500	20000	23500	24500	48000	50000	20000	35000
Field	16750	18000	24300	26300	25500	29000	45500	67000		
ingham	16500	17500	20750	21750	33500	37000	71500	79000	17000	18000
ton (Notts)	20000	21000	23000	24500	28000	31000	55000	70000	20500	23500
sterfield	17500	20500	20750	24750	26750	30000	43000	60000	17250	25000
y	14000	15500	18000	22000	22500	26000	45000	75000	15000	18500
ering			21000	21950	24000	29000	50000	65000	23500	35000
ester	19000	21500	22750	25000	27250	30000	62500	67500	18000	21000
hampton	16500	21500	19000	23000	25000	35000	52500	67500	18000	21000
hborough	17500	19500	20000	23000	25000	29000	55000	65000	15000	17000
on	15750	17750	19500	23000	29000	31000	53500	59500	26000	30000
MIDLANDS										
ingham	17750	22000	22500	29000	25000	30000	57500	62500	16000	25000
ntry	16000	18000	22000	24000	28000	33500	55000	70000	21000	26000
ey	17000	20500	21000	24000	26000	30000	47500	60000	15000	25000
well	15500	17000	23000	24500	27000	30000	45000	50000	15000	18000
all	18250	19750	20000	21750	24200	31000	45300	55600	14000	19500
erhampton	15250	16500	17750	21750	21000	26500			17500	22000
field	17500	19750	20500	24500	27000	30500	52000	62500	16500	19250
aton	16000	18500	18000	22000	23500	31000	47000	58000	16000	20000
wsbury	14000	16500	19500	21500	22500	27000	41000	47500	18500	22000
ford	17000	19000	19000	21000	22000	25000	47500	57500	18000	20000
e-on-Trent	15250	17750	17500	19000	21500	25500	39000	55000	15000	17500
ington Spa			23500	26500	28500	32000	66000	72000		
ester	20000	21500	22000	25000	27500	31000	54750	70000	22000	24000
erminster	16000	18000	18000	22500	20000	26000	40000	62500	16000	19000
ANGLIA										
ridge	31000	35000	36000	42000	45000	50000	75000	100000	38000	70000
rborough	17750	22950	21000	25500	25000	28500	47000	66000	23000	42000
ich	21000	22250	23000	28000	29000	36000	51000	67500	23500	28000
St Edmunds	21750	24750	27000	30000	31000	35000	48500	56500	29500	34000
's Lynn	17300	21000	22000	26000	26500	33500	52750	60000	24000	28000
ich	22000	24000	26950	29250	33000	35000	52000	70000	27000	32000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1986

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
ISLANDS										
	16500	17500	19000	20000	21000	23500	38000	41000	16500	18000
	17000	17500	22500	23000	25500	26500	49000	51000	22500	37500
ald	16750	18000	24300	26300	26000	29000	45500	69000		
gham	16750	17750	21000	22000	33500	37000	71500	79000	18000	19000
ra (Notts)	20000	21000	23000	24000	29000	32500	57500	72500	20500	23500
-field	17500	20500	20750	24750	26000	31000	43500	61000	17250	25000
	14500	16000	18500	22500	23500	27500	47500	80000	15000	18500
ing			23500	25000	30000	32500	55000	75000	25000	37000
cer	20000	21500	26000	28500	31000	34500	65000	70000	19000	22000
npton	17000	22000	20000	25000	26000	38000	52500	70000	18000	23000
orough	17500	19500	21000	24000	26000	30000	57500	67500	16000	18000
	16250	18250	21500	26000	30000	33000	55000	62000	27500	32000
ISLANDS										
gham	18100	23000	22950	29500	29600	38950	58500	67500	17000	27500
y	16500	18500	22500	25000	28500	34000	55000	70000	21000	26000
	18000	21500	22000	25000	28000	33000	50000	65000	15000	25000
l	15000	17500	23500	25500	27500	31000	46000	52000	15000	18000
	18500	20000	20500	23000	24750	32500	46000	58000	14500	21000
lampton	15250	16500	18000	22000	22000	27500			17500	22000
ld	18500	21000	21500	25500	28500	31500	56000	67000	17750	20500
n	17500	20000	20000	24250	23500	31000	47000	58000	17000	21000
ury	16000	18500	20000	24000	25000	28000	47500	57500	18500	25000
d	18000	20000	20000	22000	24000	27000	50000	60000	18500	21000
n-Trent	15250	17750	17500	19000	21500	25500	39000	55000	15000	17500
ton Spa			26000	29500	31500	35000	72000	78000		
er	20000	21500	22500	26000	30000	34000	57500	70000	22500	24500
inster	17250	19500	19500	24000	22000	28000	45000	65000	17500	20500
GLIA										
lge	36000	41000	39000	49000	47500	55000	80000	105000	42000	75000
orough	17750	25750	20000	30000	28000	35000	50000	80000	18250	42500
	22500	24750	24750	29500	31250	38000	53500	70000	24750	30000
Edmunds	23000	26000	29000	31500	35000	39500	55000	63500	29500	34000
Lynn	19000	22000	23000	30000	27500	35000	54000	65000	25000	30000
	24500	26500	28000	31500	35000	37500	57000	75000	30000	37000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1983

7.15 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

E

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
INNER LONDON								
Hackney	44000	49000					29750	34000
Camden							44000	54500
Islington							40000	50000
Bexley/Greenwich	40000	47500	47000	52000	60000	115000	30000	39000
Lewisham	43250	48500	48500	54000	59250	80000	29000	40000
Southwark	37500	45000	45000	60000			30000	37500
H'smith & Fulham							35000	50000
Kens'ton/Chelsea	90000	165000					40000	95000
Wandsworth	46000	67000			110000	130000	33000	70000
Westminster	70000	130000					37000	68000
OUTER LONDON								
Barking & N'ham	30000	36000					27000	30000
Enfield	46500	50000	52000	56000	75000	80000	40000	42000
Haringey							26000	28500
Havering	34000	45000	50000	60000	75000	95000	25000	40000
Redbridge	39000	52000	44000	61000			34000	45000
Barnet	38000	50000	45000	60000	70000	95000	40000	55000
Ealing	35000	48000	44000	56000	70000	140000	30000	46000
Harrow	48000	51000	62000	65000	80000	83000	38000	42000
Hillingdon	40000	47000	52000	60000	82500	95000		
Hounslow	44000	46000		60000			34000	37500
Bromley	43000	49500	50000	60000	75000	90000	32500	43000
Croydon	41500	50000	53500	59500	74000	82500	31500	39000
Kingston	53000	58000	60000	70000	110000	120000	38000	48000
Merton					90000	155000	32000	60000
Richmond	48000	60000	63000	90000	90000	125000	40000	50000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1984

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
LONDON								
y	45000	50000					30000	34500
/Greenwich	42000	49500	49000	54500	60000	115000	46200	57250
am	45500	51000	51000	57000	62000	83000	31000	40000
ark	42500	50000	45000	60000			30500	42000
r & Fulham							35000	40000
on/Chelsea	75000	175000					50000	60000
ster	73000	130000					42500	100000
							37000	68000
LONDON								
g & N'ham	34000	41000					30000	33000
d	46500	50000	60000	65000	77500	82500	42000	47500
ay							27000	29000
rg	35000	45000	50000	60000	83000	100000	26000	40000
dge	40000	53500	45500	63000			35000	46500
n Forest	40000	50000	55000	60000			30000	42500
	40000	52500	46500	62500	75000	105000	42000	56500
	36000	54000	45000	58000			30000	46000
	52000	54000	65000	68000	85000	88000	40000	43000
ndon	45000	50000	60000	67500	85000	100000		
ow	44000	46000					35000	42000
/	45000	53000	53000	62500	77500	90000	35000	43000
o	42750	51500	55000	61250	76250	85000	32500	40000
n	54000	60000	61500	72000	110000	125000	38500	50000
	42500				110000	160000	35000	70000
id	60000	65000	85000	95000	125000	150000	55000	65000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1984

7.17 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
INNER LONDON								
Tower Hamlets	40000	42000	47000	49000			30750	34000
Camden							48500	60000
Hackney	45000	50000					30000	35000
Bexley	44000	51500	51000	56500	63000	120000	32500	42000
Lambeth							32000	52000
Lewisham	47750	53500	53500	59750	64500	86500	32000	44000
Southwark	45000	52500	47500	62500			36500	42500
Fulham							50000	65000
Kens'ton/Chelsea	80000	185000					50000	120000
N Westminster	76000	136000					39000	71000
OUTER LONDON								
Romford	42000	47000	53000	47000	100000	139500	30000	45000
Enfield	47500	51000	61500	67000	79000	84000	43000	49000
Haringey							34000	42000
Redbridge	42000	55000	46000	65000	65450	74750	35000	47500
Barnet	50000	55000	57500	67500	85000	115000	42000	56500
Ealing							30000	75000
Harrow	58000	60000	70000	72500	93500	97500	44000	47500
Hillingdon	48000	58000	65000	72500	90000	115000		
Hounslow	46000	48000					36000	43000
Bromley	47500	57500	55000	65000	90000	105000	40000	50000
Croydon & Sutton	45000	55000	57500	65000	80000	90000	35000	45000
Merton/Wandsworth	45500	80000			120000	170000	38000	75000
Kingston	56500	63000	64500	75500	115000	131000	40500	52500

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
LONDON								
Hamlets	40000	44000	48000	52000				
Hampton							51500	62000
Hampton	50000	65000					32000	40000
Hampton	45000	54000	53000	59000	65000	125000	33500	43500
Hampton							35000	52000
Hampton	52000	60000					35000	45000
Hampton	45000	55000	47500	65000			37500	45000
Hampton							55000	80000
Hampton/Chelsea	90000	195000					52500	127000
Hampton	80000	145000					54000	90000
LONDON								
Hampton	43000	55000	53000	65000	100000	140000	35000	60000
Hampton	47500	54000	61500	70000	90000	92500	43000	52000
Hampton	47500	57500	74000	76500	75500	90000	37500	50000
Hampton	55000	65000	60000	70000	95000	125000	45000	57500
Hampton	62000	64000	75000	75500	97500	100000	47500	50000
Hampton	51000	60000	67500	75000	95000	120000	30000	45000
Hampton	47000	50000					37500	45000
Hampton	55000	60000	65000	85000	110000	130000	50000	55000
Hampton & Sutton	47500	57500	60000	75000	80000	92500	36000	53000
Hampton/Wandsworth	50000	85000			125000	180000	42000	80000
Hampton	62000	68000	69500	82000	123500	140000	44500	57000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

CE RANGES: AUTUMN 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
R LONDON										
ton/Newham	33000	35000	38000	43000	46000	56000	65000	83000	40000	69000
en									48000	75000
ney			45000	60000	50000	75000			33500	45000
ey	30000	37500	42000	50000	55000	65000	70000	130000	40000	50000
eth	37750	42000	47950	62000					38500	42000
sham			38500	41500					34500	39500
hwark	32500	37500	35000	50000	37500	60000	75000	150000	35000	42500
am									50000	78000
'ton/Chelsea									57000	135000
stminster			58000	58000						
R LONDON										
ord	32500	35000	43000	46000	45500	58000	100000	150000	37000	62500
ald	35500	37000	45000	57500	55000	60000	95000	97000	45000	53000
ridge	33000	38000	40000	49000	40000	52500	80000	100000	38000	46000
at	39000	42000	48000	52000	60000	65000	85000	120000	44000	46000
rfid/Northolt	35000	40000	45500	51000					35000	39500
ow	37500	39000	46000	47500	60000	62000	105000	110000	42500	44000
ingdon	37000	52000	43000	55000	49000	70000	100000	135000	34000	52000
slow	34000	39000	44000	49000	68000	80000	100000	132500	37000	43000
ley	34150	37000	38500	47000	52000	63000	125000	150000	54000	62000
don & Sutton	32000	38000	38000	47500	49000	59000	80000	107000	38000	56000
on/Wandsworth	35000	39000	43000	50000	55000	70000	140000	200000	44000	88000
ston	35000	37500	52500	60000	60000	70000	120000	130000	45000	65000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIODS: SPRING 1986

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
LONDON										
on/Newham	36000	37500	39000	44000	46000	56000	65000	87000	42000	72500
n									50000	78000
ey			50000	65000	60000	80000			33500	45000
y/Greenwich	30000	40000	42000	55000	57500	67500	75000	130000	40000	50000
th	39000	44000	51500	66500					42500	46000
ham			40000	44000					35500	42000
wark	35000	42500	37500	60000	40000	70000	75000	160000	37500	47500
m									60000	100000
ton/Chelsea									60000	137500
tminster			65000	66000						
LONDON										
rd	35000	39000	43500	47000	47000	65000	105000	160000	38000	65000
ld	38000	40000	45000	62000	60000	65000	97500	105000	47000	55000
idge	33000	38000	41000	50000	42000	55000	85000	110000	38000	47000
t	40500	44000	50000	54000	62000	67000	90000	130000	44000	48000
f'd/Northolt	37500	45000	47500	55000					40000	45000
w	38500	40000	47000	49500	61000	63000	112000	115000	43000	44500
ngdon	38000	45000	44500	56000	55000	70000	85000	150000	40000	65000
low	36000	42000	47500	52000	68000	85000	105000	150000	39000	47000
ey	34500	37500	39000	48000	52000	60000	100000	135000	45000	55000
on & Sutton	35000	40000	43000	53000	55000	65000	87500	110000	44000	64000
n/Wandsworth	35000	40000	45000	52000	58000	75000	145000	290000	55000	105000
ton	38500	41500	58000	65000	75000	80000	135000	155000	50000	70000

LAND AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1986

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

E

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
R LONDON										
ton/Newham	38000	42000	40000	45000	50000	60000	75000	90000	34000	38000
en									70000	100000
ney			55000	75000	65000	86000			37000	52500
ey/Greenwich	35000	40000	42500	60000	60000	70000	80000	135000	42000	50000
eth	41500	46000	54500	70000					47000	51000
sham			42000	46000					40000	48000
hwark	40000	50000	42500	65000	47500	80000	90000	190000	42500	80000
am									75000	120000
ton/Chelsea									65000	145000
R LONDON										
ord	39000	41000	46000	54000	59000	67000	105000	135000	42000	50000
eld	45000	47000	46000	62000	62500	67500	110000	130000	49000	60000
ridge	36000	42000	44000	57000	47000	60000	100000	135000	40000	54000
et	45000	54000	57000	67000	69000	74000	100000	145000	46000	54000
ng									50000	65000
ow	42000	44000	55000	60000	65000	70000	120000	125000	43000	44500
ingdon	42000	50000	50000	62000	62000	78000	100000	175000	45000	75000
slow/Feltham	40000	46000	51000	57000	75000	96000	115000	165000	43000	52000
ley	38000	42000	48000	55000	60000	67000	105000	135000	48000	58000
don & Sutton	40000	48000	50000	65000	63000	75000	100000	185000	48000	66000
on/Wandsworth	37000	46000	47000	55000	70000	90000	180000	300000	60000	105000
ston	41000	45000	62000	66000	75000	85000	140000	170000	55000	75000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIODS: AUTUMN 1983

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
EAST								
Bedfordshire	25500	29000	32500	39000	50000	65000		
Bucks	35000	42000	38000	45000	75000	85000	22000	26000
Essex	35000	40000	42500	51500	70000	80000	27000	30000
Hampshire	40000	45000	47500	55000	82500	92500	27500	40000
Kent	42000	48000	45000	55000	73000	98000	32000	45000
London	30000	38000	40000	50000	65000	80000	19000	24000
Northamptonshire	28500	39000	35000	50000	58000	95000	20000	30500
West Midlands	27000	30000	36000	40000	54000	59000	22500	24000
Wiltshire	30000	60000	40000	75000	50000	150000	28000	75000
Yorkshire	29000	38500	36500	45000	69000	75000		
East of England	30000	34000	37000	42000	60000	70000	25000	30000
East Midlands	27000	40000	34500	47500	50000	65000	26500	40000
East of Scotland	30000	37500	33000	41500	52500	67500	27500	33000
East of Wales	27000	35250	31000	41250	46000	59500	20500	30750
East of Northern Ireland	36000	40000	45000	51000	60000	72500	21500	24500
East of London	30000	37500	35000	40000	50000	60000		
East of Northamptonshire	35000	40000	40000	47500	67500	75000	27500	32500
East of Essex	30000	40000	43000	58000	55000	85000	30000	36000
East of Bedfordshire	35000	46000	53000	60000	71000	90000	29250	40000
East of Surrey	39000	60000	46000	78000	71000	130000	28000	41000
East of Devon	33500	40000	37500	47500	55000	85000	30000	36000
East of Dorset	32000	37500	40000	47500	64000	78000	26000	32000
East of Berkshire	39000	42000	48000	56500	72000	80000	29500	34000
East of Oxfordshire	34000	36000	43000	46000	68000	70000		
East of Gloucestershire	34500	72500	38500	55000	45000	79500	25000	42500
East of Wiltshire	25000	37000	30000	45000	42000	65000	20000	29000
East of Devon	32000	37000	44000	54000	65000	75000	26000	29000
East of Dorset	34000	41000	48000	58000	70000	90000	26000	45000
East of Dorset	29500	40000	38000	45000	63000	82500	23500	35000
East of Devon	32500	35000	42000	46000	52500	57500		
East of Devon	27500	33500	34000	40000	50000	60000	22000	24000
East of Devon	30000	37000	36000	44000	55000	70000	29500	35500
East of Devon (IOW)	22000	26000	26000	31000	42500	48000		
East of Devon	27000	32000	33000	43000	50000	80000	30000	45000

NLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: SPRING 1984

.23 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
OUTH EAST								
edford	29500	33000	37000	42000	60000	75000		
Hertfordshire	41000	46000	42000	48000	78000	85000	24000	28000
uton	35000	42500	45000	55000				
t Albans	42500	47500	50000	60000	85000	95000	35000	42500
atford	43000	50000	46000	60000	75000	100000	33000	46000
asildon	32000	40000	42000	50000	65000	80000	20000	25000
helmsford	30000	40000	40000	45000	70000	90000	24000	28000
olchester	28000	32000	36750	43000	55000	65000	23500	25000
arlow	40000	60000	50000	75000	100000	150000	45000	75000
outhend on Sea	31000	40000	40000	48000	72000	78000	25000	60000
righton	32500	37500	40000	45000			27500	32500
anterbury	30000	42000	37000	50000	50000	68250	30000	42000
astbourne	31000	38000	35000	42500	60000	80000	27500	35000
ast Kent-	32000	37500	35000	45000	46500	63000	22000	35000
aidstone	36000	43000	46000	53000	64000	75000	22500	25500
edway	30000	35000	35000	40000	55000	65000		
unbridge Wells	38000	43000	44000	52000	74000	83000	30000	35000
richester	40000	42000	50000	58000	75000	92500	32500	40000
ildford	42000	47650	55000	60000	69000	91000	47500	57500
orth Surrey	40000	60000	46000	78000	72000	130000	30000	41000
eigate	38000	48000	49000	60000	70000	100000	32000	40000
orthing	33000	39000	42000	50000	67500	75000	27000	33000
ast Berkshire	43000	49000	54000	60000	80000	90000	33000	38000
Bucks	36000	38000	44000	47500	77500	82500		
xford							27500	42500
Oxfordshire	27500	35000	35000	42000	47500	60000	20000	22000
ading	34000	39000	48000	59000	70000	80000	28000	32000
Bucks	35000	42000	50000	58000	74000	88000	30000	42000
asingstoke	33000	39000	40000	47500	68000	72000		
ortsmouth	35000	37500	42000	47500	55000	61000		
olent	29500	35500	36000	42000	54000	64000	24000	28000
inchester	35000	43000	45000	55000	65000	75000	38000	42000
olent (IOW)	25000	27500	28000	32000	45000	50000		
outhampton	29000	38000	33000	47000	50000	80000	30000	48000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1984

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
EAST								
rd	32000	35000	38500	44000	62500	75000	35000	38500
rd	44000	48000	47500	49000	85000	105000	25000	30000
	42500	45000	56000	60000				
ans	45000	50000	57500	67500	95000	105000	40000	47000
rd	45000	52000	49000	64000	80000	110000	35000	48000
lon	34000	42500	42500	55000	70000	90000	21000	27000
sford	31500	42000	42000	47250	73500	94500	25250	29500
ester	30000	34000	38000	44000	55000	69000	24500	26000
on	40000	60000	50000	75000	100000	150000	45000	75000
nd-on-Sea	34000	42500	44000	52000	75000	81000	27000	62000
on	33000	38000	42000	48000	90000	130000	30000	35000
bury	32000	44000	39000	52500	50000	71500	32000	45000
urne	33500	40000	37500	45000	65000	90000	29000	36000
itone	30000	37500	35000	50000	50000	65000	23000	35000
one	38000	44000	47000	54000	67500	76500	23000	26500
am/Chatham	35000	40000	40000	45000	57500	67500		
dge Wells	33000	42000	45000	55000	75000	85000	30000	35000
m	40000	43000	50000	59000	75000	95000	32500	42000
ord	45000	49000	62000	70000	72000	94000	55000	65000
on-Thames	50000	70000	60000	80000	80000	140000	45000	60000
e	44000	55000	50000	70000	75000	115000	34000	45000
ng	34000	40000	44000	52000	70000	80000	28000	35000
head	46000	52000	56000	63000	84000	97500	35000	42000
ury	39000	41000	48500	52500	75000	85000	28000	32000
l							30000	58000
y	29000	37000	37000	45000	50000	62000	22000	24000
g	36000	41000	50000	62000	73000	84000	29000	34000
lycombe	40000	47500	55000	62500	80000	95000	34000	43000
stoke	34000	45500	43500	54000	70000	75000		
	35000	41000	42000	47500	55000	61000		
m	32500	39000	40000	46000	60000	80000	25000	32000
ster	37500	46000	48250	58750	70750	81750	40750	45000
t(IOW)	25500	28000	28500	32500	50000	55000		
mpton	30000	40000	35000	48000	52000	80000	33000	50000

NLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: SPRING 1985

25 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

E

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
SOUTH EAST								
Bedford	35000	37000	40000	45000	62500	75000	29000	38500
Berkshire	45000	50000	48000	52000	90000	115000	30000	40000
Birmingham	38500	45000	58000	61000				
East of London	46000	51000	58500	68500	100000	115000	41000	48000
Essex	47250	55500	51500	67000	90000	110000	36750	50000
Gloucestershire	35000	44000	44000	58000	70000	95000	22000	29000
Hampshire	33000	43000	43000	49500	75000	90000	25500	30000
Herefordshire	32000	36000	40000	48000	58000	73000	25000	28000
Leicestershire	60000	65000	70000	75000	130000	140000	40000	70000
London	36500	45000	46000	55000	78000	85000	28000	64000
North of London	35000	40000	45000	50000	90000	130000	30000	35000
Northamptonshire	33500	44500	41000	55000	55000	75000	33500	46500
Northumbria	34000	42000	38000	46000	70000	95000	29500	37000
Nottinghamshire	30000	37500	37000	50000	53000	65000	23000	35000
Oxfordshire	40000	45000	48000	55000	69500	77500	24000	27000
South of London	35000	46000	41000	48000	59000	74000		
South West	35000	44000	47000	57000	75000	85000	30000	35000
Wiltshire	41000	45000	56000	59000	90000	100000	36000	43000
Worcestershire	47500	50000	65000	75000	77000	95000	57500	67500
Yorkshire	51000	71500	61000	81500	85000	150000	46000	61000
East of England	45000	60000	52000	75000	80000	125000	35000	48500
East of London	38000	45000	48000	56000	75000	85000	29000	36000
Essex	50000	58000	62000	70000	90000	110000	40000	45000
Gloucestershire	43000	48000	50000	65000	80000	100000	28000	32000
Hampshire							32000	58000
Leicestershire	30000	38000	38000	46500	51500	64000	22000	24500
Northamptonshire	37000	42000	52000	65000	75000	86000	30000	35000
Northumbria	42500	50000	58500	67000	85000	105000	36000	45000
Nottinghamshire	35000	45500	47000	58000	73000	78000		
North of London	36500	38500	44000	48500	58000	65000		
Northamptonshire	35000	42500	44000	50000	60000	80000	25000	32000
Northumbria	40500	49500	53000	64000	74000	85250	42500	47000
Northamptonshire	27000	30000	35000	40000	50000	55000		
Northamptonshire	30000	40000	35000	48000	55000	80000	33000	50000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
d	21500	26000	28000	33000	34000	40000	64000	66000	34000	38500
rd	35000	38000	38000	45000	45000	50000	80000	85000	33000	36000
	28000	30000	34000	38000	41500	46500	72000	79000	30000	35000
ans	31000	36500	38000	45000	47000	52000	85000	110000	40000	45000
d	33000	34000	44000	45000	49000	58000	100000	125000	38500	52500
on	23000	25500	30000	33000	36000	40000	68000	76000	28000	31000
ford	21000	26000	27000	32000	32000	40000	68000	80000	25000	30000
ster	25000	27000	29000	31000	34000	38000	63000	66000	25000	27000
on/Chigwell	33600	34400	41500	43000	65750	72800	89600	112000	34200	37500
nd-on-Sea	27000	30000	30000	33000	36000	39000	70000	77000	25000	57500
on			32000	34500	38000	42000	100000	140000	32000	36000
bury	25000	27500	28000	31000	33500	43000	53500	76000	32000	45000
urne	26500	28000	30250	33000	34000	38000	65000	82500	28500	37000
tone	19000	25000	21000	34500	30250	38250	54000	66000	22500	34750
one	24000	26000	30000	34000	39000	45000	72000	85000	24000	28000
gham	21500	25000	26000	30000	33000	44000	59000	65000	21000	23000
dge Wells	31000	35000	38000	40000	42000	46000	80000	100000	32500	38500
n	35500	36000	37500	38500	50000	52000	97000	110000	39000	43000
ord	36500	40000	44000	47500	50000	56000	90000	95000	37500	43000
-on-Thames	37000	39750	44000	46000	55750	78000	90000	155750	50000	66750
e	32500	37000	38500	48000	47500	64000	85000	130000	37000	43000
ng	28000	32000	36000	40000	42000	48000	82000	90000	33000	37000
ead	38500	39500	48000	51000	51000	56000	95000	115000	38500	44000
ry	30000	32000	35000	38000	37500	39500	67000	72000	28000	31000
	34000	35000	43000	46000	49500	51000			36000	57000
/	24500	25000	25500	26500	32000	38000	51000	56000	24000	26000
j	32000	34000	38000	40000	46000	48000	71000	75000	36000	37000
/combe	31000	38000	42000	48000	41000	49000	90000	120000	36000	43000
stoke	27000	29000	31500	34250	37000	42000	70000	75000	28500	30000
outh/Havant	26000	29000	30500	36000	36500	39500	70000	80000	30000	33000
n	25500	27500	30000	34000	37500	42000	65000	75000	27500	30000
ster	31500	31500	35000	37500	37500	42500	67000	85000	30000	40000
t(10W)	19000	21000	22000	24000	28000	32000	50000	55000	22000	26000
pton	20000	25000	27000	29500	32000	36000	50000	80000	23000	27000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1986

7 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

E

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
TH EAST										
ford	25000	27500	31500	35000	40000	45000	70000	75000	35000	40000
ford	32000	35000	40000	47500	45000	50000	100000	125000	35000	40000
on	30000	32000	39500	42000	44000	49000	75000	82000	32000	37500
Albans	35000	42500	42500	50000	50000	57500	95000	120000	42500	50000
ford	34000	36000	46000	48000	52000	61000	105000	130000	40500	55000
ildon	24500	28000	32000	37000	38000	44000	72000	80000	30000	35000
lmsford	22750	28500	29500	34500	34000	42500	73500	87500	28000	32000
chester	26000	28000	30000	32000	35000	40000	64000	69000	26000	29000
ghton/Chigwell	37000	46200	53000	55250	66500	77250	97500	130000	36750	41000
hend-on-Sea	29000	32000	33000	37500	39000	42500	74000	80000	27500	60000
ghton	27000	30000	33000	36000	39000	43000	110000	140000	35000	40000
erbury	26000	29000	29500	32500	35000	45000	56000	87000	33500	47000
bourne	27750	29250	31000	34000	37000	41000	72500	90000	30000	39000
estone	21000	26600	25000	34500	32000	40000	57500	70000	25000	37500
stone	26000	29000	32500	36500	42000	48000	75000	88000	26000	31000
ingham	23000	28000	29000	33000	39000	47000	62000	72000	23000	27000
ridge Wells	33000	38000	40000	43000	45000	50000	85000	115000	33000	40000
ham	37650	38650	39750	40250	51000	60000	100000	120000	43000	46000
dford	38500	41500	44000	48500	52000	58000	92000	98000	37500	43000
on-on-Thames	39000	41500	46000	57500	60000	78000	92000	167000	51000	68000
ate	35000	40000	40000	50000	55000	75000	95000	145000	40000	60000
hing	32000	34000	37000	39000	44000	47000	87000	92000	34000	37000
lenhead	40500	42500	50000	55000	54000	60000	99000	120000	40000	46000
isbury	31500	33000	36500	39000	39000	44000	70000	75000	30000	33000
rd	38000	41500	44000	51000	56000	63500			36500	57000
ury	25500	26500	27000	28500	34250	40500	54000	60000	24000	26500
ling	34000	36000	40000	43000	47500	52500	75000	90000	37500	40000
Wycombe	34000	40000	42000	48000	44000	50000	90000	120000	36000	44000
ngstoke	30000	34000	35000	40000	44000	51000	72000	79000	32000	37000
smouth/Havant	27000	30000	33500	36000	38000	41000	77500	87500	30000	33000
ham	27750	29000	32000	35000	37500	42000	70000	80000	26000	30000
chester	28950	33800	37000	39500	39500	44500	70000	90000	32000	42000
ort(LOW)	20000	22000	24000	26000	29000	34000	53000	60000	22000	26000
hampton	27500	30000	29000	32500	33000	39500	50000	85000	26000	30000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1986

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
d	28500	31500	36500	40000	45000	50000	76000	81000	38500	44000
rd	37500	40000	45000	50000	47500	55000	105000	125000	37500	42500
	33000	36500	42000	46000	46000	52000	80000	90000	35000	41500
ans	38500	46000	47500	56000	54000	63000	105000	130000	47500	56000
d	37000	39000	48750	51000	55000	65000	112500	137500	43000	57500
on	26000	30000	34000	40000	40000	48000	75000	88000	31000	38000
ford	24250	30000	31500	36500	36000	45000	78000	92000	29500	33500
ster	29000	32500	32000	36000	42000	47000	65000	75000	30000	36500
on/Chigwell	40000	49250	57250	59500	72000	83500	105000	145000	40000	45000
nd-on-Sea	32000	35000	36000	40000	42500	47500	82500	90000	32000	65000
on					40000	45000	115000	150000	37500	42500
bury	28000	31000	31500	35000	38000	48000	60000	93500	35000	49000
urne	29000	31000	33000	36000	40000	44000	80000	100000	31500	40000
tone	22000	28000	26000	36000	33500	42000	60000	75000	26000	39000
one	30000	34000	36000	40000	48000	60000	80000	100000	30000	35000
gham	27000	32000	30000	36000	44000	55000	66000	79000	25000	30000
dge Wells	35000	40000	40000	45000	47000	55000	90000	120000	34000	45000
m	39000	42000	45000	47500	55000	62500	110000	150000	44000	48000
ord	39500	44000	47000	52500	55000	63000	96000	104000	39000	45000
-on-Thames	45000	50000	55000	65000	70000	85000	100000	175000	55000	75000
e	45000	52000	50000	70000	62500	80000	120000	175000	47000	65000
ng			38000	42000	48000	52000	90000	95000	37000	42000
head	43500	46000	54000	60000	60000	66000	108000	130000	44000	50000
ry	36000	37500	39000	41000	45000	49500	95000	110000	33000	35000
	42000	45000	46000	52500	57500	65000	110000	130000	40000	58500
on	35500	37500	39500	43000	48000	52000	75000	90000	39000	41000
g	38000	41000	42000	45000	52000	56000	85000	92000	40000	44000
ycombe	38000	45000	45000	52000	48000	57000	98000	130000	40000	49000
stoke	37000	41500	44000	47000	56000	60000	85000	90000	41000	43000
outh/Havant	27000	30000	34500	39000	42000	45000	82000	94000	32000	35000
n	29000	30250	33500	36500	39500	44000	75000	90000	27000	31500
ster	32500	37500	38000	41000	45000	50000	80000	100000	36000	44000
t(IOW)			26000	28000	30000	35000	63000	70000		
pton	27500	34000	32000	34000	35000	40000	60000	90000	27500	33000

NLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: AUTUMN 1983

.29 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
OUTH WEST								
Bournemouth	26450	32500	42500	48950	65000	90000	30000	36000
West Dorset	26000	32000	31750	34750	47500	60000	28000	31000
Barrick	22500	25750	26750	32000	40000	48000	23000	28750
Wexeter	27500	31000	30000	35000	51000	57500	21000	25000
North Devon	23000	26000	30000	36000	55000	65000	16000	25000
Lymouth	28000	33000	37500	42000	55000	65000	18500	28000
Weston-super-Mare	18000	28500	24000	36000	34000	50000		
Wiltshire	24000	28500	30000	35000	45000	55000	18500	22500
Wiltshire	26000	29500	32750	35750	55000		29500	36500
Wiltshire	27000	39500	32500	50000	55000	90000	20000	40000
Wiltshire	26000	30000	37000	42000	65000	75000	25000	27000
Wiltshire	25000	34000	32000	40000	50000	75000	25000	34000
Wiltshire	23000	27500	27500	35000	45000	60000	27500	32500
Wiltshire	24500	27500	32000	42000	55000	75000		
Wiltshire	21000	26000	29000	35000	55000	65000	19000	21000
Wiltshire	29000	36500	36000	44000	54500	68000		
WILTSHIRE								
Wiltshire	16000	24000	20500	29500	26250	46250		
Wiltshire	32000	37000	35000	40000	52000	64000	26000	29000
Wiltshire	22000	26000	24000	30000	39000	50000		
Wiltshire	18000	25000	25000	32000	40000	50000		
Wiltshire	20000	25000	30000	37000	40000	50000		
Wiltshire	18750	27750	18000	34000	33500	51500		
Wiltshire	19000	27500	22000	34000	38000	60000	20000	30000
Wiltshire	27000	29000	30000	38000	45000	50000		
Wiltshire	16500	21000	18500	27500	33500	42000		
Wiltshire	18000	25000	26000	35000	35000	48000	15000	40000
Wiltshire	24750	29250	28000	36500	46000	52500		
Wiltshire	22000	26000	24000	28000	38000	42000		
Wiltshire	16500	22000	22000	30000	35000	50000	15000	25000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1984

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
WEST								
mouth	26450	32500	42500	48950	67500	92500	30000	36000
orset	28500	32500	32500	37500	47500	60000	30000	32500
k	26000	31000	32000	37500	46000	55000	25000	30000
	30000	35000	32500	50000	60000	75000	21000	26500
Devon	24000	27000	30000	33000	55000	65000	22000	25000
th	30000	34500	40000	45000	57000	66000	20000	29000
nel	21500	31500	25000	37500	40000	60000		
et	26500	29000	32500	36500	52000	57500	21000	23500
	28000	30000	38500	40000	60000	80000	30000	42500
	33000	42500	45000	52500	65000	92500	30000	42500
l	26000	30000	37000	42000	70000	80000	25000	27000
ham	26000	35000	33000	41000	50000	75000	25000	35000
ster	23000	29000	32500	40000	50000	70000	22500	32500
West Avon	25500	29000	33500	45000	60000	80000		
Wiltshire	22000	27000	30000	36000	55000	65000	19500	21500
Wiltshire	34750	38000	41750	45750	64500	70750		
	22500	26000	27500	31000	40000	50000		
F	32500	38000	36000	41000	55000	65000	26500	29500
rfed	22000	26000	24000	30000	39000	50000		
rfed	18500	26000	25750	33000	42000	52000		
Tydfil	23000	27000	30000	35000	40000	50000		
idd	16400	26000	18000	34000	29000	46850		18850
	20000	29000	23500	36500	40000	65000	21500	32500
enny	27000	29000	30000	33000	45000	50000		
	20000	22000	27000	28500	38000	42000		
Bay	25000	30000	32500	40000	40000	50000	25000	40000
	25250	29850	28550	27250	48500	56500		
sol	24000	28500	26500	32000	40000	46000		
n	17300	23000	22000	30000	36500	50000	18000	30000

NLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1984

3.31 GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

E

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
SOUTH WEST								
Poole	27250	33500	43500	50000	67500	92500	30500	37000
Plymouth	30000	35000	35000	40000	50000	60000	30000	33000
Truro	28000	34000	35000	41000	50000	60000	27500	33000
Exeter	32000	37500	35000	50000	60000	80000	22000	28000
Barnstaple	25000	28000	30000	36000	50000	65000	20000	25000
Plymouth	33000	38000	42000	47000	61000	71000	23000	30000
St Austell	22500	31500	30000	47500	40000	67500		
Taunton	28000	32500	35000	39000	54000	59000	28000	35000
Porquay/Paignton	29500	31500	40000	45000	62500	85000	30000	42500
Bath	34000	43500	46000	53500	67500	92500	32500	42500
Bristol	26500	31000	37500	42500	72000	82000	25000	27000
Cheltenham	29000	39000	36500	45000	55000	80000	26000	36000
Gloucester	23000	32500	32500	42500	50000	75000	22500	32500
Weston-s-Mare	26500	31000	34500	47000	65000	82000		
Swindon	22500	28000	31000	37500	57000	67000	19750	21750
Salisbury	37000	40500	44500	48750	68000	74750		
WALES								
Cardiff	32750	38000	36500	41500	56000	66500	27000	30000
Cardiff	23500	28000	29000	32500	40000	52000		
Cardiff	22000	26500	25000	30000	40000	53000		
Cardiff	19500	27000	26500	34000	44000	54000		
Cardiff	23000	27000	30000	35000	40000	50000		
Cardiff	16750	26000	18250	34500	29500	47000		
Cardiff	21000	30000	24000	37500	45000	67500	21500	33500
Cardiff	27000	30000	30000	34000	45000	52000		
Cardiff	21000	23000	27000	29000	39500	44000		
Cardiff	25000	30000	32500	40000	40000	50000	25000	40000
Cardiff	26000	31000	29500	38500	50000	58000		
Cardiff	25500	28500	27500	34000	43500	48500		
Cardiff	17750	23500	22500	33500	37500	52500	18000	30000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: SPRING 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE - NEW DWELLINGS

£

	Semi-detached house estate type		Detached house estate type		Detached house individually designed		Flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
WEST								
	30500	34950	35950	48000	75000	87750	36000	51750
th	30500	35750	36000	42000	50000	60000	30000	35000
	29000	36000	37000	43000	55000	65000	27500	33000
	33000	39750	42000	48000	60000	80000	23000	33000
aple	27000	30000	34000	38000	60000	65000	25000	30000
th	34000	38000	43500	48000	63000	74000	23000	30000
stell	23000	31500	30000	47500	42500	70000		
on	28500	33500	37000	43000	58000	78000	28500	36000
oy/Paignton			42000	47500	65000	90000	30000	42500
	37000	44500	46000	55000	75000	95000	33500	45000
sl	26500	32000	38000	44000	75000	85000	25000	28000
enham	29000	39000	36500	50000	56000	37000	26000	40000
ister	23250	33000	32500	43000	50000	78000	22500	32500
is-Mare	27000	32000	35500	50000	67500	85000		
on	29000	33000	35000	42000	65000	75000	21000	23000
ury	38000	41750	46000	50000	70500	77500		
nd	24000	28000	29000	33500	40000	55000		
f	33000	38500	36500	42000	56500	67000	27250	30500
ordwest	23000	26500	26000	31000	41000	54000		
li	19750	27500	27000	35000	45000	55000		
r Tydfil	23000	27000	30000	35000	42500	52500		
ridd	16750	26000	18250	34500	29500	47500	18000	20000
a	22000	32000	26000	40000	45000	70000	21500	45000
venny	31000	35000	34000	38000	51000	58500		
	21000	23000	27000	29000	39500	44000		
idno	25000	30000	32500	40000	40000	55000	25000	40000
t(Gwent)	26000	31000	29500	38500	50000	59000	25000	29000
in	25500	28500	27500	35000	43500	48500		
m	18000	23500	24500	33500	40000	55000	20000	30000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

ICE RANGES: AUTUMN 1985

3 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

E

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
TH WEST										
le	24500	28000	32995	33250	36750	39950	55000	60850	25000	30000
mouth	23000	27000	27000	30000	30000	34500	47500	55000	28000	31000
ro	21000	25000	24200	29000	29000	37000	60000	78000	28000	34500
ter	24000	25000	25000	30000	35000	37500	75000	80000	22500	27000
nstaple			20000	22000	26500	28500	52500	57500	18000	26500
mouth	25000	28000	25000	32500	32000	40000	50000	72000	23000	30000
Austell			19000	21000	24000	27500	37500	55000		
nton	19500	21500	25000	26500	33000	35000	53000	60000	23000	27000
quay/Paignton		22000	27500	29000	33000	35000	63500	77500	27500	35000
h	22000	24000	28500	31500	37500	43500	58500	85000	32500	38500
stol	21000	22250	24500	28500	28750	34250	48000	62500	25500	27250
ltenham	23500	26000	25000	31000	26000	35000	58000	90000	28500	35000
ucester	19000	22000	21000	24000	31000	36000	44250	76500	24000	32500
ton-s-Mare	20000	22000	22500	25000	27500	31000	52500	65000	22000	47000
ndon	19000	23000	25000	27500	32000	38000	60000	68000		
isbury	26250	28250	33000	35750	38000	42000	67500	74000	25000	27500
ES										
ggend	15500	18000	17750	21500	24500	28500	42000	55000		
diff	21000	22500	30000	32000	35250	38000	64000	70000	22500	24750
erfordwest	16000	16000	19000	19000	25500	25500	60000	62000		
elli	17000	18500	20500	22000	22000	26000	45000	57000		
thyr Tydfil			19500	20500	23000	24000				
rypridd	17500	18250	18000	22500	19500	27500	31000	52500	16000	20000
isea	18000	24000	21000	30000	24000	34000	42000	60000	24000	50000
gavenny	21000	24000	26500	28500	32500	36000	57000	61500	26000	32000
lor	14000	15000	21000	23000	23000	25000	38000	42000	12000	13000
lyn Bay	15750	18000	18500	24000	24000	27500	42500	50000	17500	19500
ort(Gwent)	15500	18500	16000	17500	26500	31000	48000	54000	15500	17000
own	17500	20000	20000	22500	24000	28500	37500	46000	17500	20000
ham	14250	14500	16950	17850	18500	22950	45000	55000	20500	23500

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1986

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

E

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
EST										
ournem'th	28000	30000	32985	34250	34250	43950	54750	76000	28950	30000
h	24500	27000	27500	31000	32000	37000	55000	65000	30000	33500
	21000	25000	24800	30000	29500	38000	63000	80000	25000	35000
	25250	26250	26000	31000	37000	41500	72000	85000	23500	28000
ple			22000	24000	28000	30000	54000	59000	20000	27000
h	25000	28000	25500	33000	33000	40000	50000	75000	24000	30000
ell			19000	22000	24000	27500	40000	60000		
	20500	22500	26000	27500	34000	36000	53000	60000	24000	27500
/Paignton	23000	24000	28500	30000	33000	35000	55000	79000	27500	35000
	24000	26000	31500	35000	38500	46500	65000	93500	33500	39500
	20000	22500	26000	28500	29500	36000	51000	72500	26500	29000
ham	24500	30000	27750	34000	32000	39000	50000	95000	27000	40000
ter	20000	22000	22000	24000	31000	36000	55000	70000	24000	32500
s-Mare	21000	22000	24000	25750	28000	32500	46000	57000	22000	30000
	19500	23500	26000	28250	33500	39000	64000	72000	23000	27000
ry	27750	30000	34500	37500	39750	44000	69500	76250	27000	31000
d	16250	18500	19000	22250	25500	30000	44000	59750		
	21000	22750	30000	32500	35500	38500	65000	72000	22500	25000
rdwest	15500	16950	19500	20750	26000	28000	60000	62000		
i	17500	19000	21000	23000	22500	26500	46000	58000		
Tydfil			21500	23000	26000	27500				
idd	17750	18250	18500	22500	19500	27500	31500	52500	16000	20000
	19000	25000	22000	31000	25000	35000	44000	63000	27000	50000
enny	21500	24500	27000	29000	33000	37000	58500	63000	26500	32500
	14000	15000	21000	23000	24000	26000	40000	42000	12000	14000
Bay	16000	18000	18500	24000	24000	27500	42500	50000	17500	19500
(Gwent)	18000	21000	22000	24500	27500	31000	52000	62000	22000	25000
	17500	20000	21000	23000	24000	28500	40000	50000	18000	20000
	14250	15500	17000	19000	18500	23500	45000	55000	20500	23500

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1986

1.35 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

E

	1 Bed Starter house estate type		2 Bed Terraced house estate type		3 Bed Semi-detached house estate type		4 Bed Detached house estate type		2 Bed Flat in 2/3 storey block	
	From	To	From	To	From	To	From	To	From	To
SOUTH WEST										
Boole/Bournemouth	29000	32000	33000	35000	38495	49495	63450	84950	28100	32000
plymouth	26000	28000	29000	32750	34000	39000	58000	70000	32000	35500
Truro	22500	27000	25100	31000	35000	43000	65000	84000	26000	36000
Exeter	26250	27500	27000	32000	37500	43000	74500	88000	24500	32500
Stamstaple			24500	25500	30000	33000	56000	60000	24000	29000
plymouth	25000	29000	26500	33000	33000	40000	55000	75000	24000	30000
St Austell			20000	24000	28000	31000	45000	60000		
Wentnorton	22000	24000	27000	29500	36000	38000	53000	70000	24500	38500
St Austell/Paignton		26000	31000	32500	35000	38000	67000	80000	30000	45000
St Austell	25750	28000	33250	37500	40000	47500	67500	95000	34500	40000
Bristol	21000	24500	27000	29000	30000	37000	60000	75000	27500	30000
Wilton	27000	32000	30000	37000	32500	43000	70000	100000	30000	45000
Worcester	21000	23000	22000	24000	32000	37000	60000	75000	25500	33500
Worcester-s-Mare			27000	29250	30000	35000	55000	65000	34000	38000
Wilton	20500	24000	28000	32000	34000	41000	65000	75000	23000	27000
Wiltshire	30000	32250	37000	40000	42500	47000	72500	82000	30000	34000
SOUTH EAST										
Widgend	16750	19250	20500	24000	27250	32000	45000	61000		
Widford	21000	23000	27500	32500	35500	39000	65000	73000	22500	25000
Widfordwest	15500	16950	19500	23000	26000	28000	20000	62000		
Widford	18000	19500	21500	23500	23000	27000	49000	60000		
Widford Tydfil			22500	24000	26000	27500				
Widford	18000	19000	19500	22500	22000	28000	35500	52500	17000	20000
Widford	19500	25000	22750	32000	29000	45000	47500	72500	27000	50000
Widford	22500	26000	28500	30500	35000	39000	61000	66000	27500	34000
Widford	14000	15000	21000	23000	24000	26000	40000	42000	12000	14000
Widford Bay	16500	18500	19000	24500	25000	28000	45000	52500	18000	20000
Widford(Gwent)	18000	21000	22000	24500	27500	31000	52000	62000	22000	25000
Widford	18000	21000	22000	24000	25000	29000	40000	52500	18500	21000
Widford	15250	16500	18500	21500	20500	25000	45000	55000	20500	23500

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1984

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	3 bedroom semi-detached house estate type		3/4 bedroom detached house estate type		Better quality estate detached house		2 bedroom flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
LAND								
ries	23000	30000	31000	35000	55000	60000	25000	35000
ling/Kircaldy	32000	34000	37000	42000	55000	70000	20000	24000
deen	40000	51000	44000	56000	60000	85000	27000	46000
pian (Rural)	28000	33000	34000	38000	38000	45000	19000	22000
rness	31000	35000	36000	42000	45000	60000	23000	28000
burgh	37500	47500	45000	55000	55000	80000	25000	47500
	32000	38000	35000	45000	59000	70000	22000	25000
gow	27500	30000	28000	35000			24000	27000
gow suburbs	33000	38000	34000	40000	55000	80000	23500	40000
nock	23500	34000	36500		42000	55000	27000	38200
ee	30000	35000	37500	45000	55000	70000	28000	35000
h	30000	35000	37500	45000	55000	70000	28000	35000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1984

7.37 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	3 bedroom semi-detached house estate type		3/4 bedroom detached house estate type		Better quality estate detached house		2 bedroom flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
SCOTLAND								
Dumfries	23500	30500	32000	36000	55000	65000	25000	35000
Stirling/Kirkcaldy	32000	36000	37000	45000	55000	75000	20000	24500
Aberdeen	42000	53000	46000	58000	65000	95000	29000	49950
Grampian (Rural)	28000	36000	34000	40000	39000	50000	19500	24000
Inverness	31000	35000	39000	46000	50000	62500	23000	28000
Edinburgh	39000	47500	45000	57500	55000	85000	29000	50000
Ayr	33000	40000	35000	50000	59000	70000	26000	32000
Glasgow	28000	32000	35000	40000	50000	65000	28000	30000
Glasgow suburbs	35300	38000	39150	48850	55000	80000	27300	40250
Dundee	32500	37500	40000	45000	55000	65000	26000	35000
Perth	32500	37500	40000	48000	60000	70000	28000	35000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

CE RANGES: SPRING 1985

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	3 bedroom semi-detached house estate type		3/4 bedroom detached house estate type		Better quality estate detached house		2 bedroom flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
LAND								
ries	31000		34000	38000	55000	65000	25000	
ling/Kircaldy	32000	37500	39000	50000	53000	75000	23000	25750
deen	42000	54000	46000	59000	65000	95000	30000	50000
pian (Rural)	28500	36500	34000	40000	39000	57000	19500	24500
rness	31000	35000	41000	47000	55000		24000	28000
burgh	39000	49000	47500	60000	57500	85000	31000	60000
	37500	41000	43000	52000	62000	70000	29000	40000
gow	30000	35000	37000	42000	50000	68000	29000	38000
gow suburbs	35750	37000	40000	52000	50000	85000	27500	44000
ee	32500	39000	40000	45000	55000	65000	26000	35000
h	33000	39000	40000	49000	60000	72500	28000	35000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1985

7.39 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	3 bedroom semi-detached house estate type		3/4 bedroom detached house estate type		better quality estate detached house		2 bedroom flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
SCOTLAND								
Dumfries	31000		35500	40000	55000	65000	25000	
Stirling/Kircaldy	33000	38500	40000	50000	55000	75000	24000	28000
Aberdeen	41000	54000	46000	59000	65000	95000	30000	50000
Grampian (Rural)	28500	36500	34000	40000	39000	57000	18750	24500
Inverness	33000	37000	44000	49000	60000	80000	25000	28000
Edinburgh	40000	50000	50000	60000	61500	86500	31000	60000
Ayr	39000	41000	43000	52000	62000	70000	29000	40000
Glasgow	32000	37500	42000	46000	50000	75000	31000	42000
Glasgow suburbs	36500	45000	45500	54500	56550	87000	29100	74000
Dundee	32500	39000	43000	49000	60000	70000	27000	36000
Perth	33000	39000	43000	50000	60000	72500	30000	26000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIOD RANGES: SPRING 1986

GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	3 bedroom semi-detached house estate type		3/4 bedroom detached house estate type		Better quality estate detached house		2 bedroom flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
AND								
ies	31000		35500	40000	55000	65000	25000	
erm/K'caldy	33000	38500	42000	52000	58000	75000	23500	26000
leen	42000	54000	46000	59000	62000	95000	30000	50000
sian (Rural)	30000	37000	35000	43000	39000	57000	20500	25500
ness	34000	38000	45500	50000	62500	81000	25000	28000
urgh	40000	50000	52000	62000	62000	91000	31000	61000
	39000	43000	48000	55000	65000	72000	31650	40000
ow	35000	42000	45000	49000	53000	78000	31000	45000
ow (Bearsden)	37000	41000	47250	56350	64750	80000	29950	71150
ow (Eastwood)	41000	45000	47500	51600	68500	87000	29100	35400
e	35000	40000	43000	50000	60000	70000	27000	36000
	35000	40000	43000	50000	60000	72500	30000	36000
ton	38000	43000	48000	53000	62000	72000	27500	35000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1986

7.41 GREAT BRITAIN: TOWNS BY HOUSE TYPE/SIZE - NEW DWELLINGS

£

	3 bedroom semi-detached house estate type		3/4 bedroom detached house estate type		Better quality estate detached house		2 bedroom flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To
SCOTLAND								
Dumfries	34400	38600	39000	46000	65000	72000		
Dunfermline/Falkirk	34000	39000	43000	57500	58000	93000	24000	27000
Aberdeen	40000	54000	46000	59000	60000	95000	29000	50000
Grampian (Rural)	32000	39000	36000	44000	40000	58000	21000	26000
Inverness	34000	38250	45500	51000	57000	81000	24000	26250
Edinburgh	42000	52000	53000	70000	62000	101000	33000	63000
Ayr	40000	44000	50000	57000	65000	72000	31650	40000
Glasgow	35000	43000	45000	50000	54000	80000	31000	47000
Glasgow (Bearsden)	37500	42000	47500	59350	64700	82000	29950	76950
Glasgow (Eastwood)	45900	49750	49600	53950	75000	106000	34600	56750
Dundee	35000	40000	43000	50000	60000	70000	27000	36000
Perth	35000	40000	43000	50000	60000	72500	30000	36000
Hamilton	40000	44000	48000	54000	62000	75000	27500	37500

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1983

GREAT BRITAIN:
TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
IRE AND HUMBERSIDE										
ate	16500	22000	23000	29000	22500	30000	50000	65000	28000	37000
	15000	20000	21000	26000	22000	28000	45000	65000	25000	30000
rd	10500	17000	15750	24500	18000	27000	38500	50000	15500	23000
dale	8500	22000	15000	30000	17500	25000	40000	55000		
es	9500	15000	16000	22000	18500	23500	43000	53000		
	8500	20000	18000	27750	20000	30000	40000	62500	17500	30000
eld	13000	15000	18000	24000	19500	25000	45000	58000		
ey	11000	13000	17500	19500	18500	21500	41000	45000	12500	14500
ter	8750	9250	17000	19000	19750	21750	47000	55000		
y	9500	11000	14500	18000	18500	21500	42500	50000	15000	18000
	8500	15500	20500	25000	21000	25500	41000	47000	15000	22000
side	8000	19000	17000	27500	18000	29500	37500	57000	15000	25750
ham	9500	17000	18000	25000	19000	26500	37500	52000	24000	30000
eld	14000	17000	20000	25500	22000	26500	48000	52000	18000	24000
WEST										
	11250	13250	18000	23000	19500	26500	42500	60000	14000	16000
ster	9750	13750	19500	22750	22500	26250	45500	55000	18000	22500
	11000	13000	22000	25000	24000	29000	50000	55000	21000	26000
le	14000	16000	18000	22500	21000	24000	50000	57000		
d	10000	25000	17000	32000	24000	30000	45000	80000	17000	40000
ort	13500	17000	22000	25000	23500	28000	44000	55000	19000	29000
	10250	14250	16000	21000	19000	23500	40000	55000		
urn	7250	12500	18000	25000	20500	26500	46500	61500		
y	9000	17000	17000	25000	20000	27500	37500	60000	11000	14750
ter	13000	20750	18500	25750	20750	27000	42000	62000	21750	36000
n	13000	17000	18750	22000	19500	22500	42000	52000	17000	20000
r	15000	16000	21000	22000	23500	24500	47000	51000	22000	24000
heshire	13500	24000	19000	27500	20500	29000	40000	63000		31000
ool	14850	17500	19000	24000	21000	25000	41000	50000	16000	17000
ens	8000	11500	18500	26000	19000	25000	45000	53000		
	4250	16500	18750	26750	21000	28500	49000	59500	20000	29000
gton	10250	12750	19500	21500	23500	25000	52250	54250	17500	20500
	9500	13500	19500	25000	19500	26000	47500	60000	17500	25000
N										
le	14000	21000	19000	25000	20000	25000	35000	50000	16250	30000
berland	13000	22500	21000	34000	20000	30000	40000	65000	23000	27500
and	8000	20000	17000	25000	23000	26500	40000	60000	16000	19000
e	12500	15500	19000	24000	23500	26500	42500	48000	25000	29000
leveland	12500	18250	20500	25500	20250	28750	46250	57250	11500	15250
leveland	9000	10000	18000	19000	19000	20000	45000	48000	14500	15500
ton	10000	13250	19000	23000	25000	29000	60000	70000	23500	29000
	12000	20500	15000	29250	20000	24500	40000	64500		
e	14000	18000	21000	27000	21000	27000	38000	50000		
akeland	15000	16500	22000	26000	22000	25000	48000	50000		

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

ICE RANGES: SPRING 1984

3 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE										
Arrogate	17250	22750	23250	30000	23250	30000	51000	67000	28500	37500
Bark	16000	21000	21000	26000	22000	28000	45000	65000	25000	30000
Bedford	10500	17000	16000	24500	18000	27000	38500	50000	15500	23000
Belderdale	8500	20000	15000	30000	17500	25000	65000	60000		
Birklees	9750	15250	16000	22000	19000	24000	44000	54000		
Birds	9000	19000	18500	28000	21000	30000	42000	60000	18000	30000
Birfield	13200	15500	18000	24000	19500	25000	45000	58000		
Birnsley	11500	13500	18500	21500	19500	22500	42000	46000	13000	15000
Birncaster	9000	9750	17000	19000	20500	22750	47000	55000		
Birnsby	9500	11000	15000	19500	19000	23000	44000	50000	15000	20000
Birll	8600	15500	21000	25000	21500	25000	42500	47500	15000	23000
Birnerside	17500	20000	20000	25000	25000	30000	65000	70000	22000	27500
Birtherham	10000	17000	18500	25500	20000	27000	40000	52000		
Birffield	14500	17500	20500	25500	22500	27000	48000	52000	17000	24000
YORKSHIRE WEST										
Birton	12000	14000	18000	23000	19500	26500	42500	60000	14000	16000
Birchester	10000	14000	19500	23000	23000	27750	45500	55000	18000	22500
Birham	11000	13000	22000	25000	24000	29000	50000	55000	21000	26000
Birhdale	15000	17000	19000	23000	22000	25000	50000	57000		
Birford	10000	25000	17000	32000	24000	30000	45000	80000	17000	40000
Birckport	16250	17250	23000	24500	27000	29000	55000	60000	24000	29000
Birgan	10500	15000	16000	21500	19000	24000	40000	55000		
Birckburn	7250	12500	18000	25000	20500	26500	46500	61500		
Birnley	9000	17000	17500	25000	20000	28000	40000	60000		
Bircaster	15000	20000	21000	25000	24000	28000	55000	65000	28000	35000
Birston	14000	18000	18750	22000	19500	22500	42000	52000	17000	20000
Birster	15250	16250	21250	22250	23750	24750	47000	51000	22000	24000
Bir St Cheshire	13000	14000	18500	19500	20000	21000	46000	48000		
Birverpool	15250	17750	19750	24500	21760	25500	41000	50000	16500	17500
Bir Helens	9000	12500	19000	28000	20000	27000	45000	55000		
Birton	10000	17000	18750	27250	23000	28500	50000	59500	25000	30000
Bir Winton	10250	12750	19500	21500	23000	25000	52250	54250	17500	20500
Bir Wral	9750	13750	20000	25500	20000	26500	48000	61000	17500	25000
YORKSHIRE NORTHERN										
Bir castle	16000	24000	21000	26000	22000	25000	38000	55000	18500	30000
Bir thumberland	19000	24000	27500	35000	31000	32500	43000	70000		
Bir Wderland	8250	20750	17250	26000	23500	30000	41000	64000		
Bir Wreside	13000	16500	19500	24750	24500	27500	45000	52500	26000	30000
Bir Wth Cleveland	12500	13500	20500	24000	20250	23000	52000	58000	11500	15250
Bir Wth Cleveland	9500	10500	18500	19500	19500	20000	47000	50000	14500	15500
Bir Wlington	10500	14000	20000	24000	25000	29000	60000	77000	23500	29000
Bir Wham	18500	21250	26000	30500	24000	25000	64000	66000		
Bir Wlisle	14500	16000	21000	24000	22000	25000	38000	42000		
Bir Wth Lakeland	15000	17000	22000	26000	22500	25500	48000	50000		

LD REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1984

REAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
RE AND HUMBERSIDE										
te	17500	23000	24500	31250	24500	31250	53000	68500	29500	38500
	18000	23000	21000	26000	25000	29500	50000	65000	25000	30000
d	11000	17750	16750	25500	18750	27000	39500	51000	16000	23000
	8500	25000	16000	30000	17500	25000	47500	62500	9500	31000
field	10500	16000	16500	22500	19500	24500	46000	56000		
	9000	19500	19000	28750	21500	31000	42500	62000	18500	30000
ld	13500	15750	18250	24500	19500	25250	45000	58000		
y	11500	13500	18500	22000	19500	22500	42000	46000	13000	15000
er	9000	9750	17750	20000	21250	23500	47000	55000		
	10000	11500	18500	22000	19500	23500	44000	55000	15000	20000
	9000	15500	21500	25500	22000	25500	45000	50000	15500	23000
y	18500	21500	26500	32500	26500	33000	65000	73000	22000	30000
am	10500	17500	18500	26500	20500	28000	40000	52000		
ld	15500	19000	22000	26000	23500	28000	47000	52500	16000	24000
EST										
	12000	14000	18000	23000	19500	26500	42500	60000	14000	16000
ter	10250	14500	20500	24000	23500	28000	47000	56750	15500	22500
	11500	13500	23000	26000	25000	30000	50000	55000	21000	26000
	15500	17000	19500	23500	23000	25000	50000	58000		
/Trafford	10000	27500	20000	32000	24000	30000	47500	80000	17000	40000
nt	16500	17500	24000	25500	28250	30250	62500	67500	24000	29000
	10500	15500	16000	22000	19000	25000	40000	56000		
n	7500	13250	19000	26000	22000	27500	48000	65000		
	9000	17000	17500	25000	20000	28000	40000	60000		
er	16000	21000	22000	26000	25000	29000	55000	65000	28000	35000
	14000	18000	18750	22000	19500	22500	42000	52000	17000	20000
	16000	17800	21250	23500	25000	26000	51500	53000	22000	24000
	13500	14500	18500	19500	20000	21000	47000	49000		
ol	12000	18000	21000	26000	22500	27500	42000	50000	17000	23000
ns	9000	12500	20000	28000	20000	28000	47500	57500		
rt	11000	17000	20000	28000	23500	29250	51000	60000	25000	30000
con	10750	13250	20500	22500	25000	27000	53000	56000	18250	21250
ead	9750	13750	21000	26500	21000	27500	48000	61000	17500	25000
L										
e	16000	24000	21000	28500	23000	26000	40000	56000	20000	35000
	20000	25500	27500	36000	31000	33500	43000	72000		
ind	8500	21500	17500	26250	24000	30500	41500	65000		
h	13750	17000	20000	25500	25000	28000	46000	53500	26500	31000
i	12500	13500	20500	24000	20250	23000	52000	58000	11500	15250
rough	10000	11000	19500	20500	20500	21500	48000	51000	14500	15500
on	10750	14250	20000	24000	26000	30000	62000	79000	23500	29000
	18500	22500	26000	32500	24000	27500	64000	67000		
	15500	16500	22000	25000	23000	26000	38000	42000		
	16000	18500	23000	28000	24500	27000	51000	55000		

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: SPRING 1985

45 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE										
Arrogate	17750	23000	24750	31500	24750	31500	53500	69000	29750	38500
Barnsley	18000	23000	23000	28000	26000	31000	55000	65000	25000	30000
Bradford	11250	18000	17250	26000	19250	27500	40500	51750	16250	23000
Califax	8500	25000	16000	30000	17500	25000	47500	62500	9500	31000
Claydonfield	11000	16500	17250	23250	20500	25000	47000	57000		
Conds	9500	20000	19000	29000	21500	31500	43000	63000	18500	30000
Keefield	14000	16250	18500	24500	19750	25750	45000	58000		
Rensley	11500	13500	18500	22000	19500	23000	42000	46000	13000	15000
Wincaster	9000	9750	18000	20500	21250	23500	47000	55000		
Wimsby	11000	12000	20000	22000	21000	23500	48000	60000	15000	20000
Wll	9500	16000	22000	26000	22000	26500	46000	51000	16000	28750
Wolverley	18500	22500	26500	32500	26500	35000	65000	75000	22000	32000
Wetherham	11000	18500	18500	27500	21000	29000	40000	52000		
Wheffield	16500	20000	22000	26000	23500	28000	47000	52500	15500	24000
YORKSHIRE WEST										
Wilton	12000	14000	18000	23000	19500	26500	42500	60000	14000	16000
Wincaster	10250	14500	20500	24000	23500	28000	47000	56750	15500	22500
Widham	12000	14000	23000	26000	25000	30000	50000	55000	21000	26000
Widry	15500	17500	19500	24000	23000	26000	50500	60000		
Widford/Trafford	10000	29000	20000	34000	25000	30000	50000	80000	17000	40000
Widockport	16750	17750	24250	25750	28500	30750	63500	68500	25000	29000
Widgan	10750	15750	16250	22250	19250	25250	41000	58000		
Widackburn	9000	15000	19500	28000	22000	29500	46500	64000		
Widrnley	9000	17000	17500	26500	21500	30000	40000	60000		
Widncaster	16000	22000	22000	26000	25000	29000	55000	65000	19000	26000
Wideston	14000	18000	19000	23000	20000	24000	44000	55000	17000	21000
Widester	16000	18000	21500	23750	25250	26250	52000	53500	22000	24000
Widewe	13500	14500	19000	20000	20500	21500	48000	50000		
Widverpool	12000	18000	21000	26000	23000	28500	43000	52500	17000	23000
Wid Helens	9000	12500	20000	28000	20000	28000	50000	60000		
Widuthport	15000	19000	23750	28750	25000	30000	51500	60500	26000	31000
Widrrington	11000	14500	20500	22500	25000	27500	53000	56000	18250	21250
Widrkenhead	9750	13750	21000	26500	23000	27500	48000	61000	18000	25000
YORKSHIRE SOUTHERN										
Widwcastle	16500	25000	21000	28500	23000	27500	40000	56000	20000	35000
Widrpeth	22000	26000	28000	36500	31500	34000	44000	73000		
Widderland	9000	22000	18500	26750	24500	31000	42000	67000		
Widitley Bay	14000	17000	20000	25500	25000	29000	46000	53500	26500	32500
Widockton	12500	13500	20500	24000	20250	23000	52000	60000	12500	16000
Widldesbrough	10000	11500	19500	21000	21000	22000	49000	52000	14500	16000
Widlington	11000	14750	20000	24000	26250	30250	64000	79000	24500	31000
Widham	20000	22500	28000	32500	24000	27500	64000	67000		
Widlisle	16000	19000	22000	24000	24000	27500	38000	42000		
Widrow	16000	19000	25000	31000	24500	30000	51000	55000		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
IRE AND HUMBERSIDE										
ate	20500	25000	28500	33000	26000	33000	56000	72500	31250	40000
	22000	27000	25000	29000	26500	31000	59000	70000	25000	30000
nd	11750	19000	17750	27000	19750	30000	41500	53000	17000	23000
<	14000	18000	22000	27500	18000	26000	55000	65000	10000	12000
sfield	14000	19000	18500	25000	21000	26000	48000	58000		
	16500	26000	21500	32000	22000	32500	44000	65000	18950	30000
ld	11000	21000	21950	29000	23000	28500	45000	76500		
y	14000	16000	21000	23000	19500	23500	44000	48000	14000	16000
er	12500	14000	19000	21000	22000	24000	47000	55000	15500	16000
	13000	16000	20000	24000	22000	28000	45000	60000	25000	30000
	12000	16500	26500	28500	24000	28000	47500	52000	16000	28750
y	22000	26000	29000	35000	27500	35000	65000	75000	25000	32000
am	14000	19000	22000	28500	22000	30000	42500	52000	20000	25000
ld	19000	22500	24500	28500	25000	30000	48000	55000	15500	24000
EST										
	13000	15500	20000	25500	19500	27000	42500	65000	14000	16000
ter	13500	17000	22250	26250	25800	30750	49000	59500	16250	23600
	15250	17750	24000	27000	25000	30000	50000	56000	21000	26000
	16000	18000	22000	25500	23000	26500	52000	62000	14500	20000
/Trafford	12500	35000	22950	33000	25500	30500	50000	80000	17000	35750
rt	17500	24000	25000	30000	25000	31000	59500	68500	22500	29000
	13500	15500	25000	28000	22500	27000	55000	65000	22000	22000
rn	14000	23000	23100	28000	24000	30000	49000	67000	17500	22500
	11000	18500	19500	28000	21500	30000	41000	60000		
er	19000	23000	25000	27000	25000	29000	55000	65000	19000	26000
	16000	20000	26000	29000	27000	31000	54000	60000	22000	26000
	18000	20000	24000	26000	26000	27000	55000	60000	22500	24500
	14000	15500	19500	22000	20500	23000	50000	60000		
ol	13500	20000	23000	30000	23000	28500	43000	65000	17000	24000
ns	14000	19000	23000	30000	22000	29000	50000	60000		
rt	18500	21500	28250	31500	27000	32000	52000	62000	27500	32500
ton	12000	14000	25000	30000	25000	29000	53000	56000	18250	21250
ead	13500	15000	22500	26500	23500	28500	55000	65000	20000	26000
W										
le	20000	26000	24000	30000	23000	28000	40000	56000	21000	35000
	20000	26000	28000	36500	31500	34000	44000	73000		
and	21000	24000	25000	31500	25000	32000	44000	70000		
Bay	14500	17500	21000	26750	26000	30500	50000	59000	27000	33500
	11500	13750	21000	24500	20000	26000	52000	58000	9500	12500
rough	13000	15000	25500	27000	22000	23000	50000	52500	15000	16000
on	14000	16500	22000	25000	26250	30250	64000	79000	24500	31000
	23000	26000	34500	38500	24500	28000	65000	68000		
	21000	24000	25000	27000	27000	29500	44000	46000		
	18000	20000	28000	32000	26000	30500	53000	59000		

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1986

17 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
YORKSHIRE AND HUMBERSIDE										
Arrogate	19500	24000	28000	35000	26000	35000	56000	72500	27500	40000
Barnsley	23000	29000	27000	31000	28000	31500	60000	71000	25000	30000
Bradford	13000	22000	18500	27000	21000	30000	42500	55000	17000	23000
Calke	15000	19000	22500	28000	18500	27000	56000	65000	10500	12500
Claydon	15000	20000	20000	26000	23000	28000	50000	62500		
Consett	16500	27000	21500	33000	25000	33000	44000	67500	19000	30000
Doncaster	14000	21500	23500	29000	24000	29500	50000	76500		
Embsay	14000	16000	22500	24500	21000	24500	48000	55000	14500	16500
Goole	13000	14500	19500	21500	22500	24500	47000	55000	15500	16000
Halifax	13000	16000	22000	25000	22000	28000	45000	60000	25000	30000
Ilkley	12500	16750	26500	28500	24000	28500	49000	53500	16000	28750
Leeds	22000	26000	29000	35000	27500	35000	65000	75000	25000	32000
Sheffield	14000	19000	22500	30000	22500	30000	42500	52000	20000	25000
Thorncliffe	20000	23000	26000	29000	25000	30000	48000	55000	16000	24000
YORKSHIRE WEST										
Alton	13000	16250	20000	27000	20000	28500	44000	66000	14000	16000
Barnsley	14000	23000	23000	27250	25800	30750	49000	59500	16250	23600
Doncaster	15250	17750	24000	27000	25000	30000	55000	60000	21000	26000
Halifax	16250	18250	22000	25500	23250	27250	52000	62500	14500	21000
Leeds/Trafford	14000	37500	25000	37500	25500	37000	52500	82500	18000	41000
Leedsport	17500	24250	25000	35000	25500	31750	60000	70250	22500	29500
Leeds	14000	17500	21500	27000	25000	30000	50000	58000		
Leedsburn	14500	23500	23750	29000	24500	30750	50000	67500	17600	22750
Leeds	12000	19000	20000	28000	22000	30000	42000	61000		
Leeds	19500	23500	26000	29000	26000	31000	55000	67000	19000	26000
Leeds	16500	20500	26500	30000	27000	31000	54000	60000	22000	26000
Leeds	18000	20000	24000	26000	30000	34000	65000	75000	24000	27000
Leeds	14500	16250	19500	24000	21000	24000	52500	65000		
Leeds	13750	20000	23000	30000	23000	30000	43500	60000	17000	25000
Leeds	14500	19000	24000	30000	24000	29000	50000	60000		
Leedsport	19000	22000	28250	31500	30000	33500	55500	62000	27500	32500
Leeds	13500	14500	25000	30000	25000	30000	53000	60000	18250	21250
Leeds	13500	15500	24000	29000	25500	31000	55000	65000	20000	26000
YORKSHIRE EAST										
Leeds	22000	27000	25000	32500	24000	31000	40000	56000	22500	35000
Leeds	20500	26500	29500	38000	32250	35000	45000	75000		
Leeds	21500	25000	25500	32000	25000	32000	44500	70000		
Leeds	15000	18500	22000	28000	26000	31000	50000	59000	27000	34000
Leeds	11500	14000	21000	25000	20000	28000	52000	58000	9500	12500
Leeds	13000	15000	25500	27000	22000	24000	50000	53000	15000	16000
Leeds	13500	16750	21750	25000	26500	30500	64000	75000	24500	31000
Leeds	23000	26000	26500	34500	24500	28500	65000	68000		
Leeds	23000	25000	27000	31000	27000	29500	46000	48000		
Leeds	20000	23000	29000	34000	29000	33500	55000	60000		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1986

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
RE AND HUMBERSIDE										
te	19500	24000	28000	36000	26000	35000	62500	77500	27500	40000
	23000	29500	29250	31500	28000	31950	64000	73500	25000	31250
d	15000	24000	19500	28500	22500	31500	45000	59000	17000	23000
	15750	20000	23500	29250	20000	28000	58000	67500	11250	13000
field	16000	23000	21000	26500	23500	29000	52000	65000		
	17000	27000	22000	34000	26000	38000	45000	70000	19000	30000
ld	14000	21500	23500	31000	24500	30000	50000	76500	19000	20000
y	15000	17500	23500	26000	22500	26000	50000	58000	14500	17500
er	13000	15000	19500	25000	22500	29500	48000	60000	16000	25000
	13000	17500	22000	27000	23000	28000	45000	60000	25000	30000
	13000	17500	26500	29000	24500	29250	50000	55000	15000	28750
y	22000	26000	30000	36500	28000	36000	65000	75000	25000	32000
n	14500	19500	23500	30000	23500	30000	45000	52000	20000	25000
ld	21000	24000	26500	29500	25500	30500	48000	55000	16500	24000
EST										
	13000	16750	20000	28000	20000	30000	46000	70000	14000	16000
er	14500	25850	23500	28500	26500	33000	49000	65500	16600	25000
	16000	17750	24750	28000	25000	31000	55000	60000	21000	27500
	16750	18750	22500	26250	23500	27750	52000	63500	14000	21750
Trafford	15000	37500	25000	38000	26500	39000	52500	85000	18000	41000
t	17750	25250	26000	31500	26000	33250	62500	71000	23000	30000
	14000	18000	21500	27500	25000	30000	50000	58000		
n	15000	23500	24500	30000	25000	31000	50000	68500	18000	23000
	12200	19200	22000	30000	24000	32000	44000	63000		
r	22000	24500	26000	30000	27000	32000	57000	70000	19000	26000
	16500	20500	26500	30000	27000	31500	54000	60000	24000	28000
	19500	24000	24000	27000	32750	34500	65000	85000	26000	29000
	15000	17500	21000	25000	23000	25500	57000	68500		
l	14000	20500	23500	31000	23500	32500	43500	60000	17000	25000
s	15000	20000	24500	30000	22000	29500	50000	60000		
t	20000	23000	28250	33000	31500	34500	59000	65750	27500	32500
on	15000	17000	26000	30000	26000	30000	55000	62500	18250	21250
ad	14000	16000	22500	29500	24000	31000	48000	64000	18000	25000
e										
	21000	27000	24500	36950	25000	31000	42500	56000	22500	35000
	22000	28000	30000	40000	32500	36000	47500	80000		
nd	22000	25500	26000	32500	25500	32500	45000	70000		
neside	16000	20000	22500	28500	26000	31000	50000	59000	27000	34000
	11500	14500	21000	26000	21000	29000	52000	58000	9500	12500
rough	13000	15000	25500	27500	22000	24500	50000	55000	15000	16000
on	14000	17250	21750	25000	26500	30500	64000	75000	24500	31000
	23500	26500	29250	35250	25000	29250	67000	70000		
	24000	27000	28000	33000	28000	32000	48000	52000		
	20500	23500	31000	35500	31000	35500	57000	62000		

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

ICE RANGES: AUTUMN 1983

9 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
ST MIDLANDS										
Nottingham	12500	15000	18500	20000	20500	22500	35000	40000		
Leicester	9000	18500	16500	24000	20000	24500	41000	55000		
Derby	6000	8500	16000	23000	17500	27750	40000	60000		
Sheffield	11000	12500	21000	23000	25000	27000	52000	56000	25000	27000
South Notts	8500	16000	16000	24000	18500	26500	45000	75000	14000	20000
Nottingham	10750	17500	19500	26500	21000	27000	45000	58000		
Derby	9000	14500	16500	25000	17500	22500	42500	55000	12000	16000
Sheffield	14500	17500	20000	23000	20000	22000	56000	60000		
Leicester	8500	16000	18000	23000	20000	24000	35000	50000	20000	40000
Nottingham	14000	18000	20500	24000	20000	25000	50000	55000	17000	18500
Leicestershire	14000	18000	18000	24000	20000	25000	50000	65000		
Leicestershire	12000	16500	18500	22500	18000	24000	40000	52000		
Derbyshire	13000	19000	19500	27000	20500	28500	40000	50000	16500	27500
ST MIDLANDS										
Nottingham	12000	16750	24500	31000	24500	31000	52000	72000	16500	26000
Leicester	12000	16500	19500	28750	20500	31000	36000	65000	13500	32500
Derby	10750	15500	18250	25250	21500	26500	47500	60000	15000	34000
Sheffield	10000	15000	18000	23000	23000	28000	40000	50000	13000	16000
Leicester	11000	13500	17500	23500	21500	27000	41500	52500	12000	19000
Nottingham	8000	12500	18500	24000	22500	26500	50000	62500	16000	20000
Sheffield	14000	19500	16500	28500	18250	27500	42500	65000	17000	27000
Warwickshire	9000	16500	18500	22000	22000	25000	36000	50000	12000	20000
Warwickshire	12000	18000	16000	24500	17500	25000	47000	62500		
Leicester	14500	16500	18000	21000	19000	24000	47000	56000		
Leicester	10750	13500	18500	24500	18500	25000	43500	61000		
Leicester	17500	20000	22000	25000	24500	28500	56000	62500	19000	25500
Leicester & W Worcs	17000	19000	21500	25000	23000	26000	48000	56000	17000	21000
Leicester	13500	19000	18000	25000	19000	25000	47500	73500	16000	25000
ST ANGLIA										
Nottingham	25000	38000	27000	37500	25000	35000	47000	69000	23000	40000
Leicester	10000	18000	18000	24000	22000	29000	39000	64000	8000	23000
Derby	16000	19000	21500	28000	23500	27000	45000	61000	16000	24000
Derby	15000	22500	25000	35000	22500	30000	40000	55000	17500	22500
Leicester	17500	24000	18000	26000	20500	27500	45000	65000	30000	30000
Leicester	16500	17500	22500	24000	22500	24000	42000	44000	18000	25000
Leicester	15000	20000	19000	28500	25000	30000	45000	55000	20000	25000

REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1984

EAT BRITAIN:

OWNERS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
ANDS	12500	15000	18500	21000	20500	24000	37500	45000		
	10500	18000	18000	22500	21000	25000	42500	56000		
	6500	9500	16500	25000	18250	27000	40000	60000		
1	11500	13000	21500	23500	25500	27500	52000	56000	25000	27000
s	11000	16000	19000	23000	22500	27000	55000	75000	15000	18000
ld	12000	17250	19500	26500	21000	27000	45000	59000		
	9000	15000	16500	25000	17500	23000	42500	56000	12000	16000
	14500	18000	21000	26000	20500	25000	56000	62000		
	8500	16500	18000	24000	21000	25000	47000	52000	22500	27500
on	14000	18000	21000	25000	22000	26000	50000	60000	17000	18500
rshire	14500	18500	19000	26000	20000	26000	55000	68000		
rshire	12500	17000	19000	23500	19000	25000	41000	53000		
re	16000	19000	24500	27500	26500	29500	47500	53500	25000	27500
ANDS	12000	16750	22500	26500	24500	31000	52000	72000	16500	26000
	11500	15000	18000	23500	19000	27000	35000	57500	12000	32500
	11000	17000	18500	26000	22000	27000	49000	65000	15000	35000
	10000	15000	18000	23000	23000	28000	40000	50000	13000	16000
	11000	13500	17500	23500	21500	27000	41500	52500	12000	12000
ton	8000	12500	18500	24000	22500	26500	50000	62500	16000	20000
	17500	20000	18500	29000	18250	28500	50000	55000	17000	21500
hire	9000	16500	18500	22000	22000	25000	36000	50000	13500	20000
	14000	18000	17000	25000	20000	26000	52000	63000		
	14500	17000	18000	22000	20000	25000	48000	57000		
rent	11000	14000	18500	25000	19000	25500	44000	61500		
	18000	20500	22500	25500	25000	29500	57500	65000	19500	26000
Worcs	17500	19500	22000	25000	24000	26500	49000	56000	17250	22250
r	13500	16000	18000	24000	19000	25000	47500	60000	16000	27500
A	26000	42000	31000	42000	33000	40000	65000	90000	26000	40000
gh	10000	18000	18000	25000	22000	29000	40000	67500	8000	23000
	17500	21000	22500	30000	24000	28500	48000	61000	16750	25000
unds	16000	23500	26250	36750	22500	31500	40000	57500	18500	23500
	18250	25250	19000	26500	22000	28500	48000	65000	16000	32000
	16500	17500	22500	24000	22250	24000	44500	45500	18000	25000
	16500	22000	20000	30000	24000	30000	45000	60000	20000	25000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1984

7.51 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST MIDLANDS										
Boston	12500	15000	18000	21000	20500	24000	37500	45000		
Lincoln	11000	18500	18500	23000	21500	25000	45000	57000		
Mansfield	6750	10000	16500	27500	18500	27500	40000	62500		
Nottingham	12000	13500	24000	26000	27500	29500	54000	58000	26000	28000
Carlton (Notts)	13000	17000	20000	24500	24500	28000	60000	80000	16500	19500
Chesterfield	12000	17500	20000	27000	21000	27000	45000	59000		
Derby	9000	15000	17000	25000	18500	23000	42500	56000	12000	16000
Leettering	15000	20000	22000	28000	21000	26000	58000	65000		
Leicester	8600	17000	19500	25500	22750	27000	45000	55000	22500	27500
Northampton	14250	18500	22000	27000	23000	28000	52500	65000	17500	19500
Roughborough	15000	20000	19000	27000	21000	28000	55000	70000		
Linckley	13000	17500	19500	24000	19500	25500	42000	54000		
Luxton	16500	19500	25000	28000	27250	30000	48250	54500	25000	27500
WEST MIDLANDS										
Birmingham	12250	17000	22750	26750	24750	31250	52500	72500	16500	26000
Coventry	11500	16000	18500	25500	19500	29000	36500	59500	10000	34000
Ludley	11500	17500	19000	27000	22500	28000	50000	70000	15000	35000
Sandwell	10500	15500	18000	23000	23500	28500	42500	52500	13000	16000
Salsall	11250	13750	17500	23500	21500	27000	41500	52500	12000	19000
Solverhampton	8000	12500	18500	24000	22500	26500	50000	62500	16000	20000
Stichfield	18000	21000	19250	30500	19000	29750	52000	57000	17500	22250
Stuneaton	9000	16500	18500	22000	22000	26500	36000	53000	14000	23000
Sthrewsbury	14250	18250	17500	26000	20500	26500	52500	65000		
Stafford	15000	17000	18000	22000	20000	25000	48000	57000		
Stoke-on-Trent	11000	14000	18500	25000	19000	25500	44000	61500		
Steamington Spa	19000	22000	24000	27000	27000	32000	60000	67500	20000	27000
Storcester	17750	19750	22000	26000	24500	27500	49000	57000	17750	22500
Stidderminster	14500	17000	19000	25000	20000	25000	50000	60000	16500	27500
EAST ANGLIA										
Stambridge	28000	45000	32000	43000	33000	40000	68000	93000	27000	43000
Steterborough	10000	18000	18000	26500	22000	29000	40000	80000	10000	25000
Stpswich	18500	22000	23000	31000	25000	30000	50000	65000	17500	26000
Stury St Edmunds	17000	24500	27000	37250	23500	32500	40000	58500	19000	24000
Sting's Lynn	17000	17500	24500	25000	24000	26000	50000	52000	19000	26000
Storwich	16500	22000	22500	31000	24500	30000	45500	60000	21000	29000

REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1985

Great Britain:

HOUSES OWNED BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
ANDS	14000	16500	19000	22500	22000	25500	37500	45000		
	12500	19000	19500	23000	21500	25000	45000	57500		
	7000	10500	17000	27500	19000	28000	40000	62500		
m	12500	14000	24500	26500	28000	30000	55000	59000	26000	28000
Notts)	13500	17500	20500	24500	24500	28500	60000	80000	17000	20000
eld	12000	17750	20250	27250	21000	27250	45000	59000	17000	24000
	10000	16000	19000	25000	19500	24000	45000	67500	14000	17500
	15000	20000	22000	28000	21500	27000	58000	65000		
	8700	17000	20100	26250	23000	27500	46000	57000	22500	27500
on	14500	18500	22500	27500	24000	29000	55000	65000	17500	20000
ugh	15000	20000	20000	27000	22000	29000	55000	70000		
	16000	19000	24000	28000	24500	27000	46000	55000		
	16500	19500	25000	28000	27250	30000	48250	54500	25000	27500
ANDS										
n	12500	17000	23250	28500	24750	31500	50000	70000	16500	26000
	11500	16500	18000	26500	19500	30000	37500	60000	19000	35000
	11500	17500	19500	27500	22500	28000	50000	70000	15000	35000
	10500	15500	18500	24000	24500	29500	42500	52500	14000	17500
	11500	14000	18000	24000	22250	28000	42000	52500	12000	19000
ston	8000	12500	18500	24000	22500	26500	50000	62500	16000	20000
	18000	21000	19250	30500	19500	30000	52000	57500	17750	22750
	10000	16500	18500	25000	20000	28500	38000	60000	14000	23000
	14250	18250	18000	27000	21000	27000	52500	65000	16000	18000
	16000	19000	18000	22000	21000	26000	48000	57000	14000	15000
rent	11000	14000	18500	25000	19000	25500	46000	62000		
Spa	20000	23000	25000	28000	28000	32500	62500	70000	20000	27000
	18000	20500	22000	26500	25000	28500	50000	60000	17750	23000
ter	14500	18000	19000	25000	20000	25000	50000	65000	16500	30000
A										
	30000	48500	34000	47500	34500	42000	76000	98000	28500	47000
gh	12500	18000	18000	30000	22000	33000	55000	90000	20000	35000
	19500	23000	25000	32500	27500	31500	52000	67500	18500	27000
munds	22500	28000	30000	38000	28500	35000	42500	60000	20000	25000
n	16000	19000	24000	33000	23000	30000	50000	65000	23000	35000
	17000	23000	23000	33500	26000	32500	46000	62500	22000	32000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1985

5.3 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernised)		Interwar semi-detached house (modernised)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST MIDLANDS										
Boston	15000	16000	19000	23000	22000	25500	37500	45000		
Lincoln	15000	19750	22000	26000	22000	25000	47500	60000		
Mansfield	10000	11000	17000	27500	19500	28000	40000	62500		
Nottingham	14500	16000	26700	28700	29000	31000	60000	65000	26000	28000
Carlton (Notts)	16000	19500	23000	26000	26000	30000	60000	80000	18000	22000
Chesterfield	13500	19500	22000	28500	21500	27500	45000	59000	17000	24000
Derby	10750	17000	19000	25000	19500	25000	47500	70000	14000	17500
Kettering	15000	20000	24000	29000	24500	28000	60000	70000		
Leicester	17000	20000	24500	28500	25000	28000	50000	60000	18000	19000
Northampton	14500	19000	22500	28500	24000	30000	55000	70000	17000	20500
Loughborough	16000	20500	24000	30000	23000	29000	60000	80000		
Buxton	19500	25000	26000	32000	27500	32500	48500	56500	25500	29000
WEST MIDLANDS										
Birmingham	15000	23750	24750	34000	25000	32000	50000	70000	16500	26000
Coventry	13250	18750	21000	31000	21500	32500	40000	62500	19000	35000
Dudley	15000	18500	23000	28000	24000	30000	52500	75000	15000	35000
Sandwell	13500	18500	23000	29000	25000	30000	45000	55000	14000	17500
Walsall	13000	15500	20500	26500	22750	30000	43250	54000	12250	19500
Wolverhampton	10500	13500	20500	25500	22500	27000	50000	62500	16000	20500
Lichfield	20000	23000	23500	33000	20000	30500	52500	57500	18250	23000
Nuneaton	14000	16500	20000	26000	21000	30000	40000	61000	14000	23000
Shrewsbury	18000	20000	20000	30000	21500	27000	52500	65000	16500	19000
Stafford	16500	19500	19000	23000	22000	27000	48000	60000	14000	16000
Stoke-on-Trent	11000	15500	21000	25500	21500	26000	47000	60000		
Leamington Spa	24000	27000	27500	31000	30000	35000	66000	73000	20000	27000
Worcester	18500	20500	24000	27000	26000	30000	52500	75000	18000	23000
Kidderminster	15500	20000	20000	28000	20000	26000	52500	65000	17000	30000
EAST ANGLIA										
Cambridge	39000	56000	40000	56000	36500	44500	79000	102500	30000	48000
Peterborough	18000	30000	25000	30000	24000	34000	55000	90000	21000	30000
Ipswich	23500	27000	28000	36000	30000	36000	59000	78000	23000	30500
Bury St Edmunds	28500	31500	37000	39000	30000	36000	50000	62000	22500	27500
King's Lynn	18000	20000	27000	35000	24000	31000	50000	65000	23500	35000
Norwich	22500	26500	26000	37500	28000	34000	55000	70000	20000	28000

REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: SPRING 1986

EAST BRITAIN:
OWNERS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
ANDS	16000	17500	20000	23000	23000	26000	40000	50000		
	16000	20000	22500	26500	22500	26000	49500	60000		
	10500	12000	17500	28000	20000	28000	42500	67500		
n	15000	17000	27500	29500	30000	32000	62000	66000	26000	28000
Notts)	17000	20000	24000	27500	27000	30000	62500	80000	18000	22000
eld	13500	20000	22500	29000	22000	25000	45000	60000	17250	24500
	11000	17500	20000	26500	20000	26000	47500	75000	14000	17500
	22500	25000	26000	29000	26000	30000	65000	75000		
on	18000	20500	28500	33000	26500	30000	55000	65000	18000	20000
ugh	15000	20000	24000	30000	25000	32500	57500	72500	18000	22000
	16000	21000	25000	31000	25000	32000	60000	80000		
	19500	25000	26000	32500	27500	33500	49500	56500	26000	30000
ANDS										
n	16000	23750	24750	34000	25000	36000	50000	70000	17000	26000
	14000	19500	21500	33000	22500	34000	42500	67000	19000	35000
	15000	19750	23500	29000	25000	31000	52500	75000	15000	35000
	13500	18500	23000	29000	25000	30000	45000	55000	14000	17500
	13250	15750	21000	27000	23250	30500	44000	55000	12500	20000
oton	11000	14000	20750	26250	22750	27500	50000	62500	16000	21000
	21000	24000	24250	34000	22500	32500	53000	59000	18750	23500
	14000	16500	22000	27500	22000	30000	40000	61000	14500	25000
y	18000	21000	20000	30000	21500	27000	52500	66500	16500	19000
	17000	20000	20000	24000	23000	28000	48000	60000	15000	17500
rent	11500	16500	21000	26000	21000	26000	47000	60000		
Spa	26000	30000	30000	35000	32500	37500	70000	77000	21000	28000
	19500	21500	25000	28500	27000	31500	53000	75000	19000	24000
ster	17000	21500	21500	29000	23000	30000	57000	67500	17000	32000
IA										
ugh	42000	70000	43000	58500	40000	50000	90000	110000	34000	52000
	18000	26000	24000	33000	24000	36500	53500	92000	19000	32000
	24750	29000	29000	37500	32000	37000	60000	80000	24500	32000
munds	29500	34000	38500	43500	31500	38000	55000	70000	24000	29500
n	18000	24000	27000	37000	26000	32000	50000	65000	23500	35000
	23000	27000	26500	38000	29000	35000	55000	70000	24000	29000

NLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RICE RANGES: AUTUMN 1986

55 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST MIDLANDS										
Nottingham	16500	18500	20500	24000	23500	26500	40000	52500		
Lincoln	16500	24000	23000	28000	24000	27500	52500	62500		
Leicester	10500	12500	17500	28000	20000	28000	45000	67500		
Nottingham	16000	18250	29000	31000	31000	33500	63000	66000	26000	28000
Ilkeston (Notts)	17500	20500	25000	28500	28000	31500	65000	82500	18500	22500
Leicester	14000	22500	23500	32000	23000	28500	47000	65000	18500	25500
Derby	11500	18000	21000	28000	21000	27500	50000	80000	14500	18000
Nottingham	27000	30000	32500	36000	28000	35000	70000	85000		
Leicester	19000	23000	29000	33000	28000	32000	55000	65000	18000	21000
Northampton	17000	23000	26000	33000	26000	35000	57000	75000	18000	23000
Loughborough	17500	23000	26000	33000	27500	34000	62500	82500	16000	18000
Nottingham	20500	25500	26500	33000	28500	35000	52500	60000	27500	32000
EAST MIDLANDS										
Birmingham	16250	25000	25250	38000	25000	39500	60000	74000	17000	27000
Leicester	15000	22500	24000	36500	24500	37500	45000	72000	19000	35000
Leicester	16000	21000	24500	30500	27000	33000	57000	80000	15000	35000
Leicester	14500	20000	24000	30000	26000	31500	46000	57000	15000	18500
Leicester	13500	16250	22000	28000	24000	32000	44750	56000	12750	20500
Northampton	11500	15000	21500	26500	23000	28000	52500	65000	16000	21000
Leicester	22750	26000	26000	36000	25000	33500	58000	64000	19500	24500
Leicester	14500	16500	24500	31000	24500	32500	45000	66000	15500	25000
Leicester	20000	24000	22500	33000	23000	30000	55000	75000	17000	21000
Leicester	18000	21000	21000	26000	24000	29000	50000	65000	16000	18000
Leicester	12250	16500	21000	26000	22000	28000	47000	60000		
Leicester	28000	32000	33000	38000	35000	40000	76000	84000	23000	30000
Leicester	19500	23000	27500	32500	28500	34000	55000	75000	19500	24000
Leicester	18000	23000	23000	30000	25000	32500	60000	70000	18000	35000
EAST ANGLIA										
Leicester	46000	80000	47000	62500	43000	55000	97000	120000	37000	55000
Leicester	18500	28000	24500	34000	28500	38500	50000	105000	17000	42500
Leicester	26500	30750	31000	40500	33500	39500	63000	82500	26000	34000
Leicester	31500	36500	40000	47500	33500	39750	60000	75000	25500	30000
Leicester	19000	26000	30000	40000	29000	35000	52500	67500	24000	36000
Leicester	24500	30000	29000	43000	31000	38500	60000	75000	28000	37000

D REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1983

REAT BRITAIN:

OWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
NDON										
	22500	28000	30000	35500	39000	44000			26500	30000
nlets	20000	27500								
	37000	43000							44000	54500
r	30000	50000			70000	80000			30000	35000
reenwich	22000	28000	33000	40000	38000	46000	60000	90000	25000	34000
	27500	31000	37000	42000					30000	35000
	24250	30000	33250	43750	41000	47000	53250	74000	26000	36500
k	24000	28000	35000	42500	37500	45000	100000	150000	28000	36000
& Fulham	33000	65000							34000	55000
/Chelsea	45000	120000			90000	165000			40000	95000
th	32500	47500	40000	55000	46000	67500			33000	70000
rster									55000	120000
rster	33000	36000							47000	73000
NDON										
& Newham	23000	25000	26000	35000	30000	33000			24000	26000
	28000	30000	39000	42500	41000	44000	75000	77500	38000	40000
	29000	30000	32000	34500	70000	80000	80000	120000	27000	29000
	23000	25000	29500	35000	34500	43000	65000	82000	23000	42000
e	24000	32000	34000	46000	36000	48000	67000	82000	26000	44000
Forest	23000	28500	36000	43500					28500	34000
	27500	37500	38000	46000	37000	48500	65000	90000	37500	47500
	24000	34000	28500	38000	34000	50000	75000	130000	26000	41000
	28000	30000	38000	42000	45000	47000	77000	80000	35000	37000
on	24000	30000	33000	40000	35000	42000	70000	85000		
	30000	51000	33000	50000	35000	47000			28000	38500
	29000	36500	36500	45000	40500	49500	74000	85000	28500	40000
	27000	31000	36000	43500	41500	50000	74000	82500	31500	39000
	30000	35000	40000	48000	50000	55000	100000	110000	35000	45000
	32000	44000	40000	55000	40000	65000	75000	140000	32500	55000
	37000	50000	40000	55000	45000	60000	80000	130000	35000	50000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1984

57 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
INNER LONDON										
Bankney	23000	28750	31000	36750	40500	45750			27000	30750
Lower Hamlets	21000	28000								
Wandsworth	39000	45000							46000	57000
Woolwich/Greenwich	23000	30000	34500	42000	40000	48000	62000	92000	26250	36000
Walthamstow	26000	32000	38000	43000					28000	35000
Waltham	25750	31750	35000	45500	43000	49000	55500	77000	27500	38000
Walthamstow	25000	29000	35000	42500	37500	45000	100000	150000	29000	37500
Walthamstow & Fulham	35000	72500							35000	57000
Walthamstow/Chelsea	48000	130000			70000	175000			42500	100000
Westminster									55000	120000
Westminster	34000	37000							47000	73000
OUTER LONDON										
Acton & Newham	23500	25500	28500	37000	31500	33500			25000	27000
Acton	28500	31000	37000	44250	42250	45250	76500	79000	39000	41000
Acton	29000	31000	33000	35000	75000	85000	85000	125000	27000	29000
Acton	25000	27000	29500	35000	35000	45000	75000	85000	25000	42000
Acton	24250	32500	34750	47000	36000	48000			26500	45000
Acton Forest	24000	29500	36500	44500	40000	50000			29750	35500
Acton	29000	39000	39500	47500	39500	50500	67500	95000	39000	49500
Acton	25500	36000	30000	40000	36000	52500	79000	133000	27500	43000
Acton	31000	32000	42000	44000	46500	48500	80000	82500	38000	39000
Acton	24000	30000	33000	42500	37500	45000	75000	95000		
Acton	32750	54500	35000	53000	37000	50000			30500	42000
Acton	30000	38000	39250	47500	44000	53000	77500	87500	31000	40000
Acton	27750	34000	38500	45000	42750	51500	76250	85000	32500	40000
Acton	33000	40000	42000	50000	50000	58000	100000	115000	37000	50000
Acton	33500	50000	41500	57500	41000	75000	77500	145000	35000	70000
Acton	47500	55000	62500	67500	65000	70000	130000	150000	52500	60000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1984

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
LONDON										
Hamlets	25000	31000								
	41000	47250							48300	59000
	24000	30000	32000	39000					28500	32500
	24500	31500	36000	44000	42000	50000	65000	100000	27500	37500
	28000	34000	39500	44500					30000	36500
Ham	27000	33500	36750	47750	45000	51500	57750	80000	29000	40000
Ham/Peckham	27500	31500	38000	46500	40000	50000	110000	165000	30000	40000
	35000	82000							35000	65000
Ham/Chelsea	55000	150000			80000	185000			50000	120000
Ham/Minster									57500	130000
Ham/Minster	35000	40000							49000	76000
LONDON										
	29000	32000	32000	42000	39000	49000	80000	97000	27500	65000
	28500	33500	39000	45500	43000	46500	77500	80500	39000	42000
Ham	29000	33000	35000	40000					25000	29000
Ham	25250	34000	37000	50000	38500	51000			28000	48000
	34000	42000	43000	52000	42000	53000	80000	110000	41000	54000
	30000	50000	39000	65000	40000	65000	80000	180000	32000	65000
	35000	37000	44500	47000	53000	55000	88000	90000	39000	41000
Ham	30000	35000	35000	45000	43000	50000	85000	100000		
Ham	35000	63000	38000	65000	42000	52000			34000	48000
	31000	40000	42000	52000	45000	54000	85000	95000	33500	45000
Ham/Sutton	29000	36000	42500	52500	45000	55000	80000	95000	33500	42500
Ham/Wandsworth	36000	53000	44500	60000	44500	80000	89000	158000	38000	75000
Ham	35000	42000	44250	51500	52500	61000	105000	120000	39000	52500

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
LONDON										
Hamlets	26000	32000								
Hampton	43750	50600							51750	63200
Hampton	25000	32500	35000	42000					28500	32500
Hampton	25000	33000	37000	45750	43500	52000	67000	105000	28500	39000
Hampton	29000	35000	40000	46000					31000	37000
Hampton	32000	36000	38500	50000	50000	55000	60000	85000	32000	42000
Hampton	27500	32500	40000	50000	42500	55000	110000	175000	30000	42500
Hampton	40000	86000							40000	75000
Hampton/Chelsea	62500	165000			90000	195000			52500	127000
Hampton									60000	150000
Hampton	48000	52000							54000	90000
LONDON										
Hampton	31000	34000	34500	45500	41500	52000	90000	120000	30000	65000
Hampton	29500	34000	40000	46500	45000	49000	82500	90000	39000	43000
Hampton	27000	35000	40000	48000	42000	56000			32000	47000
Hampton	36000	45000	45000	55000	47500	57500	90000	120000	42500	55000
Hampton	35000	50000	39000	65000	40000	65000	80000	200000	32000	65000
Hampton	36000	38000	49000	51500	55000	57000	89000	91000	44000	46500
Hampton	33500	38000	36000	50000	43000	51000	85000	100000		
Hampton	37000	66000	39500	68000	44000	55000			36000	50000
Hampton	32000	41000	45000	55000	46000	56000	75000	105000	35000	45000
Hampton/Sutton	30000	37000	43500	53500	46000	57000	82500	98000	33500	43500
Hampton/Wandsworth	38000	56000	46500	62000	47000	84000	95000	168000	40000	79000
Hampton	38500	46500	48500	56000	57000	66500	114000	130000	42500	57000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernised)		Interwar semi-detached house (modernised)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
LONDON										
Hamlets	33000	50000								
	75000	90000							48000	75000
	45000	55000	50000	57500					30000	36000
	30000	40000	40000	60000	50000	65000	70000	130000	32000	45000
	37000	43000	49000	56000					33500	39000
Ham	36000	42000	45000	55000	52000	58000	63000	90000	33000	38000
Ham	31000	35000	42500	52500	45000	57500	120000	190000	35000	45000
	75000	95000							45000	80000
Ham/Chelsea	70000	200000			100000	205000			57000	135000
Ham									68000	165000
Ham	58000	58000							58000	110000
LONDON										
Ham	35500	39000	42000	55000	46000	54500	94500	125000	32000	69000
Ham	37500	41500	47500	55000	50000	65000	92500	97500	43000	49000
Ham	37000	46000	47000	55000	45000	58000	95000	110000	35000	48000
	47000	57000	50000	60000	46000	58000	100000	130000	45000	57500
	39000	55000	45000	75000	45000	75000	80000	250000	35000	65000
	42500	45000	58000	60000	61000	62500	105000	110000	45000	47500
Ham	40000	55000	45000	65000	53000	60000	90000	135000		
Ham	50000	75000	53000	63000	50000	80000	150000	175000	38500	46000
	37750	47000	50000	59000	53000	62500	76500	115000	38000	50000
Ham/Sutton	35500	39000	45000	62000	57000	67000	90000	105000	36000	53000
Ham/Wandsworth	50000	65000	53000	72000	52000	90000	105000	185000	44000	85000
Ham	55000	75000	65000	85000	60000	80000	120500	160000	45000	65000

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1986

1 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
NORTH LONDON										
Hamlets/N'ham	36000	55000	42500	46000						
den	77500	95000							50000	78000
ney	45000	60000	52000	60000					30000	36000
ey/Greenwich	32000	42000	42500	62500	52500	67500	75000	130000	34000	47500
eth	40750	47500	55000	62500					39000	43000
sham	38000	44000	46000	57500	52000	60000	65000	92000	34500	40000
hwark	32500	40000	45000	55000	47500	60000	125000	200000	36000	47500
iam	80000	100000							50000	90000
lton/Chelsea	77500	225000			110000	240000			65000	150000
stminster									75000	175000
stminster	64000	65000							65000	120000
SOUTH LONDON										
ord	40000	45000	45000	60000	50000	60000	100000	130000	35000	70000
eld	41000	45000	51000	60000	52000	67500	97500	105000	43000	52000
ridge	41000	48000	52000	62000	51000	64000	105000	125000	38000	50000
et	59000	64000	60000	65000	48000	62000	100000	135000	45000	59000
ng	50000	65000	50000	80000	50000	80000	90000	200000	38000	70000
ow	46000	48500	59000	61000	62000	63500	112000	117000	48000	49500
ingdon	44500	58000	50000	67000	55000	69000	100000	165000	42500	50000
slow	50000	90000	55000	75000	55000	85000	150000	180000	39000	50000
ley	42500	50000	55000	65000	55000	65000	95000	120000	40000	52000
don/Sutton	41000	46000	51000	68000	58000	68000	100000	130000	38000	58000
on/Wandsworth	55000	68500	57950	80000	55000	95000	130000	215000	52000	102500
ston	60000	80000	70000	87500	65000	90000	130000	175000	48000	70000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1986

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
LONDON										
mls/N'ham	35000	70000	46000	50000						
	90000	115000							70000	100000
y	52500	70000	57500	65000					32500	40000
/Greenwich	36000	47500	47500	70000	52500	67500	80000	140000	36750	50000
h	42000	49000	59000	67000					41500	45500
am	40000	50000	48000	61000	54000	68000	70000	100000	36000	43000
ark	40000	55000	50000	65000	55000	70000	125000	200000	40000	55000
	90000	115000							50000	115000
on/Chelsea	90000	260000			125000	265000			70000	157000
minster									82000	190000
minster									75000	140000
LONDON										
d	42500	48000	48000	65000	52000	65000	105000	135000	40000	70000
d	43500	50000	55000	65000	55000	70000	110000	130000	47000	60000
dge	46000	52000	58000	72000	56000	70000	120000	140000	42000	55000
	65000	75000	65000	72000	60000	71000	110000	150000	50000	65000
	55000	72000	60000	85000	60000	80000	110000	220000	50000	77000
	53000	56000	61000	69000	80000	87000	122000	147000	52000	55000
gdon	50000	65000	55000	78000	60000	75000	120000	185000	47000	55000
ow/Feltham	55000	100000	58000	80000	60000	89000	150000	200000	46000	55000
y	48000	54000	60000	67500	60000	67500	105000	135000	45000	58000
n/Sutton	45000	52000	56000	75000	63000	75000	120000	150000	42000	62000
/Wandsworth	62000	75000	65000	90000	60000	100000	145000	230000	60000	105000
on	65000	85000	75000	90000	72000	95000	140000	200000	52000	75000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

CE RANGES: AUTUMN 1983

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
H EAST										
ord	15000	17500	24500	31000	25500	29500	50000	65000	20500	30500
rtfordshire	27500	32000	35000	40000	37500	44000	75000	85000	22000	25000
n	18000	22000	27500	40000	28500	40000	65000	80000	20000	27000
lbans	28000	33000	35000	47500	40000	50000	65000	95000	31500	39500
ord	27000	30000	36000	40000	41000	48000	73000	88000	32000	42000
ldon	17500	20500	28000	34000	30000	38000	60000	75000	18000	23000
nsford	21000	29500	26000	39000	28500	39000	58000	95000	20000	30500
vester	20000	21000	24000	27000	24000	28000	58500	65000	25000	70000
ow	25000	40000	28000	50000	29000	57500	50000	145000	17000	25000
end on Sea	20500	22500	27000	31000	27000	34000	62500	67500	22500	31500
iton	23000	26000	28000	33000	28000	34000	66000	72500	25000	28000
erbury	19500	25000	25000	35000	25000	32500	45000	57500	22000	27000
ourne	20000	25000	28000	33000	30000	37500	50000	65000	27500	33000
Kent	17700	21000	25500	32750	25500	33750	46000	61500	21500	30750
stone	23000	25000	31000	35000	34000	38000	56000	73000	20500	23500
y	17250	19750	24500	27500	25500	29000	48500	53500	17000	19000
idge Wells	24000	25750	34000	37000	35000	40000	67500	75500	27500	32500
ester	23000	32000	25000	45000	30000	37500	55000	85000	30000	36000
xford	27500	33000	32000	38000	35000	40000	71000	79000	28000	45000
i Surrey	29000	39000	34000	50000	37000	60000	71000	130000	28000	41000
ite	28000	34000	35000	42500	34000	40000	55000	85000	30000	36000
ing	22500	29000	27500	35000	30000	36000	62000	72000	24000	30000
Berkshire	28000	32000	36750	42500	35000	43000	72500	80500	28500	33000
ks	20000	22000	34000	36000	33000	35000	64000	66000	22500	24500
d	28500	37500	30000	45000	31500	46950	55000	100000	25000	42000
ordshire	17000	28000	22000	40000	24500	36000	42500	62000	20000	28000
ng	24000	27000	32000	37000	32000	37000	65000	75000	26000	29000
ks	21000	30000	27000	42000	32500	44000	67000	87500	26000	45000
gstoke	25500	29500	34000	39500	29500	40000	55000	78000	23500	34000
mouth	14500	17000	22500	24500	25000	29000	55000	60000	23000	39000
t	18000	22000	22000	25000	26000	30000	50000	60000	20000	35000
ester	22000	28000	26500	36500	28000	37000	55000	70000	29500	35500
t (LOW)	17000	20000	21000	25000	23000	26000	45000	50000	22500	32500
ampton	12000	23000	22000	32000	24000	32000	47000	75000	27000	45000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: SPRING 1984

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
nd	16500	19500	26000	33000	27500	33000	58000	75000	22500	32500
tfordshire	30000	33000	37500	42500	42500	47500	82500	87500	24000	27000
	19000	23000	27500	42500	29000	42500	65000	80000	21000	30000
ans	30000	34000	36500	50000	42000	52500	75000	95000	35000	43500
nd	28000	32000	37000	48000	42000	50000	75000	95000	33000	43000
don	18000	24000	29000	37500	32000	40000	62000	80000	19000	25000
sford	22000	26000	28000	33000	30000	34000	65000	90000	22500	25000
ester	20750	22000	26000	27250	28500	29750	59500	65000	18000	26000
	32000	40000	35000	55000	38000	57500	90000	145000	40000	70000
nd on Sea	21000	23000	27500	31500	28000	35000	65000	70000	23000	53000
on	24000	27000	30000	35000	31000	35000	67500	90000	26000	30000
bury	21000	27500	27000	37000	27000	38000	50000	65000	23000	32000
urne	21500	26500	29000	34000	31000	38000	57500	75000	27500	35000
ent	18250	22000	28000	34500	28500	35000	48000	62000	23000	33000
one	23500	25000	32000	36000	35000	38500	57000	74000	21500	24500
	17000	20000	24500	27500	27500	30000	48500	53500	17500	20000
dge Wells	27000	30000	37000	40000	38000	43000	74000	83000	30000	35000
ster	31000	35000	50000	52000	45000	49000	70000	75000	39000	41000
ord	30000	34500	36000	38000	37000	43000	76000	87000	37000	45000
Surrey	30000	39000	37000	50000	38000	60000	72000	130000	29000	41000
e	29000	37500	35000	50000	34000	47500	70000	105000	25000	39000
ng	24000	31000	28500	36000	31000	37000	65000	72000	24500	31000
erkshire	31000	36000	39000	46000	40000	48000	77500	90000	32000	37000
s	20000	22000	36000	38000	34000	36000	72500	77500	24000	26000
	28500	37500	32000	45000	32000	45000	72500	82500	27500	42500
rdshire	17000	20000	24000	32000	26000	32500	45000	60000	20000	22000
g	26000	29000	34000	40000	34000	40000	70000	80000	28000	31000
s	22000	33000	29000	41000	34000	41000	70000	88000	29000	38000
stoke	26000	28000	35000	40000	31500	37500	60000	80000	23500	25000
outh	14500	17000	23500	25500	28500	33000	55000	60000	23000	39000
	22000	24000	23000	26000	27000	35000	54000	64000	20000	35000
ster	25000	30000	35000	45000	35000	43000	65000	75000	38000	42000
(IOW)	17500	20000	24000	27000	24000	28000	50000	55000		
mpton	12000	25000	24000	36000	25000	35000	50000	78000	22000	46000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: AUTUMN 1984

GREAT BRITAIN:
TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
Aldershot	16500	21000	26000	37500	28000	37500	60000	75000	25000	38500
Andover	35000	38000	40000	45000	48000	52000	85000	110000		
Arundel	21000	27000	27500	47000	31000	47000	70000	90000	22500	35000
Basingstoke	34000	38000	45000	55000	47500	57500	85000	105000	36000	43000
Barnstaple	29500	34000	39000	50000	44500	53000	78000	95000	35000	45500
Barnstaple	18000	25000	31000	40000	35000	42000	65000	84000	20000	26000
Barnstaple	23000	27250	29500	34750	31500	35750	68000	94500	23750	26250
Barnstaple	22250	23250	27500	28750	29750	31500	61000	66500	18500	26000
Barnstaple	35000	42000	40000	55000	42000	58000	88000	145000	40000	70000
Barnstaple	23000	25000	29000	32000	31000	37500	68000	73000	25000	56000
Barnstaple	26000	29000	33000	39000	34000	40000	75000	90000		
Barnstaple	22000	29000	28500	39000	28500	40000	52500	68250	25000	34000
Barnstaple	23500	28000	31000	36000	33000	40000	60000	90000	29000	36000
Barnstaple	19250	23250	29500	36500	29000	36000	50000	65000	23000	35000
Barnstaple	24000	26000	36000	38500	36500	41000	65000	80000	22000	25500
Barnstaple	18000	21000	26500	29500	31000	34000	52500	60000	17500	20000
Barnstaple	25000	30000	38000	43000	33000	42000	75000	85000	30000	35000
Barnstaple	31000	37500	50000	55000	45000	49000	70000	78000	39000	42500
Barnstaple	33500	36000	37500	42500	42500	45000	87000	95000	40000	47500
Barnstaple	40000	50000	45000	55000	50000	70000	80000	170000	40000	60000
Barnstaple	33000	45000	38000	55000	37000	50000	75000	115000	34000	45000
Barnstaple	25000	32000	29500	37000	32000	38000	68000	76000	25000	32000
Barnstaple	33000	38000	42000	49000	44000	51000	80000	97500	34000	40000
Barnstaple	24000	26000	37500	42500	37500	40000	75000	80000	26500	28500
Barnstaple	28500	40000	32000	47000	32000	45000	73000	86000	30000	44000
Barnstaple	18500	21500	25000	33000	28000	35000	48000	62000	22000	24000
Barnstaple	27500	30000	36000	42000	36000	42000	73500	85000	29000	32500
Barnstaple	27000	34000	35000	45000	37000	46000	75000	90000	33000	39000
Barnstaple	28000	30000	37000	40000	33500	41500	63000	80000	25000	28000
Barnstaple	16000	18500	25000	30000	31000	36000	60000	67500	24000	39000
Barnstaple	22000	26000	25000	32000	30000	38000	55000	70000	20000	35000
Barnstaple	27250	32750	35500	46250	35500	44000	70750	81750	40750	45000
Barnstaple	17500	21000	24000	28000	24500	28500	50000	55000		
Barnstaple	12000	26000	24000	39000	25000	38000	60000	78000	29000	46000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

CE RANGES: SPRING 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
H EAST										
ord	17000	20000	27000	39000	29000	39000	63000	77500	25000	38500
ford	38000	40000	42000	50000	50000	56000	90000	120000	30000	40000
n	21000	28000	29000	50000	32000	48000			23000	36000
lbans	36000	40000	48000	58000	50000	60000	90000	110000	37000	44000
ord	30500	35000	40000	51500	46500	55000	81000	99000	36500	47250
s	19000	26000	32000	42000	35000	44000	65000	88000	21000	26000
msford	25000	29000	31000	37000	33000	40000	71500	90000	24500	27500
hester	22500	24500	28500	30000	30000	33000	62500	67500	19500	27000
hton	45000	50000	60000	65000	55000	60000	100000	130000	32500	65000
hend-on-Sea	24000	26000	30000	33500	32500	39000	70500	76000	26000	58500
hton	27000	30000	35000	40000	36000	42000	75000	90000	27500	35000
erbury	23500	32000	31000	42000	32500	42500	55000	72500	26500	35500
bourne	24000	28500	31000	37000	33000	41000	65000	95000	29500	37000
estone	20250	24500	30250	37500	31250	38500	53000	69500	24250	36750
stone	25000	28000	37500	41000	37500	43000	70000	85000	23000	26500
'ham/Chatham	19000	25000	30000	38000	34000	41000	54000	65000	20000	23000
ridge Wells	27000	33000	38000	46000	36000	45000	75000	95000	30000	36000
ham	32000	37500	50000	57500	45000	49000	72500	87500	39000	42500
ford	35000	38000	39000	44000	44000	47500	89000	97500	45000	50000
on-on-Thames	41000	51000	47000	56000	51000	70000	85000	180000	42000	61000
ate	35000	50000	40000	60000	39000	55000	80000	125000	35000	48000
hing	26000	33000	31000	39000	34000	40000	70000	79000	26000	33000
enhead	37000	43000	46000	55000	49000	57000	90000	110000	36000	44000
sbury	27000	30000	40000	45000	40000	46000	78000	100000	28000	30000
rd	28000	45000	33000	50000	33000	50000	73000	90000	32000	46000
ury	18500	23000	26000	35000	28000	36000	48000	64000	22000	24000
ing	28000	31000	37000	42000	37000	43000	75000	87000	30000	34000
Wycombe	27500	36000	36000	48000	38500	48000	80000	97500	34000	40000
ngstoke	30000	32000	41000	44000	34000	42500	65000	80000	28000	30000
smouth/Havant	19000	24000	27500	33000	33000	38000	63000	67000	24000	40000
ham	23000	27000	26000	32000	32000	38000	55000	70000	22000	35000
hester	28500	34500	38000	49500	38500	47750	74000	85250	42500	47000
ort(IOW)	19500	23000	28000	31000	27000	32000	50000	57500		
hampton	13000	28000	25500	40000	26000	40000	60000	80000	32000	50000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house (modernised)		Interwar semi-detached house (modernised)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
id	22000	30000	30000	45000	30000	45000	65000	80000	26000	45000
nd	40000	50000	45000	55000	54000	59000	95000	125000	32000	46000
	28500	33000	37500	55000	38500	50000	90000	100000	33000	43000
ans	42500	46500	56000	64000	56000	64000	110000	130000	40000	50000
id	40000	45000	55000	65000	55000	65000	90000	110000	37000	51000
	27000	30000	44000	48000	38000	48000	72000	96000	23000	30000
ford	27500	32500	35250	41750	35000	42000	75000	95000	26000	29000
ster	26000	29000	30000	37000	36000	40000	63000	75000	26000	30000
on/Chigwell	52500	57500	67500	75000	60000	65000	105000	135000	35000	60000
nd-on-Sea	25500	28000	33500	37000	36000	42000	73500	80000	27000	60000
on	33000	36000	40000	45000	42500	45000	85000	100000	27500	35000
ury	26500	34500	35000	45000	34000	45000	58500	77000	28000	37500
rne	29000	34000	35000	45000	35000	43000	75000	105000	29500	37000
one	22000	28000	31500	39500	32500	40000	55500	72500	25250	38250
one	28000	31000	40000	45000	41000	46000	75000	90000	24000	28000
ham	22000	28000	32000	41000	36000	46000	57000	70000	22000	25000
lge Wells	30000	35000	41000	48000	40000	49000	78000	95000	30000	38000
i	39000	41000	52000	56000	45000	49000	80000	90000	35000	37500
rd	40000	45000	45000	50000	47500	52000	95000	105000	47500	52500
on-Thames	44500	55750	50000	61500	55500	77700	88750	188500	44500	66500
	38000	54000	45000	63000	45000	58000	90000	135000	36000	52000
ig	32000	37000	42000	48000	38000	44000	80000	88000	31000	37000
lead	43000	47000	55000	65000	52000	62000	100000	130000	39000	47500
ry	34000	36000	52000	56000	45000	48000	87000	100000	29000	31000
	45000	57000	40000	52500	37500	50000	75000	90000	36000	50000
	23000	24500	29000	35000	28000	37000	50000	65000	22500	24500
	33000	35000	46000	48000	45000	50000	85000	95000	33000	36000
combe	35000	42000	41000	50000	43000	51000	85000	110000	35000	42000
toke	33000	35000	45000	50000	42500	50000	70000	85000	30000	33000
uth/Havant	27500	31500	38000	42500	36000	40000	65000	70000	24000	43000
	26000	31000	31000	37000	35000	43000	60000	80000	25000	32000
ster	39000	47000	48000	57500	42000	52000	80000	97000	45000	55000
(IOW)	21000	25000	30000	35000	30000	35000	52500	62500		
pton	24000	26000	31000	34000	32000	42000	57500	85000	34000	52000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIODS: SPRING 1986

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
Abingdon	28000	33000	39000	49000	40000	50000	68000	85000	27500	45000
Abingdon	45000	55000	52500	62500	55000	62500	100000	130000	35000	40000
Abingdon	29000	33500	38000	56000	38500	50000	90000	100000	33000	43000
Abingdon	45000	55000	60000	70000	60000	70000	115000	140000	42500	52500
Abingdon	43000	47000	59000	70000	57750	70000	95000	115000	39000	53000
Abingdon	28000	34000	46000	54000	44000	54000	75000	97500	25000	32000
Abingdon	30000	35000	38000	45000	37000	44000	80000	100000	28000	32000
Abingdon	27000	30000	31000	39000	37000	41000	64000	77000	27000	31000
Abingdon/Chigwell	57500	62000	70000	80000	65000	72500	110000	145000	38000	65000
Abingdon-on-Sea	27000	32500	36000	40000	39000	47000	78000	85000	30000	62500
Abingdon	34000	37000	42000	47000	44000	48000	90000	110000	30000	37000
Abingdon	28500	36500	37000	47500	35500	47000	60000	82000	29000	39000
Abingdon	31000	36000	37000	47000	37000	45000	80000	112500	30000	40000
Abingdon	24000	30000	33000	41500	34000	42000	57500	76000	26500	40000
Abingdon	30000	35000	43000	49000	43000	49000	78000	93000	28000	33000
Abingdon	24000	31000	34000	44000	36000	50000	63000	85000	24000	27000
Abingdon Wells	32000	40000	44000	55000	40000	50000	85000	110000	33000	42000
Abingdon	44000	49000	57000	63000	51000	56000	90000	105000	38000	40500
Abingdon	40000	45000	46000	52800	50000	55000	100000	110000	47800	55000
Abingdon-on-Thames	46000	57000	52500	63000	57000	79000	90000	190000	47000	69000
Abingdon	42000	60000	50000	60000	50000	65000	95000	145000	40000	60000
Abingdon	33000	36000	48000	51000	40500	44500	84000	88000	34500	37000
Abingdon	46000	54000	58000	68000	53000	64000	110000	140000	40000	49000
Abingdon	35000	37000	54000	57000	46000	50000	90000	105000	31000	34000
Abingdon	45000	60000	42500	57000	42500	56000	85000	105000	38000	55000
Abingdon	24500	26000	31000	37500	30000	38000	54000	68500	24000	26500
Abingdon	34000	36000	47500	49500	46500	51500	87500	97500	34000	37000
Abingdon	37000	44000	43000	52000	45000	55000	95000	125000	36000	44000
Abingdon	36000	39000	48000	54000	44000	53000	75000	90000	32000	35000
Abingdon/Havant	28000	32000	38000	42500	40000	45000	67500	72000	26000	45000
Abingdon	28000	32500	33000	40000	37000	45000	65000	85000	27000	34000
Abingdon	41000	49500	50500	60500	45500	56000	84000	105000	47000	57500
Abingdon(IOW)	21000	25000	30000	35000	31000	35000	57000	70000		
Abingdon	26500	30000	31000	36000	32000	42000	57500	86000	25000	45000

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1986

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
EAST										
id	33000	36000	43000	53000	43500	53500	75000	95000	32000	50000
id	47500	57500	55000	65000	60000	67500	110000	125000	37500	42500
	32500	36000	42500	60000	40000	55000	92500	105000	33000	44000
ins	52000	60000	65000	75000	64000	74000	125000	145000	48000	58000
l	47000	52000	63000	75000	61750	75000	102000	125000	42500	58000
	30000	36000	48000	56000	45000	56000	78000	100000	26000	33000
ord	31500	37500	40000	48000	39000	46000	84000	105000	29500	33500
ter	29500	35000	33000	45000	37000	45000	65000	78000	28000	33000
n/Chigwell	62500	67500	76000	87500	70000	77500	120000	157500	42500	70000
d-on-Sea	31000	36000	40000	43000	42500	50000	84000	94000	32500	67500
n	38000	42000	45000	50000	47500	52500	95000	125000	34000	40000
ury	31000	39000	39500	50500	38000	49500	66000	90000	31500	41500
rne	35000	42000	40000	48000	42000	48000	90000	120000	33000	43000
one	25000	32000	35000	44000	36000	45000	62500	82000	28000	42500
ne	35000	39000	48000	55000	48000	55000	83000	100000	32000	36000
ham	28000	35000	35000	49000	42000	57000	65000	85000	27000	31000
ge Wells	36000	46000	47000	60000	50000	68000	85000	120000	35000	48000
	49000	52500	59000	67000	55000	65000	95000	115000	42500	45000
rd	43000	49000	49500	57000	54500	60000	110000	120000	50000	59000
on-Thames	52500	65000	60000	75000	67000	90000	110000	200000	50000	70000
	50000	65000	60000	75000	60000	75000	105000	170000	45000	55000
g	37000	40000	50000	56000	43000	48000	90000	100000	37000	41000
ead	47000	56000	60000	71000	59000	72000	120000	148000	43000	53000
ry	36000	39000	59500	64000	50000	53000	95000	110000	33000	36000
	47500	64500	47500	64500	47500	62500	87500	125000	40000	59500
r	38000	50000	45000	55000	47500	50000	70000	85000	38000	39000
	38000	40000	50000	55000	50000	55000	90000	100000	35000	40000
combe	39000	47000	46000	58000	49000	60000	95000	135000	39000	48000
toke	45000	47000	53000	56000	50000	60000	90000	105000	38000	42000
uth/Havant	30000	35000	43000	48000	42000	47000	68500	75000	28000	47500
	28500	35000	33500	40500	37000	46000	65000	95000	27000	35000
ter	45000	53000	54000	62000	50000	58000	90000	107000	48000	58000
(IOW)	24000	29000	32000	37000	34000	40000	65000	70000		
ston	30000	42000	35000	45000	33000	45000	75000	95000	27000	45000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

CE RANGES: AUTUMN 1983

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
H WEST										
nemouth	21500	23500	24750	29000	26750	28000	63000	70000	23500	30000
Dorset	22000	28000	26500	31500	28500	34000	47500	60000	28000	31000
ick	17500	22500	22000	26000	24500	28750	39000	47500	23500	29500
er	20000	23000	26000	35000	27000	31500	50000	60000	20000	23000
h Devon	17000	20000	25000	30000	23000	27500	48500	65000	16000	25000
outh	18000	22000	25000	29000	28000	33000	55000	65000	18500	28000
ormel	16500	21000	19000	27000	19500	30000	34000	50000		
rset	15500	19500	22000	27000	24000	28000	45000	54000	18500	22000
ay	19000	22000	22000	25500	24500	29500	55000		25000	32000
	18000	27000	22000	35000	23000	40000	55000	90000	18500	37500
tol	13000	21000	21000	36000	22000	27500	60000	70000	19500	23000
tenham	20000	26000	25000	32000	25000	35000	48000	70000	25000	32500
cester	16000	20000	23000	27000	23000	27500	45000	60000	27500	32500
h West Avon	18000	21000	23000	30000	24500	27500	55000	75000	18500	30000
h Wiltshire	15000	17000	23000	28000	23000	30000	50000	60000	19000	20000
h Wiltshire	21000	26250	26750	33500	28000	35000	52400	65500	19250	24000
S										
	10250	15500	14000	22500	16500	24500	26750	47250	8000	13500
iff	14500	20000	27000	32000	29000	36000	52000	64000	23500	28500
Dyfed	15500	21000	21500	25000	23000	26000	41000	54000	20000	27000
Dyfed	10500	17000	17000	24000	17500	25000	40000	50000		
yr Tydfil	11000	16000	19000	22000	20000	26000	40000	60000		
ypridd	9500	17250	18000	25000	16250	21000	29000	43500		
sea	7500	17000	18000	28000	19000	28500	40000	60000	20000	30000
gavenny	19000	22000	28000	30000	27000	29000	45000	48000		
or	11500	15750	17000	23000	18500	26250	31500	44000		
yn Bay	9000	16500	17000	25000	19000	26000	30000	50000	13000	40000
ort	13000	15500	20500	23500	22250	25500	44000	52500		
pool	14000	18000	20000	24000	24000	28000	40000	45000		
ram	8500	11000	12750	19000	14500	23500	34000	54500		

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1984

GREAT BRITAIN:
TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
WEST										
Wiltshire	22000	24000	24750	29000	27500	28500	64000	75000	23500	30000
Dorset	22000	28000	27500	32500	30000	36000	47500	60000	28000	33000
Wiltshire	19000	24500	25000	29000	26000	32000	47000	56500	26000	32000
Wiltshire	21000	24000	29000	35000	27500	35000	52500	62500	20000	25000
Devon	18000	20000	28000	32000	24000	27000	55000	65000	22000	25000
Wiltshire	19000	23000	26500	31000	30000	35000	57000	66000	20000	29000
Wiltshire	17000	22000	19500	28000	20000	30000	40000	60000		
Wiltshire	17000	19250	24500	27500	26000	28500	51000	56000	21000	23000
Wiltshire	21000	24000	24500	27500	25500	29500	56000	80000	25000	40000
Wiltshire	22500	28500	23500	36500	25000	42000	65000	92500	26500	40000
Wiltshire	14000	22000	22000	27000	23000	28500	65000	75000	20000	24000
Wiltshire	22000	27500	25000	32000	26000	36500	50000	75000	28000	35000
Wiltshire	16000	20000	23000	27000	23000	29000	50000	70000	22500	32500
West Avon	19000	22000	24500	32000	25500	29000	60000	80000		
Wiltshire	16000	18000	23000	28000	24000	31000	50000	60000	19500	22000
Wiltshire	25000	27500	32000	35000	33250	36500	61750	67750	22750	24750
Wiltshire	12500	16500	20000	24000	21000	26000	40000	50000	9500	14000
Wiltshire	15000	20000	28000	33000	30000	36500	57000	66500	24000	29000
Wiltshire	15500	21500	21500	25500	23000	26000	42000	55000	20000	27000
Wiltshire	10800	17500	17500	25000	18000	25750	41000	51000		
Wiltshire	11500	16000			23000	27000	40000	50000		
Wiltshire	8500	17500	18000	25000	18750	27750	32000	51500		
Wiltshire	8000	18000	19500	29500	20000	31000	43500	65000	21000	32000
Wiltshire	19000	22000	28000	30000	27000	29000	47000	50000		
Wiltshire	14000	16000	20000	23000	23000	26000	38000	44000		
Wiltshire	13500	20000	22000	28000	22500	30000	42500	50000	25000	40000
Wiltshire	14500	16750	22250	24500	23500	27000	50000	58000		
Wiltshire	15000	20000	22000	26500	26000	31000	44000	50000		
Wiltshire	8500	11000	12750	19000	14500	23500	34000	54500		

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PERIODS: AUTUMN 1984

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
WEST										
Leeds	23000	25500	27500	29250	29000	31500	69500	80000	23500	30000
Leicester	25000	30000	30000	35000	32500	37500	52500	65000	30000	34000
London	20500	26000	26500	30500	28000	34000	50000	60000	28500	35000
Manchester	22000	25000	30000	37000	29000	35000	55000	65000	20000	25000
Nottingham	19000	22000	27000	30000	25000	28000	50000	65000	20000	25000
Sheffield	20500	25000	28500	33500	32500	37500	61000	71000	21500	30000
Southampton	19000	24000	20000	29000	20000	30000	40000	65000		
Wolverhampton	17750	19750	25500	28500	28000	31000	57000	62000	23000	28000
Worcester	22000	25000	25500	28500	27500	31000	58000	85000	25000	40000
Cardiff	24000	29500	23500	38000	25000	43500	67500	92500	28000	42000
Edinburgh	14500	22500	23000	28000	24000	29500	67000	77000	20000	25000
Exeter	23000	29000	27000	35000	28000	37500	54000	80000	28000	36000
Birmingham	17000	21000	23000	30000	24000	37500	50000	80000	22000	32500
London - Maresfield	19500	22500	26000	33000	26500	31000	65000	82000		
London - Maresfield	16500	18500	23750	29000	25000	32000	52000	63000	19750	22500
London - Maresfield	26500	29000	34000	37500	35250	38750	65000	71500	23750	26000
SOUTH										
London - Maresfield	13500	18000	21000	25000	22000	27000	40000	52000	10000	15000
London - Maresfield	15500	21000	28250	33250	30250	36750	58500	67000	24250	29500
London - Maresfield	15500	22500	21500	26000	23000	26500	45000	55000	20000	27000
London - Maresfield	9500	16500	17000	25000	17000	25000	43000	52000		
London - Maresfield	12000	16500			23000	27000	40000	50000		
London - Maresfield	8500	18000	18500	25750	18750	28250	32000	54800		
London - Maresfield	9000	19000	20000	31000	21000	32500	45000	67500	21000	33000
London - Maresfield	19000	23000	28500	30500	28000	30500	47000	50000		
London - Maresfield	15000	17000	21000	24000	23000	26000	38000	44000		
London - Maresfield	13500	20000	22000	28000	22500	30000	42500	50000	25000	40000
London - Maresfield	15250	17500	24000	26500	25000	28750	51500	60000		
London - Maresfield	17000	20000	22000	26500	27500	31000	47000	52000		
London - Maresfield	13000	16500	16500	23000	18500	24500	38000	54500		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: SPRING 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house		Interwar semi-detached house/bungalow		Post 1960 semi-detached house/bungalow		Post 1965 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
WEST										
	28500	34500	38000	49500	38500	47750	74000	85250	42500	47000
th	26000	31000	31500	36500	34000	39000	55000	65000	31500	36500
	22500	28000	28000	33000	28500	36000	55000	65000	28500	35000
	23000	26000	31000	39000	31000	39000	56000	67000	21000	26500
aple	19000	22000	28000	31000	27000	30000	60000	65000	27000	30000
th	21500	25500	29000	34500	33000	39000	62000	72500	21500	30000
tell	19000	25000	20000	29000	21000	30000	42500	67500		
n	18500	23000	26000	29500	28500	32500	59000	68000	23500	29000
y/Paignton	23000	26500	26000	30000	29000	33000	60000	85000	26500	40000
	25000	30000	28000	40000	35000	45000	75000	95000	29500	42500
l	15000	23000	23000	28500	24500	30000	70000	80000	22000	26000
ham	23000	29000	29000	37000	29000	38500	56000	83000	28000	36000
ster	17250	21250	23500	30500	24250	38000	50000	80000	22000	32500
-s-Mare	20000	24000	27000	34000	27000	32500	67500	85000		
r	18000	20000	28000	33000	29000	36000	60000	71000	21000	23000
ry	27500	30000	35000	38750	36500	40000	67000	73750	24500	26750
nd	14000	18500	21000	26000	22000	30000	40000	55000	12000	17000
f	17000	22000	29000	34500	31500	37500	56750	66750	27000	30000
ordwest	16000	23000	22000	26500	23500	27000	45000	56000	20000	28000
.i	9800	17000	17500	26000	18000	26000	45000	55000		
· Tydfil	12000	16500			23000	27000	42500	52500		
idd	8750	18250	18500	26000	19000	28500	32500	54500		
t	9000	20000	21000	31000	22000	34000	47000	70000	22000	45000
enny	21000	24000	29000	33000	30000	35000	50000	57500		
	15000	17000	21000	24000	23000	26000	38000	44000		
lno	13500	20000	22000	28000	22500	30000	42500	55000	25000	40000
: (Gwent)	15250	18000	24000	27500	25000	29000	51500	60000		
t	17000	20000	22000	28500	27500	31000	47000	52000		
t	13500	16500	18000	23000	18500	24500	40000	55000		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1985

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	Pre-1919 terraced house (modernised)		Interwar semi-detached house (modernised)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
WEST										
	28000	31500	33750	34250	32500	37250	75000	95000	25500	38750
th	28500	33000	34000	39000	35000	39500	60000	70000	32000	37000
	25000	30000	29500	35000	29000	37000	58000	70000	29500	36000
	26500	28000	39000	45000	34000	40000	60000	85000	24000	30000
aple	21000	25000	30000	37000	29000	32000	63000	68000	29000	32000
th	24500	30000	30500	38000	30000	39000	60000	73000	22000	30000
tell	20000	27500	22000	30000	24000	31000	50000	75000		
n	19250	24000	29000	32500	29250	34500	59500	70000	24000	30000
y/Paignton	26000	29000	28500	35000	32000	36000	65000	90000	26500	40000
	28000	31000	33500	42500	36500	46000	75000	96500	29500	43500
l	22000	25000	24000	30000	29000	32500	75000	82000	23000	27000
nham	26500	35000	33000	40000	29000	40000	58000	87000	30000	38000
ster	18500	23500	27000	33000	24000	34000	50000	80000	22500	32500
-s-Mare	21000	25000	27000	32000	25000	35000	58000	70000	30000	40000
n	22000	26000	33000	40000	30000	38000	65000	80000	21000	24000
ury	28750	31750	38000	42000	39000	43000	70750	78000	26000	28250
nd	17000	23000	22000	26000	22500	33000	42000	55000	12500	17500
f	23250	28500	40500	43000	33500	39000	58000	70000	28000	31000
ordwest	22500	23000	29000	30000	25000	28000	48000	60000	20000	28000
li	14000	19000	22000	28000	19000	27000	48000	60000		
r Tydfil	16000	19000			26000	29000	44000	54000		
ridd	14750	18750	18750	26500	19500	29500	32500	55000		
a	16000	26000	25000	36500	23000	36000	48000	73000	22500	45000
venny	25000	29000	33000	38000	32000	37000	52500	59500		
	16500	19500	23500	26500	25000	28000	39500	44000	10000	13000
idno	16000	22500	24750	27500	25000	30000	40000	50000	25000	40000
t (Gwent)	15500	19000	25000	29000	26750	33000	50000	60000		
n	18500	23000	24000	30000	27500	31000	47000	52000		
m	14500	17000	20000	25000	22500	27000	42500	57500		

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1986

GREAT BRITAIN:
TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
WEST										
South	29500	32500	34000	36500	34750	39750	80000	100000	26250	47500
North	28500	33500	36000	40000	37500	42500	65000	75000	34000	40000
East	25250	31500	29800	36500	29100	37350	58000	70000	29600	36200
West	27750	29500	40000	47500	35750	42000	70000	87500	25250	31500
Staple	22000	26000	33000	38000	30000	35000	64000	70000	30000	35000
South	25000	30000	30000	38000	30000	39000	60000	75000	23000	42000
West	20000	27500	22500	32500	25000	31000	50000	75000		
East	22000	27500	30000	34000	30500	35000	59500	70000	24000	30000
Day/Paignton	27500	30000	31000	37000	33000	37500	65000	90000	26500	40000
North	29000	32000	36000	44000	37000	47000	80000	97500	30000	43500
South	19000	24000	28000	34000	30000	35000	77000	85000	24500	29000
East	27500	36500	34000	42000	33000	45000	62000	95000	30000	40000
West	19000	23500	28000	35000	35000	45000	55000	80000	22500	32500
North-S-Mare	21000	30000	27500	35000	27000	34500	58000	85000	26000	46000
East	25000	32000	34000	42000	32000	40000	65000	85000	23000	25500
West	30000	34000	39750	44000	40750	45000	73000	82000	28250	31750
South	17500	24500	22500	28000	22500	33000	42000	57000	15000	20000
West	24000	29000	41000	43750	33750	39500	60000	71000	28000	32000
Northwest	22500	23500	29000	31000	26000	29000	48000	62000	20000	28000
East	14500	19500	23000	29000	19000	27000	48000	60000		
North Tydfil	16750	19750			28000	31000	44000	54000		
West	14950	18950	18750	26500	19500	29500	32500	55000		
East	17000	28500	26000	37000	24000	38500	48000	77000	24500	46000
West	26000	30000	35000	39000	33000	38000	55000	61000		
North	16500	19500	25000	35000	27500	32000	40000	45000	10000	13000
North Bay	16000	18000	22500	24500	25000	30000	40000	50000	25000	40000
West (Gwent)	20000	23000	28000	33000	28000	34000	55000	70000	22000	25000
West	18500	23000	24000	30000	27500	31000	48000	55000		
East	14500	17500	21000	26000	22500	27000	43000	57500		

ND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E RANGES: AUTUMN 1986

GREAT BRITAIN:
TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	Pre-1919 terraced house (modernized)		Interwar semi-detached house (modernized)		Post 1960 semi-detached house		Post 1960 detached house		Post 1960 flat in 3 (or more) storey block	
	From	To	From	To	From	To	From	To	From	To
WEST										
Bournemouth	32000	35000	36000	40000	37500	43000	75000	100000	26750	52500
Exeter	30000	35500	38000	42500	39500	45000	70000	80000	36000	42500
Gloucester	26500	32500	30000	37500	30000	38000	60000	75000	30000	37000
Leeds	28000	32000	37000	49000	36500	43500	70000	89000	24000	33000
Leicester	25000	29000	37500	43000	35000	39000	68000	73000	33000	38000
London	25000	30000	30000	40000	31000	42000	65000	77500	25000	42000
Manchester	22500	28500	30000	37500	28000	32500	60000	80000		
Newcastle	23500	29000	32000	38000	32500	38000	60000	78000	25000	30000
Nottingham	29000	34000	36000	41500	37000	42000	70000	95000	30000	45000
Sheffield	30000	35000	39000	46000	40000	49000	82500	98500	32500	44000
Southampton	19500	24500	29000	35000	32000	37000	78000	86000	25000	30000
Stamford	29000	38000	35000	45000	34000	55000	70000	100000	32000	45000
Stroud	20000	24000	30000	38000	38000	48000	60000	85000	25000	33000
Swansea	24500	34500	29000	39000	29750	36000	55000	70000	30000	48000
Torquay	27500	35000	38000	44000	34000	45000	68000	90000	23000	26000
Wolverhampton	32000	36250	42500	47000	43500	48000	80000	90000	30000	35000
Cardiff	18000	25500	23500	30000	23500	35000	44000	58000	15750	21000
Cardiff	24500	30000	39000	44000	37500	43950	60000	71000	28000	32000
Cardiff	22500	25000	29000	31000	26500	29000	48000	62000	20000	28000
Cardiff	15000	20000	23500	30000	19500	27500	49000	62000		
Cardiff	17000	20000			28000	31000	44000	54000		
Cardiff	15500	19000	21500	28500	22000	30000	36500	55000		
Cardiff	17000	29500	27000	38500	24500	39000	48000	79000	25000	49000
Cardiff	27000	32000	37000	42000	35000	40000	56500	63000		
Cardiff	16500	21500	25000	36000	29000	34000	42000	47000	11000	14000
Cardiff	16000	18000	22500	24500	25000	30000	40000	52500	25000	40000
Cardiff	20000	24000	27000	32000	28000	34000	55000	70000	22000	25000
Cardiff	19000	24000	25000	30000	28000	32000	48000	55000		
Cardiff	15500	19000	22000	28500	22500	29000	43000	60000		

LAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGE OF PRICES: SPRING 1984

77 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	2 Bed tenement flat c1900		3/4 Bed semi-detached or terrace c1900		Interwar 4 roomed bungalow		Mid 1960s 3 bed semi-detached house estate type	
	From	To	From	To	From	To	From	To
SCOTLAND								
Glasgow	9000	15000	22000	35000	22500	27500	20000	27000
Edinburgh/Kirkcaldy	13000	22000	21000	35000	27000	40000	22000	29000
Perth	26000	34000	40000	70000	50000	65000	40000	60000
Highland (Rural)			22000	27000	30000	35000	27000	30000
Inverness	13000	20000	22000	30000	35000	42000	24000	30000
Edinburgh	15000	35000	30000	53000	32500	45000	32000	40000
Perth	14000	19000	28000	35000	30000	35000	28000	35000
Glasgow	17000	19000	37000	45000	35000	38000	28000	30000
Glasgow suburbs	14500	17500	37000	45000	35000	46000	24000	35000
Greenock	14500	18000	25000	42000	37000	50000	26000	32000
Inverdee	15000	19000	25000	35000	27500	35000	25000	25000
Perth	14000	17500	28000	35000	27500	40000	25000	32500

	Mid 1960s 3/4 bed detached house estate type		Mid 1960s better quality estate detached house		Mid 1960s 2 bed flat	
	From	To	From	To	From	To
Glasgow	25000	35000	40000	45000	27000	32000
Edinburgh/Kirkcaldy	28000	37000	45000	65000		
Perth	50000	65000	65000	85000	40000	45000
Highland (Rural)	32000	37500	32000	37500		
Inverness	30000	40000	40000	60000	18000	23000
Edinburgh	35000	45000	47500	65000	30000	47000
Perth	35000	45000	50000	70000	20000	30000
Glasgow	32000	35000	50000	55000	23000	28500
Glasgow suburbs	30000	40000	44000	65000	25000	44000
Greenock	32000	38000	40000	50000	23000	42000
Inverdee	32000	38000	45000	60000	22500	27500
Perth	34000	38000	45000	60000	25000	30000

AND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

AGE OF PRICES: AUTUMN 1984

GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

	2 Bed tenement flat c1900		3/4 Bed semi-detached or terrace c1900		Interwar 4 roomed bungalow		Mid 1960s 3 bed semi-detached house estate type	
	From	To	From	To	From	To	From	To
AND								
ies	9500	17500	23000	37500	22500	28000	20000	27500
ing/Kircaldy	13000	22000	21000	35000	27000	40000	22000	29000
een	26000	35000	42000	75000	52500	67500	42000	63000
ian (Rural)			22000	30000	30000	35000	27000	31000
ness	13000	20000	24000	33000	35000	45000	26000	33000
urgh	16000	36000	35000	58000	40000	47000	33000	42000
	15000	25000	30000	36000	32000	40000	30000	38000
ow	18000	21000	38000	50000	38000	42000	28000	32000
ow suburbs	10000	22000	25500	38000	35000	50000	27000	39000
e	16000	20000	27500	37500	27500	35000	27500	32500
	15000	18500	28500	35000	27500	40000	27500	32500

	Mid 1960s 3/4 bed detached house estate type		Mid 1960s better quality estate detached house		Mid 1960s 2 bed flat	
	From	To	From	To	From	To
ies	26000	36000	40000	45000	27000	32000
ing/Kircaldy	28000	37000	45000	65000		
een	52500	67500	67500	88000	40000	45000
ian (Rural)	32000	38000	32500	40000		
ness	30000	40000	45000	60000	18500	24000
urgh	35000	47000	50000	65000	30000	47000
	35000	48000	50000	70000	23000	32000
ow	35000	42000	50000	65000	28000	32000
ow suburbs	32000	43250	45000	70000	28000	52500
e	32500	38500	50000	60000	22500	27500
	34000	38000	50000	60000	25000	30000

INLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGE OF PRICES: SPRING 1985

7.79 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	2 Bed tenement flat c1900		3/4 Bed semi-detached or terrace c1900		Interwar 4 roomed bungalow		Mid 1960s 3 bed semi-detached house estate type	
	From	To	From	To	From	To	From	To
SCOTLAND								
Dumfries	13000	17500	25000	40000	25000	35000	24000	30000
Stirling/Kircaldy	14000	22000	21000	40000	29000	42500	25000	33000
Aberdeen	26000	36000	42000	75000	52500	70000	42500	65000
Grampian (Rural)			22000	30000	30000	37500	27500	31000
Inverness	13000	21000	25000	35000	36500	47500	27000	35000
Edinburgh	18000	37000	37000	61000	42000	52000	34500	44000
Ayr	15750	26500	32000	38000	34000	42000	30000	38000
Glasgow			40000	50000	40000	44000	28000	35000
Glasgow suburbs	16500	31500	40000	70000	34000	58000	29500	39500
Dundee	16000	21000	27500	37500	27500	35000	27500	35000
Perth	16500	20000	28500	35000	27500	40000	28500	32500

	Mid 1960s 3/4 bed detached house estate type		Mid 1960s better quality estate detached house		Mid 1960s 2 bed flat	
	From	To	From	To	From	To
Dumfries	28000	38000	40000	50000		
Stirling/Kircaldy	33250	46000	50000	67500		
Aberdeen	52500	70000	70000	90000	40000	47500
Grampian (Rural)	32000	38000	33500	42500		
Inverness	31500	42500	45000	63000	19500	25000
Edinburgh	37000	50000	52500	70000	31500	48500
Ayr	37000	50000	50000	70000	25000	35000
Glasgow	35000	45000	50000	65000	28000	32000
Glasgow suburbs	33000	48000	51000	90000	28000	54500
Dundee	34000	40000	50000	65000	24000	29000
Perth	34000	40000	50000	65000	25000	32000

D REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

E OF PRICES: AUTUMN 1985

REAT BRITAIN:

OWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

E

	2 Bed tenement flat c1900		3/4 Bed semi-detached or terrace c1900		Interwar 4 roomed bungalow		Mid 1960s 3 bed semi-detached house estate type	
	From	To	From	To	From	To	From	To
	13500	17500	29000	48000	26500	37000	24000	30000
/Kirkcaldy	15000	22500	22000	40000	30000	42500	27000	33000
	26000	37500	42000	75000	52500	70000	42500	65000
(Rural)			22000	31000	30000	37500	27500	31000
s	13500	23000	27500	40000	38000	52000	28000	37500
1	20000	38000	41000	63000	43000	54000	36500	47000
	16500	27000	33500	39000	35000	43000	31000	39000
	20000	33000	42500	55000	42000	47500	31500	37000
suburbs	17000	32000	41000	72500	35000	61000	29500	40000
	17000	21000	27500	37500	30000	35000	27500	35000
	16000	20000	28500	35000	30000	40000	28500	35000

	Mid 1960s 3/4 bed detached house estate type		Mid 1960s better quality estate detached house		Mid 1960s 2 bed flat	
	From	To	From	To	From	To
	30000	38000	45000	55000		
'Kirkcaldy	32500	48500	50000	68000	18500	21500
	52500	70000	70000	90000	40000	47500
(Rural)	32000	38000	33500	42500		
	33000	40000	47500	70000	20000	25000
	42000	55000	55000	75000	33000	49000
	38750	52500	52500	73500	26000	36000
	37500	48000	52000	70000	30000	35000
uburbs	34000	49000	55000	90000	30000	57000
	35000	42500	50000	65000	24000	30000
	35000	42500	50000	65000	25000	32000

NLAND REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

PRICE RANGES: SPRING 1986

81 GREAT BRITAIN:

TOWNS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	2 Bed tenement flat c1900		3/4 Bed semi-detached or terrace c1900		Interwar 4 roomed bungalow		Mid 1960s 3 bed semi-detached house estate type	
	From	To	From	To	From	To	From	To
SCOTLAND								
Glasgow	13500	19000	29000	48000	30000	40000	25000	30000
Glasgow/Kilmarnock	15000	24000	23500	40000	32000	42500	28000	33000
Glasgow/Aberdeen	26000	39000	43500	77500	54000	72000	42500	65000
Glasgow (Rural)			22500	32500	30000	38000	27500	32000
Inverness	14000	24000	29000	42500	40000	57500	29000	39000
Edinburgh	22000	40000	42000	64000	43000	54000	36500	48000
Glasgow	17000	28000	34000	40000	36000	45000	32000	40000
Glasgow	21000	35000	42500	57000	43000	56000	33000	41000
Glasgow(Bearsden)	23750	32500	49000	85000	41000	62500	30000	41000
Glasgow(Eastwood)	19000	21500	43500	53500	44000	52500	32000	38000
Glasgow	18000	24000	27500	37500	30000	35000	29000	37000
Glasgow	18000	23000	28500	37500	32000	42500	30000	37000
Glasgow	18000	25000	30000	50000	45000	60000	28000	35000

	Mid 1960s 3/4 bed detached house estate type		Mid 1960s better quality estate detached house		Mid 1960s 2 bed flat	
	From	To	From	To	From	To
Glasgow	30000	38000	45000	55000		
Glasgow/Kilmarnock	32500	48500	51000	68000	18500	22500
Glasgow/Aberdeen	53000	72500	72000	92500	40000	48500
Glasgow (Rural)	33000	39000	34000	45000		
Inverness	35000	42500	48000	80000	21000	26000
Edinburgh	42000	55000	55000	75000	33500	49000
Glasgow	39500	52500	52500	73500	26000	37000
Glasgow	38000	48000	55000	75000	33000	45000
Glasgow(Bearsden)	37000	52000	62000	90000	46500	59000
Glasgow(Eastwood)	35000	43500	70000	84000	33000	41500
Glasgow	35000	45000	50000	65000	24000	30000
Glasgow	35000	45000	50000	68000	25000	33000
Glasgow	35000	45000	55000	65000	25000	35000

REVENUE: VALUATION OFFICE PROPERTY MARKET REPORTS

RANGES: AUTUMN 1986

EAST BRITAIN:

OWNERS BY HOUSE TYPE AND AGE OF HOUSE - SECONDHAND DWELLINGS

£

	2 Bed tenement flat c1900		3/4 Bed semi-detached or terrace c1900		Interwar 4 roomed bungalow		Mid 1960s 3 bed semi-detached house estate type	
	From	To	From	To	From	To	From	To
	14500	19500	30000	50000	30000	43000	26000	31000
Falkirk	18000	25000	25000	40000	35000	45000	29000	37000
	25000	40000	43500	77500	54000	72000	42000	65000
(Rural)			23000	34000	30000	39000	27500	33000
	15000	25000	25000	42500	40000	57500	29000	39000
	23000	41000	44000	66000	45000	56000	36500	50000
	18000	28500	35750	42000	38750	48500	33500	42000
	21500	36000	42500	59000	43000	57500	33000	41000
(arsden)	23750	32500	49000	85000	47000	67500	30000	41000
(stwood)	20000	22500	45000	54500	45000	56900	33000	39000
	18000	24000	27500	37500	32500	37500	29000	37000
	18000	24500	28500	37500	32000	42500	30000	37000
	19000	27000	30000	50000	45000	60000	28000	35000

	Mid 1960s 3/4 bed detached house estate type		Mid 1960s better quality estate detached house		Mid 1960s 2 bed flat	
	From	To	From	To	From	To
	30000	38000	45000	60000		
Falkirk	32500	49500	51000	75000	19000	24000
	53000	72500	72000	82500	40000	48500
(Rural)	33000	40000	35000	47500		
	35000	42500	48000	75000	21000	25000
	43000	58000	58000	77500	33500	50000
	41500	54500	54000	75500	28000	40000
	38500	49500	56000	77000	35000	47500
(arsden)	37000	52000	62000	90000	46500	59000
(stwood)	36500	45000	73000	88000	35000	44000
	35000	45000	50000	65000	24000	30000
	35000	45000	50000	70000	25000	33000
	35000	50000	55000	70000	25000	37000

8. Northern Ireland Department of Finance and Personnel (PPRU)

8.1 TECHNICAL DETAILS

(a) Source of data and timing

Northern Ireland Stamp Office data for existing dwellings and building societies' records for new dwellings at mortgage completion stage.

(b) Types of data and periods covered

Average prices: 1978 Q1 to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES
HOUSE DATA	
All houses	
New/Non-new	*
Type	*
Size	
Age	
LOCAL DATA	
Regions	
Sub-regions	*
Towns	
BUYER DATA	
First-time buyer	
Former owner-occupier	

(c) Frequency

Annual and quarterly

(d) Geographical coverage

Northern Ireland subdivided into seven sub-regions - Belfast, North Down, South Down, South Antrim, North Antrim, Derry and Fermanagh & South Tyrone.

(e) Method of analysis

Existing Houses: Simple averages based on details of all sales of existing houses notified by solicitors to the Stamp Office (Northern Ireland), which passes returns to local Valuation Offices for their use. This information is accessed by the Policy Planning and Research Unit (PPRU) of the Department of Finance and Personnel and details of price, type, ward and district for sales in the preceding quarter are recorded. Any late notifications are collected as part of the next quarter's inquiry and revised results are produced. Sales of houses at non-market prices are excluded.

New Houses: Simple averages based on data provided by the largest building societies in Northern Ireland (currently six largest), through the Building Societies Association. About 70 per cent of new houses bought with mortgage loans are covered by this return, but there is no information on the proportion of new houses which are bought by other means.

LIST OF TABLES

Average prices

- 8.1 Northern Ireland: new and existing dwellings, type of property. 1978-
- 8.2 Sub-regions: existing dwellings. 1978-
- 8.3 Sub-regions: small terraced houses (existing dwellings). 1978-
- 8.4 Sub-regions: medium/large terraced houses (existing dwellings). 1978-
- 8.5 Sub-regions: detached houses (existing dwellings). 1978-
- 8.6 Sub-regions: semi-detached houses and bungalows (existing dwellings). 1978-
- 8.7 Sub-regions: detached bungalows (existing dwellings). 1978-
- 8.8 Sub-regions: miscellaneous properties (existing dwellings). 1978-

CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Existing dwellings by sub-regions: Table 8.2

(b) Three-way classifications

Existing dwellings by sub-region by type of house: Tables 8.3-8.8

PUBLICATIONS

(a) Data

PPRU Monitor. Northern Ireland House Prices, Department of Finance and Personnel (PPRU), Belfast. Quarterly
Northern Ireland Annual Abstract of Statistics, Department of Finance and Personnel. HMSO, Belfast. Annual
Northern Ireland Housing Statistics, Department of the Environment (Northern Ireland). HMSO, Belfast. Annual

(b) Description of methodology

None

(c) Supplementary studies

None

NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

AVERAGE PRICES (at completion stage) 1978 -

8.1 NORTHERN IRELAND: NEW AND EXISTING DWELLINGS

E

TYPE OF PROPERTY (EXISTING DWELLINGS)

Year	New	Existing	Small Terrace	Medium Terrace	Detached House	Semi-det House/Bungalow	Detached Bungalow	Other
1982*	24910	20737	9800	16261	34419	20594	29541	15444
1983*	24010	22638	11226	17374	36668	22199	31056	17504
1984*	25951	23509	11748	18219	39005	23408	33010	20540
1985*	28095	24988	13369	19813	42276	25066	34438	19342
1986*	30771	26891	15093	22101	43413	26171	36985	21348
1978 1	18070							
2	18490	11952	3960	6689	22637	12419	19065	7623
3	19040	13730	4028	7663	25255	13515	21404	7372
4	20620	13505	4401	9932	24949	14034	21566	7645
1979 1	21040	14282	5571	10024	24838	14910	22105	9987
2	21920	15604	5853	10682	26870	16005	24012	7870
3	22930	17967	7281	12508	29789	17709	26087	7556
4	25550	18680	7656	13061	32159	18577	28037	8705
1980 1	25640	18241	8240	13624	31825	18857	27201	7953
2	26610	18815	8859	14137	32121	19207	27691	9479
3	26860	20373	9089	14533	35108	20092	28154	13558
4	26600	19063	9040	13554	32614	19624	28242	9009
1981 1	25530	19140	8023	16502	30741	18363	24802	9938
2	25370	20180	8910	14948	33022	20103	29328	16783
3	25490	20898	9433	16356	33980	20542	28806	16228
4	25120	19840	9362	15002	32854	20134	28894	16307
1982 1	25050	19264	8730	16162	33636	19852	28623	15501
2	24620	20434	9781	16688	33654	20411	29224	13072
3	25250	21252	10292	15878	34577	20822	29814	16872
4	24720	21506	10199	16312	35387	21009	30119	15818
1983 1	23650	21451	10428	16190	33886	21495	29784	15549
2	22790	22320	10779	17240	35323	22048	30875	16653
3	24250	23895	12064	18808	38992	22642	31782	18571
4	25090	22697	11478	16936	37780	22505	31553	18659
1984 1	25770	22234	10841	16294	37319	22796	31497	19662
2	25870	22565	11550	18924	37759	22600	32165	18086
3	26110	24619	12265	18925	39745	23766	34041	22047
4	25990	24135	12099	18259	40373	24202	33601	21368
1985 1	27080	23433	12041	19988	41793	23890	32931	19351
2	27590	24798	13121	19736	42648	24700	34605	16669
3	28660	26220	14259	19613	42503	26336	35111	19377
4	28850	24646	13629	20057	41911	24640	34404	21809
1986 1	29300	25965	14147	21454	41994	25130	36030	20378
2	31880	26120	14648	23023	40089	25818	37559	19967
3	30750	27716	15708	22316	44941	26656	36295	23342
4**	30830	27154	14831	21434	45027	26672	38491	21341

* Data for existing dwellings are unpublished figures obtained from Valuation Office records

** Data for existing dwellings have been supplied by PPRU in advance of publication (subject to revision)

HERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

AGE PRICES (completion stage) 1978 -

B-REGIONS: EXISTING DWELLINGS

£

Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
17888	25105	18491	21251	22080	20138	23384
19451	27331	20274	23284	24279	21794	22798
20210	28380	21801	24223	24518	22784	25816
22036	30081	23638	25988	26328	23206	24647
24887	31112	23446	26858	26331	24217	26465
14041	13567	16019	14101	8906	13539	11286
15905	17543	8690	15680	12677	14969	16105
10447	17448	12331	15544	15109	14143	15641
11972	17988	11869	15504	15894	14351	16196
12800	19816	12606	16280	18054	16228	16344
15751	21049	15416	18430	18799	17976	19319
16321	22840	14932	19514	18350	16660	19763
16287	22020	15572	19072	18748	16396	19717
16158	23012	15596	20048	19496	17131	21403
18683	24461	16970	20202	19832	18965	23646
17272	23037	15358	20915	16546	18674	19652
15982	21038	13189	19166	17928	16772	18570
17240	24808	17944	20573	22326	19552	22182
18122	25985	18416	21320	20831	19469	23480
16184	24153	18183	20284	22213	20571	23383
15787	24392	18117	20206	21667	19456	21941
17659	24661	18433	20283	21680	20104	24780
18549	25479	18469	22058	23030	18923	24123
18921	25603	19118	21986	21881	21673	22658
18450	25874	18622	21726	22069	20705	23037
18945	27170	20422	23194	23610	21513	21309
20747	28051	21474	24296	27291	22910	24363
19380	28096	20207	23658	24014	21790	22283
18744	26399	20803	23629	22644	22087	24763
19007	28515	21870	24193	24448	21569	25429
21661	29173	23459	24543	25394	23574	26728
20846	28923	20673	24359	25156	23559	25671
19640	27442	22479	25230	25984	20526	25928
20811	30843	22995	24543	26272	23355	24674
24260	31640	22923	26879	26069	24017	22893
21707	29364	25160	26513	27095	23955	26177
24700	29654	23716	26998	26465	22733	25859
23649	30113	23105	26138	26244	24334	27155
26461	31571	23729	27203	26778	24461	27039
24545	32743	23243	27089	25668	24922	25384

e unpublished figures obtained from Valuation Office records

NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

AVERAGE PRICES (at completion stage) 1978 -

8.3 SUB-REGIONS: SMALL TERRACED HOUSES (EXISTING DWELLINGS)

£

Year	Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
1982	9161	12931	9065	9930	11127	8745	9402
1983	10167	15144	10911	11553	12759	9519	13834
1984	10971	13983	12467	12531	12900	10697	9947
1985	12489	17432	12199	14529	15067	11657	14402
1986	14585	16468	13930	16780	16158	10635	13962
1978 2	6642	4645	6974	3081	2301	6254	4642
3	6815	6914	3039	4504	4018	3900	4026
4	3184	6825	4888	4854	7382	3025	7215
1979 1	4997	7795	4596	4474	7232	3473	7975
2	5505	7881	4682	5444	8655	4750	6787
3	6321	9121	6438	7977	10457	4723	7528
4	7043	10265	5901	7599	10080	4281	7725
1980 1	8485	10066	6530	7973	7690	5600	7469
2	8391	11610	6673	7533	10643	5880	12691
3	9126	11456	7168	8599	9422	4188	4850
4	8600	11589	7617	10061	8495		10103
1981 1	7836	10656	5815	8133	7577	7875	8930
2	8236	12084	7692	8461	12138	1500	10525
3	8903	13357	8369	10000	10052	5670	10200
4	8500	12781	7806	9692	10896	9439	11192
1982 1	8240	12262	8363	7718	10433	7918	10071
2	9090	12859	9322	10438	10261	7433	6360
3	9585	13439	8935	10856	10645	9531	13997
4	9611	12860	9857	10221	12416	9025	6748
1983 1	9580	14079	10460	10889	10820	6600	11194
2	10310	13192	10031	11256	11727	9200	12290
3	10392	16880	11810	12332	15308	10033	16851
4	10351	15539	11059	11746	12767	10682	13021
1984 1	10128	12846	11162	12599	9643	10833	10770
2	10450	15502	12917	12780	13360	7850	12600
3	11704	14513	13124	11962	13708	13231	7399
4	11349	13569	12449	12937	14098	10870	12004
1985 1	11199	13830	11842	13398	14343	9609	13257
2	12117	16966	11999	14572	15744	9169	14567
3	13353	21581	10740	15091	14768	13363	14723
4	12752	17845	13501	14603	15330	12956	13300
1986 1	15584	15763	12885	15447	16655	10147	14873
2	14064	16067	14230	16506	16071	9503	8175
3	15258	16836	14321	16929	16341	12797	16362
4	13716	17058	14016	17658	15799	10356	14046

These are unpublished figures obtained from Valuation Office records

NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

VERAGE PRICES (at completion stage) 1978 -

SUB-REGIONS: MEDIUM/LARGE TERRACED HOUSES (EXISTING DWELLINGS)

£

	Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
	16115	19308	14366	17495	18348	14009	19643
	17620	18637	18056	20142	18620	15302	19960
	18000	19394	19881	19880	19292	15456	24059
	21446	19564	20901	24219	21182	16917	20419
	25742	22021	19224	22250	25943	17925	19528
2	14727	8839	14982	7431	5202	11206	8300
3	10842	10985	7276	11020	6399	9087	16414
4	8606	14249	9726	11950	13375	8268	12533
1	9424	11505	9046	12725	11945	9521	11500
2	10391	12871	7654	14438	15334	10206	7517
3	11816	13545	13250	15168	14240	9960	18330
4	13433	15457	15046	14040	11800	10678	12425
1	12496	16759	15265	19000	19033	10987	15195
2	14045	17278	13245	15300	13625	10557	24389
3	14822	15085	13734	16100	15237	12876	20417
4	13624	14968	12255	16372	14011	11125	20750
1	20398	14690	9966	20238	18942	10248	18994
2	14266	17809	17844	13020	18271	11465	20200
3	16851	21835	10650	19275	17714	12567	14200
4	14825	17073	16125	19000	15077	13068	23417
1	15844	18515	13514	17340	20082	14516	19857
2	16692	21172	12700	18842	18108	13283	17421
3	15653	18584	15677	14625	18206	14000	30625
4	16196	18732	16438	18125	17669	14067	18214
1	16141	16776	17604	18970	19854	14670	16815
2	15255	19113	17711	20612	20500	15959	17333
3	20425	18892	18767	22321	17000	15928	23690
4	17439	19786	17988	17558	17108	14526	17550
1	16703	15684	18613		17575	14414	19370
2	18906	21623	19930	19618	22029	15655	21500
3	19951	18674	19808	19385	19327	15621	32625
4	16027	21080	20640	30000	17618	16032	24850
1	22386	20915	19700	19338	21083	16024	19863
2	21560	19361	26471	31000	21426	16115	21750
3	22185	18407	17523		21231	18202	19836
4	19870	25464	22520	28625	20875	17314	20169
1	26879	20579	18850	22250	25042	16660	17300
2	25791	22092	20667		31222	18760	19385
3	27392	22709	18191		23615	18108	20817
4	22853	22129	21333		26896	17921	18339

are unpublished figures obtained from Valuation Office records

NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

AVERAGE PRICES (at completion stage) 1978 -

8.5 SUB-REGIONS: DETACHED HOUSES (EXISTING DWELLINGS)

E

Year	Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
1982	38528	35079	29384	31097	30174	31782	29242
1983	38813	39278	31279	33434	34778	33812	26427
1984	41563	42791	31799	33273	37479	34110	35895
1985	45437	46755	36996	37242	39081	36068	29837
1986	48890	46804	36193	38203	36905	35306	35922
1978 2	20913	22843	26153	21154	22813	17607	22573
3	22732	26703	21867	25776	28323	18574	18844
4	25961	27874	18738	21076	23927	27938	19426
1979 1	24918	25198	18925	30050	23468	23900	28000
2	27486	26207	27765	23203	30676	32679	19827
3	31442	30800	25163	28760	29101	26083	26550
4	32780	33375	42400	29978	28875	29864	28600
1980 1	35038	31587	32303	27288	29117	25431	42556
2	34065	36729	24853	27382	27194	28104	16406
3	37017	37860	28768	30311	30765	32029	33156
4	36169	34565	25729	28484	25523	29167	23125
1981 1	33287	32452	22524	32471	28623	24507	28696
2	34740	36989	22765	30348	30853	28127	32250
3	36140	36643	28560	31018	30504	27967	25667
4	33020	36991	26073	29954	30152	31289	30560
1982 1	35168	32976	30829	32893	35439	35292	29250
2	39676	34822	28531	29367	26125	30877	33450
3	38014	35114	28899	31352	32603	27958	29912
4	40209	36577	29727	30869	30394	32560	26343
1983 1	36874	37248	24804	32283	28958	30923	28036
2	37100	38924	35367	31710	31200	30523	25107
3	40093	39069	34995	34435	45087	33744	31820
4	40883	41902	29728	35643	33122	38008	24347
1984 1	40400	39962	29548	33870	36639	36591	30639
2	38319	46700	30447	35221	36015	35842	30054
3	44092	41763	35780	31464	37505	31428	50673
4	41784	43757	28531	34303	40188	33433	33623
1985 1	42120	45017	35135	41320	38773	32869	40875
2	46068	45859	46660	36088	39364	33015	25567
3	46105	48647	31219	34031	37915	38897	31433
4	45912	46763	40326	40125	40531	38028	28593
1986 1	45019	49711	35409	39818	38482	28722	37214
2	45323	39765	37970	37998	35408	37388	37223
3	51955	48591	36521	39951	37607	33936	34428
4	51400	50582	34242	35295	36078	39854	36412

These are unpublished figures obtained from Valuation Office records

NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

PRICE RANGES (at completion stage) 1978 -

SUB-REGIONS: SEMI-DETACHED HOUSES, BUNGALOWS (EXISTING DWELLINGS)

£

	Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
2	20112	21683	19704	20046	21313	21068	19984
3	22093	22984	21449	21349	22812	22536	20173
4	23770	24071	21983	22440	23359	23268	22351
5	25676	26290	22746	24132	24369	23685	22749
6	27527	27285	23690	24917	24867	23996	22458
2	12557	13370	13364	13743	11277	12798	11927
3	14212	13861	11080	12656	14591	14519	14918
4	13205	15334	13710	13793	15521	13329	16358
1	14301	16279	15249	14088	15475	14576	18288
2	15402	17426	15580	15216	16796	15281	17112
3	17373	18304	17710	17086	18983	17369	16368
4	18184	19641	18158	17972	19506	17951	13844
1	18576	19774	18310	18212	20166	17458	19613
2	18748	19892	17482	20076	18977	18440	24700
3	19916	21532	18836	19115	19244	19025	21833
4	19475	20237	18768	19265	20519	19103	19780
1	18897	19027	14918	17875	18121	17894	14614
2	20299	20699	19943	19343	20017	18915	18722
3	20315	22114	19200	19669	20136	19620	19932
4	19738	20593	19615	19348	21993	21009	19533
1	19188	21148	19447	19026	20651	20241	21438
2	20007	21678	18962	19771	21745	20016	22491
3	20258	22123	20608	20293	20739	21500	14917
4	20607	21543	20530	20676	21833	22044	19545
1	21465	22238	21251	20504	21065	22468	16981
2	21841	22898	21816	21068	22939	22286	19769
3	22645	23379	22313	21467	22704	22970	22145
4	22270	23386	20692	22360	23983	22390	19533
1	22720	23466	21867	22050	22830	23436	22735
2	22406	23917	21448	21838	22907	23018	22734
3	24386	23812	22766	23024	23783	23844	21986
4	25188	24829	21560	22631	23725	22568	22108
1	24062	24575	22081	23124	24510	22472	25508
2	24817	25830	22733	24394	24290	24523	22264
3	27336	28510	22780	24793	23971	23423	20134
4	25157	25018	23097	23907	24873	24411	26600
1	26392	26254	23079	24450	23368	23555	21364
2	26743	27054	23168	24384	25314	23784	24458
3	28279	27530	24613	25050	25697	24540	22674
4	28336	28012	24139	25854	24264	23867	21233

These are unpublished figures obtained from Valuation Office records

NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

AVERAGE PRICES (at completion stage) 1978 -

8.7 SUB-REGIONS: DETACHED BUNGALOWS (EXISTING DWELLINGS)

£

Year	Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
1982	33979	31541	27057	27682	27116	27793	27617
1983	33060	33671	28777	30600	28460	29913	26891
1984	39892	35180	29973	33188	30216	31584	29546
1985	39530	37320	32365	35430	32214	31676	29686
1986	41045	41724	34002	37140	32485	33506	31544
1978 2	19796	17816	19633	18865	18896	18703	19303
3	20630	23123	19793	19525	20862	21227	21175
4	23327	22372	21391	21367	20071	19980	20156
1979 1	24425	24481	22223	20420	22004	19590	19142
2	23810	26525	21891	22490	23690	22958	22768
3	27181	27955	24365	24496	24878	24978	24624
4	31408	30914	21442	27098	24615	22630	25015
1980 1	31159	29420	27685	26510	24017	23984	24066
2	30401	29813	24367	27728	26275	24257	25465
3	32635	29869	24781	27154	26819	26281	26208
4	31537	30893	24229	28279	24127	26494	24284
1981 1	27032	26845	22891	24300	20845	24983	21033
2	31886	31655	26718	27458	27240	30088	24333
3	33914	30705	25875	28282	25982	27264	27543
4	31383	30320	25798	28588	28530	28409	26050
1982 1	31126	30732	28994	26043	25704	28395	24693
2	32447	31214	26426	27045	27695	25419	28811
3	34369	32030	26731	28465	28183	25826	27476
4	37180	31901	26541	28218	26694	30864	27882
1983 1	32016	31467	27334	28776	28007	29282	26899
2	33325	33884	29998	30244	28485	28664	25225
3	32851	34316	29404	31415	28414	31541	29048
4	33971	35204	27626	31383	28804	30175	25906
1984 1	37349	34184	28683	31199	28062	29640	27972
2	40639	33829	30338	32981	29360	29322	29640
3	40311	36071	30647	34272	31879	32701	29875
4	40774	35566	30154	34012	30958	32481	29900
1985 1	40267	35151	31123	35229	31405	27179	27632
2	34357	38794	31406	34260	31064	34050	31552
3	43115	37448	33899	35189	32547	30790	28177
4	36640	36773	32721	36588	34188	32575	30803
1986 1	40477	41430	33536	36735	31660	31700	30099
2	41413	40824	34897	37778	33680	35370	31504
3	42631	39451	31941	37491	32073	32546	32802
4	38747	47027	36535	36391	32313	34135	30956

These are unpublished figures obtained from Valuation Office records

THE NORTHERN IRELAND DEPARTMENT OF FINANCE AND PERSONNEL

HOUSE PRICES (at completion stage) 1978 -

UB-REGIONS: MISCELLANEOUS PROPERTIES (EXISTING DWELLINGS)*

£

	Belfast	North Down	South Down	South Antrim	North Antrim	Derry	Fermanagh & South Tyrone
	21045	19636	11598	11595	15393	10656	12165
	21654	21137	11802	11731	14182	16543	18909
	21128	25044	23545	11627	16351	18062	19348
	20773	18845	23935	25167	18702	17343	15887
	23331	22811	20498	15969	18948	17784	20649
2	8086	10000	8568	5057	5312	8063	5748
3	3780	9481	6677	6729	4343	11100	10580
4	7207	8788	7249	6986	4112	4115	8750
1	28000	14520	5236	6494	3406		3567
2	14350	9234	4485	12463	3338	9500	11152
3	21750	8140	6255	6875	4717	12500	7869
4	15514	11417	10348	5840	2721		14100
1	14923	10758	9671	1500	3763	9750	7750
2	7033	13381	5564	7200	6600		
3	27321	16275	8321	14907	4494		2800
4	13810	14991	7416	8036	4519	8075	11576
1	5350	13284	6729	11650	2258		14813
2	23950	15991	13567	10667	18333		19833
3	32200	17426	15620	16183	9875	11000	17583
4	23125	19117	17613	9640	12857	12525	10167
1	18558	20778	10602	14525	10700	17100	10375
2	17667	14979	13378	9139	11120	13000	10800
3	23014	20343	12573	12418	21125	11800	9625
4	23300	23292	10283	11293	15328	7888	16086
1	12188	18735	11000	14695	14405		17568
2	18333	20284	15000	8342	12905	20500	17300
3	29278	21985	10906	10100	15383	11000	17177
4	24093	22672	4250	11436	14094	18014	23569
1	16288	27758	21458	9638	16270	14000	18156
2	21846	24478	15050	10248	16200	14683	16157
3	22750	22200	34973	11836	12356	20558	22031
4	23114	26648	9655	26400	18943	15781	17979
1	12117	20241	35833	16000	15917	16531	21775
2	18333	18632	12846	9000	16571	20375	15151
3	24861	18071	22957	28000	15414	20488	15331
4	22270	19012	29343	29571	24829	13494	14261
1	26082	18733	21150	11250	20222	18889	25646
2	23618	20790	17225	19200	17500	17183	20308
3	25356	26153	21610	16800	16883	18675	19053
4	20267	23969	20762	15250	21500	17339	18492

Miscellaneous properties include flats, maisonettes and cottages.

are unpublished figures obtained from Valuation Office records

PART II Institutional Data Sources

Abbey National Building Society

TECHNICAL DETAILS

(a) Source of data and timing

Society's own lending records at the mortgage completion stage for the period 1977 Q4 to 1978 Q2, and at the approval stage subsequently

(b) Types of data and periods covered

Average prices: 1977 Q4 to 1981 Q4

Weighted average prices: 1982 Q1 to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES
HOUSE DATA	
All houses	*
New/Non-new	(*)
Type	(*)
Size	
Age	(*)
LOCAL DATA	
Regions	*
Sub-regions	
Towns	
BUYER DATA	
First-time buyer	(*)
Former owner-occupier	(*)

(*) These data no longer published

(c) Frequency

Quarterly

(d) Geographical coverage

United Kingdom subdivided into official standard regions (defined in Appendix B)

(e) Method of analysis

Until 1981 Q4 the published series were based on simple averages of house prices. The problem of noncomparability, as discussed in the introductory chapter, was then recognised by the introduction of a weighted average similar to that now employed by the DOE for its weighted index (see Chapter 3). Simple average prices are computed for subsets of houses classified according to particular characteristics and these are then

combined in fixed proportions into a single *weighted* average. Subclassifications are made according to type, age group and region. The weights employed are derived from the DOE Five Per Cent Sample Survey results and not from the Society's own mortgage transactions in order to ensure more representative national coverage. All sales, including those at discounted prices, are covered.

9.2 LIST OF TABLES

Average prices and weighted average prices

- 9.1 United Kingdom: all, age of dwelling, type of buyer, type of house. 1977-
- 9.2 Regions: all dwellings. 1977-
- 9.3 Regions: new dwellings. 1977-1984
- 9.4 Regions: post-1919 dwellings. 1977-1984
- 9.5 Regions: pre-1919 dwellings. 1977-1984
- 9.6 Regions: detached houses. 1977-1984
- 9.7 Regions: semi-detached houses. 1977-1984
- 9.8 Regions: terraced houses. 1977-1984
- 9.9 Regions: bungalows. 1977-1984
- 9.10 Regions: flats and maisonettes. 1977-1984
- 9.11 Regions: first-time buyers. 1980-1985
- 9.12 Regions: former owner-occupiers. 1980-1985
- 9.13 United Kingdom and regions by age of house: detached houses. 1977-1984
- 9.14 United Kingdom and regions by age of house: semi-detached houses. 1977-1984
- 9.15 United Kingdom and regions by age of house: terraced houses. 1977-1984
- 9.16 United Kingdom and regions by age of house: bungalows. 1977-1984
- 9.17 United Kingdom and regions by age of house: flats and maisonettes. 1977-1984

9.3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Numbers in the grid below refer to the corresponding tables compiled for this data source

ALL HOUSES	NEW	NON-NEW	AGE		TYPE		SIZE		REGIONS		SUB-REGIONS		TOWNS		FTB/FOO	
9.2	9.3		9.4-9.5	9.6-9.10												
										9.11-9.12						
HOUSE DATA										LOCAL DATA					BUYER TYPE	

(b) Three-way classifications

United Kingdom and regions by type of dwelling, by age of dwelling: Tables 9.13-9.17.

9.4 PUBLICATIONS

(a) Data

Homes - People, Prices and Places. Quarterly from 1978 Q1 to 1984 Q3, and then in a quarterly press release. Abbey National Building Society, London

) **Description of methodology**

None

) **Supplementary studies**

Homes - People, Prices and Places contained two short series of data which we have not reproduced in our tables:

type of buyer by type of property and by age of property. 1977 Q4-1979 Q4

type of buyer by region and by new/secondhand. 1980 Q2-1984 Q4

Ad hoc articles published in *Homes - People, Prices and Places* are listed below (numbers refer to issue numbers):

- 1 Average price paid by owner-occupiers and first-time buyers. Comparison of proportions of owner-occupiers and first-time buyers in last quarters of 1976 and 1977.
- 2 Average prices paid by first-time buyers and owner-occupiers.
Percentage of first-time buyers and owner-occupiers.
- 3 Wales and Scotland: regional house prices by first-time buyer, owner-occupier, age of dwelling, type of dwelling.
- 4 West Midlands and East Midlands. Average house prices and percentage of buyers as above.
Pre-1919 Houses.
- 6 South East: average prices in 1st quarter of 1979.
- 7 First-time buyers and existing borrowers - 2nd quarter 1979.
- 8 Metropolitan Counties - 3rd quarter 1979.
- 10 South East: average prices by buyer type.
- 11 New Homes - 2nd quarter 1980.

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977 -

9.1 UNITED KINGDOM: ALL. AGE OF DWELLING. TYPE OF BUYER. TYPE OF HOUSE

Year	All	AGE OF DWELLING			TYPE OF BUYER	
		New	Post-1919	Pre-1919	First-time	Former Owner-occupier
1977 4*	14092	14601	14691	12399	11547	16879
1978 1*	14473	15227	15015	12659	11701	17417
2*	14842	15741	15385	12939	12633	19345
3	17370	18386	18207	15005	13683	20963
4	18387	19476	19253	15772	14646	22025
1979 1	19418	20577	20364	16567		
2	21263	22357	22445	18131	16519	25443
3	22988	24182	24168	20009	17632	27861
4	23894	25052	25237	20742	18335	29369
1980 1	24370	26158	25413	21344	18859	29725
2	25362	26626	26668	22376	19409	30857
3	25243	26857	26748	21849	19628	30937
4	25192	27018	26663	21894	19660	31387
1981 1	24909	27948	25694	21986	19040	31375
2	25613	28361	26235	23113	18747	32896
3	24501	27937	24947	22006	18456	31840
4**	24143	28214	23400	24037	19818	27865
1982 1	24118	28903	23249	23690	19973	27641
2	24479	28894	23429	25096	20020	28292
3	25396	28804	24896	25118	21492	28741
4	25783	29663	25038	25885	22282	28781
1983 1	26217	30890	25434	26254	22928	29125
2	27428	31955	26503	27911	23670	30752
3	28327	32407	27614	28945	24440	31762
4	29326	33395	28731	30181	25097	33064
1984 1	29182	33637	28461	29417	25003	32882
2	31105	34699	32382	26719	23864	38022
3	31306	34566	32673	26870	23925	38360
4	31483	34573	32936	26979	24270	38365
1985 1	31686				24727	38458
2	32551				25070	39839
3	33660				25948	41175
4	34502					
1986 1	34811					
2	36814					
3	38391					
4	39495					
1987 1	39938					

* Prices at completion stage

** Simple averages before 1981 Q4; weighted averages from 1981 Q4 to date.

E OF HOUSE

ached	Semi-detached	Terraced	Bungalow	Flat/Maisonette
29	12818	11015	14944	12123
25	13204	11359	15822	12550
41	13780	11705	16025	12783
41	15716	13581	18724	14422
83	16899	14359	20125	15479
34	18073	15516	23203	16456
68	19755	16660	25085	17539
48	21054	18143	27475	19325
55	22265	18409	28724	19946
40	22972	19163	29271	20164
64	23745	19750	30088	20934
61	23956	19606	30437	20962
31	24218	19778	30453	21301
95	24190	19560	30606	21290
60	24471	19874	31487	20807
86	23563	19035	31082	20865
56	22504	18665	27951	18035
37	22876	18513	29198	18632
90	22995	18652	31000	18796
10	24026	19836	30376	19475
54	24575	19876	31639	19309
23	24932	19960	31600	20510
54	25974	20761	33904	21042
65	27011	21468	34551	21414
78	27898	22990	36032	22055
88	27571	22950	35610	22215
17	28793	23422	38000	24942
43	29311	23627	38082	25545
83	28965	23920	39118	25846

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES AND WEIGHTED AVERAGE PRICES (at approval stage) 1977 -

9.2 REGIONS: ALL DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	11553	10046	11421	11528	12597	13102
1978 1*	12024	10170	11614	11631	12769	13229
2*	12214	10709	12127	11965	13262	13408
3	13464	11329	13529	13033	15607	15370
4	14355	11986	14943	13854	15589	16615
1979 1	13687	13417	15207	15028	17016	17814
2	16290	14451	16660	15559	17835	19280
3	16500	15685	17554	17267	20199	20228
4	17459	16837	18412	17496	20996	21540
1980 1	18192	17478	18842	17917	21861	22683
2	18248	18017	19954	19396	22298	23384
3	18439	18289	20107	19941	21878	23451
4	18163	18138	19705	19830	21508	23842
1981 1	18068	18212	20177	19661	21190	22878
2	18371	19023	20126	20187	21861	23064
3	18128	18084	19267	19835	22746	23429
4	19681	19097	21015	18590	21354	21980
1982 1	18797	18613	21375	19517	21917	22429
2	18672	18803	20830	19248	21120	21277
3	19919	20573	21491	20430	22067	22764
4	19679	20111	21654	18983	21930	23434
1983 1	21114	21099	22143	20190	22580	23733
2	22317	21557	22690	20718	22873	25102
3	22724	22610	23743	21359	23786	26110
4	23518	23147	24506	22351	24878	26485
1984 1	23172	22582	24239	22491	24271	27217
2	23487	24097	25102	25371	26880	30429
3	23714	23937	25391	25344	26757	31017
4	23516	24381	24814	25045	26342	31427
1985 1	23069	24322	24685	25133	25884	31747
2	22685	24044	24797	25894	26591	33114
3	23871	25331	25720	27014	27050	34326
4	23606	24991	26046	27561	27757	34701
1986 1	23886	24513	25812	27721	28046	35416
2						
3	25076	27045	27492	30645	30264	38202
4	25736	26488	27092	30816	31667	41622
1987 1	23902	26101	28573	31754	31282	44707

* Prices at completion stage

South East	Greater London	South West	Wales	Scotland	Northern Ireland
6330	16321	13619	11637	15076	15469
6602	16871	14290	12112	14956	15693
6958	17540	14563	12362	14994	16476
0738	20220	16870	14283	16802	18489
1970	22039	17518	15195	17309	19122
2854	23584	18211	15619	18122	19539
5273	25982	19929	16627	19185	20507
7586	27677	22118	18952	20760	21934
8863	28702	23267	17767	21471	21934
8728	29763	24060	18972	21129	23234
0325	30219	25250	19713	21933	21718
0066	29849	25525	19525	22424	23067
0064	29869	24604	19075	22207	19209
9631	30047	24588	18821	21438	15120
1309	30751	25401	17690	22473	15030
9870	29114	25554	18744	22241	12481
9383	34348	23919	19300	23472	22088
9081	34415	24518	19205	23553	21561
0111	36015	25248	19625	24684	21541
0927	35066	26191	20643	26397	22180
2105	36950	27316	20766	26445	21572
2671	37612	27462	20306	25453	21481
4681	40446	28782	21895	26414	20823
5778	42480	29674	22358	25695	21828
6493	43826	30349	23101	28673	24054
7238	41788	30141	23133	28823	23479
0252	40275	32412	24286	29942	26237
0732	41678	31886	24164	29728	26066
1330	42392	32442	24112	29779	25977
1404	43722	32484	24304	29790	25836
3393	45275	34097	23722	29978	25423
5195	46503	34982	24194	30173	26166
6723	49221	35466	24702	30910	26856
7318	50573	36561	25428	31259	25597
3497	58073	39404	27341	32320	27578
5363	61398	40506	27370	32568	28196
5607	62897	40842	28651	31586	27322

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.3 REGIONS: NEW DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	12757	11891	12972	12050	13792	12767
1978 1*	13008	12051	13218	12249	14121	13659
2*	13293	12764	14196	12607	15119	13466
3	14638	14813	16,33	14403	18273	15933
4	15579	15459	17625	15920	18116	17120
1979 1	16357	16646	18743	17037	19038	18420
2	17564	17557	20222	18191	20998	20189
3	18798	19104	21754	19583	24722	21185
4	19289	19884	22443	20842	25297	22376
1980 1	20853	20706	23578	20936	26328	24476
2	21246	20943	23897	23691	25654	25127
3	21934	21605	25016	22869	25556	24885
4	21887	21775	24555	23284	25427	25239
1981 1	24644	22697	25066	23499	25611	25044
2	24246	23360	24145	24649	28015	26035
3	26102	22157	23379	24921	28827	25366
4	23762	23532	23469	23156	25745	25081
1982 1	24639	22738	24651	25327	29699	26308
2	24835	24110	24158	24098	25471	26034
3	25683	24273	25613	24733	25820	25957
4	26593	24382	25746	24165	27467	26140
1983 1	27484	26866	27620	25952	26550	26807
2	27120	25852	28588	27309	28198	28241
3	26871	27768	28906	28335	28338	28649
4	28528	28859	29616	27447	31167	30005
1984 1	28447	28626	29587	27325	29332	30397
2	29332	29418	31587	29334	32912	32338
3	29758	29564	31917	30261	32131	34095
4	27981	30244	29698	29218	32539	33859

* Prices at completion stage

th t	Greater London	South West	Wales	Scotland	Northern Ireland
32	20333	13594	12870	15702	17042
10	21186	14341	13797	15512	17794
47	22702	14655	13756	16266	17933
01	24430	16777	15315	18265	19392
51	26053	18403	16364	18128	20440
94	26409	19487	17957	19430	20438
32	29060	20776	19782	20729	23194
13	30048	22751	21011	22753	23666
04	33433	23954	20831	23132	23666
52	31949	25657	23258	23497	26609
50	33960	25914	24674	24190	26047
98	35660	25937	24776	25020	26901
96	34078	25821	24097	24480	26233
57	35422	26195	24930	25457	24914
33	32739	25915	26060	27433	24603
15	31349	25872	24091	28330	24458
58	42713	27453	24603	30954	28347
44	42261	27873	25234	29805	28170
19	39790	28898	24570	31098	26492
44	39757	29018	25088	30872	25193
01	48316	29298	25626	32509	26628
31	49385	31439	26806	33340	25005
52	49926	32798	26267	35334	25018
39	56148	33466	26951	34036	27893
04	55319	34145	29400	34255	29505
75	52238	33671	27667	35236	29000
09	42005	34310	30831	35936	29978
53	41351	34202	29025	33634	29921
42	42721	34159	30271	34756	30743

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AVERAGE PRICES (at approval stage) 1977-1984

9.4 REGIONS: POST-1919 DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	12657	10148	12344	12068	12575	13434
1978 1*	12749	10523	12493	12045	13025	13431
2*	13126	11001	12895	12097	13352	13655
3	14424	11064	14883	13257	15456	15435
4	15338	11989	16181	13807	15689	17074
1979 1	14440	13644	15953	15724	17020	18052
2	18281	15180	17989	15947	18023	19489
3	17981	16411	19044	18179	19990	20638
4	19491	18204	20589	18864	20428	21679
1980 1	20226	18131	20478	19011	21116	22160
2	20260	19229	22084	20260	22858	23704
3	19990	19962	22098	21230	22633	23730
4	20059	19535	22432	20611	21750	23879
1981 1	18660	19938	22314	20317	20748	22172
2	18971	20841	22588	20775	21841	21817
3	18407	19717	21322	20733	22175	23072
4	18799	18818	20980	17694	20846	21027
1982 1	17822	18066	21132	18551	20621	21422
2	17280	17652	20412	18416	20054	19674
3	18759	20367	21212	20051	21297	21140
4	18510	19433	21328	17434	20701	21902
1983 1	19706	20454	21537	19182	21841	22773
2	21388	20766	21936	18915	21589	23313
3	21464	21854	23140	19656	22627	24886
4	22449	22267	24122	21380	23852	24682
1984 1	22527	21972	23675	21578	23341	25653
2	24669	25764	27091	26314	26604	30609
3	25064	25581	27583	26307	27004	30574
4	25355	26018	26898	25868	26454	31428

* Prices at completion stage

th t	Greater London	South West	Wales	Scotland	Northern Ireland
50	17210	13958	12589	16007	15032
71	17742	14692	12753	15822	14958
69	18296	15233	13052	16362	15543
04	22067	17594	15273	18093	17256
38	23568	18007	16268	18403	17694
73	25229	18878	16247	19082	18543
29	27815	21144	17738	20343	19122
36	29601	23378	19305	21904	21203
08	30325	23844	18378	22499	21203
71	31226	25531	19845	22180	22831
00	31853	26120	21070	23663	20492
00	31873	25735	20913	23085	20920
14	31646	24976	21234	23169	17647
00	31706	24915	20259	20976	13250
69	32462	25355	17585	21843	12695
15	30015	25803	19457	21282	10828
4	33524	23322	18525	21666	20358
17	33435	23311	18402	21918	20297
12	35406	23997	19052	22832	19887
3	35444	25461	20316	24421	21920
11	37196	26502	20280	24427	20009
9	38229	25937	19500	22906	21361
14	40037	27091	21554	24230	21503
16	42965	28594	22330	23194	19854
15	44449	29700	22564	27661	22366
12	41299	29396	22726	27058	21161
9	42796	33287	25944	31878	26304
13	43953	32791	26009	32190	25736
11	45225	33236	25710	31784	25992

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.5 REGIONS: PRE-1919 DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	8548	8509	8381	9586	11314	12696
1978 1*	9665	8003	8620	9592	9771	12515
2*	9231	8304	9028	10822	10518	12774
3	10297	9086	9220	10627	12695	14580
4	10856	9295	10638	11258	12836	14997
1979 1	10067	9932	10950	10851	14150	16670
2	10878	10446	11781	11884	14173	17741
3	12048	12045	12583	13196	16108	18336
4	12853	12357	12471	11667	18615	20231
1980 1	12613	13467	13047	12694	19247	21642
2	13072	13504	13735	13518	17148	21142
3	14220	13449	14754	14996	17250	21832
4	13506	14190	13738	15305	17340	22656
1981 1	13907	13283	14705	15418	18131	22265
2	14353	13800	14929	15587	17657	23705
3	14528	13474	14616	14434	20042	22776
4	21852	18138	19415	18465	21167	21975
1982 1	18727	18284	20824	18126	20593	23286
2	19531	19999	20050	19158	22139	24133
3	19062	20477	22001	19207	21246	23321
4	18809	21170	22085	19662	21533	25426
1983 1	21526	19595	22038	19142	22697	23304
2	22148	21235	23232	22760	23450	27538
3	24882	22610	25590	20953	25117	27256
4	25118	22982	23687	23633	24560	27934
1984 1	20729	22132	24450	23137	24450	27977
2	18646	18030	18984	20870	23195	28679
3	18616	17735	18820	20058	21774	29792
4	18134	18135	19184	20557	21265	29720

* Prices at completion stage

uth st	Greater London	South West	Wales	Scotland	Northern Ireland
036	14692	13022	9702	13014	14985
626	15353	13546	10140	12982	12893
023	15973	13274	10335	12323	17659
218	17612	15741	11897	14072	24411
431	19597	15898	12363	15092	22721
768	21321	16101	12390	15451	22814
558	23498	17336	13080	15985	16830
209	25244	19716	16825	17551	21290
482	26422	21884	15373	18928	21290
012	27906	20822	15080	18132	17760
864	28308	23409	15653	18205	19809
267	27251	24897	15911	19866	28026
298	27784	23225	15125	19574	17983
068	27865	23115	15268	19809	15229
481	28843	25107	15305	20843	16100
934	27723	24859	16211	20939	15791
996	31754	25615	17775	23632	22139
823	32313	25878	16736	24013	19421
218	34336	26531	18188	25344	24022
409	35466	25638	19058	25991	20007
031	35307	28159	18964	25170	19776
937	36068	28007	18422	26114	19653
807	39950	29900	20855	26125	14216
160	41021	29121	20645	26800	19213
300	42163	30437	22134	27340	22022
539	42262	30159	22424	28988	23574
213	36870	29609	19504	24832	18372
738	38771	28818	19754	24845	19332
691	38704	29902	19579	25023	17839

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.6 REGIONS: DETACHED HOUSES

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	18726	17911	19202	16666	18523	17769
1978 1*	18661	16735	18888	16374	18375	17750
2*	20413	18359	19800	17419	19346	18179
3	21344	20860	23383	18619	22845	21162
4	24532	20612	24991	20266	22560	23281
1979 1	24422	23002	25401	21655	24872	25142
2	25176	23604	28645	23504	26563	26289
3	27999	25949	31159	25538	30402	28083
4	30856	27807	33513	27366	32357	29493
1980 1	31132	29706	32841	26829	34175	31476
2	30778	30792	34751	29642	33252	31973
3	30555	30802	36779	30549	33497	33211
4	30663	29878	34331	30673	32492	34095
1981 1	32228	31650	35808	29816	33143	32551
2	32900	31668	36527	31103	35208	34038
3	34382	31296	34779	32301	37321	33208
4	29878	28179	32087	26644	29590	29767
1982 1	28355	27834	31702	28778	30355	31842
2	27898	27510	30865	29171	30401	30327
3	29333	30708	31963	29462	31030	32273
4	28157	29364	30816	28680	30895	32816
1983 1	31729	30992	33149	30528	33140	32367
2	33637	32072	34702	32398	34016	35757
3	32502	35319	36751	34642	36146	35711
4	33925	34823	37589	33772	35385	36664
1984 1	32010	33151	36584	33515	34070	36987
2	40112	38847	42314	37551	40902	42666
3	40795	38135	42868	37206	39349	43724
4	40550	37978	40566	37274	39248	43981

* Prices at completion stage

	Greater London	South West	Wales	Scotland	Northern Ireland
1	29323	19218	16840	19814	21430
5	32443	20604	17114	20248	20339
7	33823	21535	17510	20768	21856
2	38395	24725	19667	22697	25964
5	38005	25356	22186	23655	25475
4	46007	27365	22259	26224	25485
5	49864	29110	24339	26113	26256
3	55677	31511	26244	29281	30003
7	53798	33897	26820	31515	30003
1	61305	36037	30530	31061	29029
7	62836	37878	32018	32610	30454
7	60934	39177	30748	33849	35573
1	58825	36983	30145	33072	31402
3	60881	36473	29239	32709	27987
7	59360	37796	31926	36619	26743
1	59058	38824	32578	36324	27851
5	49530	33677	26934	31903	31696
1	49689	33481	27034	32561	31727
5	48270	34278	26659	32534	28349
2	48182	35624	27935	34469	29300
5	51588	36489	28346	35562	28883
1	55353	39551	29174	36365	30169
1	59425	40653	31995	39327	27219
5	60325	41772	32005	36095	31199
1	61438	41144	32936	37848	35139
7	64097	40538	32847	38830	31265
1	75229	48805	37019	42908	35452
7	84484	45070	34946	43012	34076
7	81325	46378	37179	41551	37088

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.7 REGIONS: SEMI-DETACHED HOUSES

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	11810	9319	10790	9791	11150	10828
1978 1*	12279	9627	11214	9833	11243	11317
2*	12439	9814	11782	10294	11831	11762
3	13538	9989	12991	10827	13446	13492
4	14238	11025	13915	10869	14110	14365
1979 1	14664	12655	14861	12435	15320	14636
2	18260	13450	16051	12977	15973	16636
3	17086	14423	17013	14672	17568	17583
4	17807	15546	17937	15235	18155	18788
1980 1	18789	16279	18590	15665	18956	19523
2	19822	17208	19806	16273	19646	20650
3	20114	17891	20103	16915	19771	20638
4	19861	18166	20509	17438	19961	22020
1981 1	18975	18272	20326	17700	20208	20792
2	19308	18724	20832	16860	21020	20876
3	17830	18221	20564	17502	20270	20892
4	17872	16798	20011	17923	20391	20693
1982 1	17520	17252	20635	18151	20577	21714
2	17409	17813	20324	17694	19894	20411
3	18656	19896	21188	18525	20786	20767
4	19244	19702	21461	17278	20828	21672
1983 1	20145	19729	21839	17651	22124	21828
2	21844	20173	22282	18442	21798	23026
3	22419	20951	23283	19223	22596	25128
4	22774	21639	23614	20854	22766	24652
1984 1	22791	22171	23470	21303	23078	25249
2	23800	23105	24493	22060	23282	26567
3	24581	23136	24532	22233	24628	27254
4	23216	22749	24029	21606	23470	27060

* Prices at completion stage

Greater London	South West	Wales	Scotland	Northern Ireland
18271	12383	10984	14646	11851
19200	12773	11380	14485	12044
20687	13265	11440	15296	13391
24073	15087	12756	16422	13750
26923	16070	13725	16911	15392
28483	17350	14355	17555	15644
31653	18631	15433	19341	15873
32590	20310	17198	20050	18081
34113	22224	16587	21029	18081
35519	22659	17533	21319	19366
36594	22872	18232	21476	19102
35918	23022	18829	22071	19777
36175	23523	19012	22248	17324
36729	23944	17817	20645	15385
36950	23944	17614	21928	13990
36357	23765	17108	21014	12418
32214	21962	17714	21591	19682
32748	22786	19094	22165	19927
32545	23677	18495	23642	20486
35062	24378	19653	24808	21002
36582	26603	19735	24801	21216
37710	24994	19711	25444	20868
39736	26159	20837	25614	19759
42089	27413	21615	25316	20737
42915	28755	22316	27823	22405
36653	28610	22854	27450	23131
48931	30021	22610	30589	22002
49843	29910	23827	29710	22730
50510	29847	22703	30486	22941

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AVERAGE PRICES (at approval stage) 1977-1984

9.8 REGIONS: TERRACED HOUSES

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	8347	6282	7266	7409	8418	9280
1978 1*	8995	6744	7562	7508	8592	9552
2*	8655	7020	7537	7456	8757	9826
3	10226	7097	8436	8515	10090	10384
4	10078	7796	9381	8652	10285	11738
1979 1	9994	8555	9545	9293	11283	12287
2	11068	9606	10106	9359	11708	14406
3	11080	10322	11073	9821	12473	14451
4	12315	10501	11234	9840	13285	14843
1980 1	12432	11265	11553	10400	14253	16152
2	12080	12115	12266	11007	14410	17136
3	12535	11914	12677	11941	15037	16279
4	13057	11936	12607	12256	14951	16961
1981 1	12779	11874	13371	12255	14370	16910
2	12254	11995	12882	12291	14578	15570
3	12950	12192	12983	12131	14634	17809
4	13687	12674	14056	13117	15941	17824
1982 1	13455	12835	13577	13897	17205	17668
2	13487	13066	13801	13216	14794	15611
3	14307	14285	14380	14388	16453	17962
4	13962	14106	15022	13143	16281	18515
1983 1	14806	15153	14776	14583	15752	19382
2	15725	15439	14714	14141	15820	19679
3	16299	15076	15298	14513	16505	21430
4	17742	16455	16452	16335	18109	22604
1984 1	17328	15877	16580	15836	17401	22677
2	16892	15772	16311	16282	18256	21582
3	16811	15817	16139	16678	17193	22499
4	16498	16075	16442	16432	16984	23734

* Prices at completion stage

Greater London	South West	Wales	Scotland	Northern Ireland
15436	10191	8433	12441	8878
15503	10673	8787	13318	9741
16515	11015	9114	13342	12925
18964	12471	10146	14678	11063
20317	12680	10294	15187	11162
22523	13405	10973	15211	10191
24435	14797	11180	16477	12430
26379	16309	14509	17900	14240
27469	17493	11757	18278	14240
28473	17240	12632	18048	14511
28901	19056	13091	19164	12605
28641	19120	13594	18579	13063
28905	18938	13684	19345	11819
29008	18752	13743	15710	10284
30025	20195	12655	16450	8299
28483	19435	13385	16172	7894
28897	19653	14428	18672	15260
28194	19716	14333	18913	13839
29027	20716	15023	19932	15691
30330	21186	15894	22245	15623
30912	21596	15528	20897	16079
31265	21838	14442	17980	13975
33203	23222	16069	17903	13943
35574	24399	16760	17478	13567
36878	24912	17234	23725	14517
37258	24209	17116	24243	14982
38911	23942	17586	25210	15128
39928	24297	17392	23760	15026
40621	25626	17199	25345	16057

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AVERAGE PRICES (at approval stage) 1977-1984

9.9 REGIONS: BUNGALOWS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	14123	12335	14373	12545	14095	12225
1978 1*	15395	12745	13966	13565	15737	13000
2*	15209	12841	15925	13256	15469	13498
3	16833	15334	17468	14005	17983	14607
4	18445	16305	18772	15145	19060	16215
1979 1	20227	18778	23085	17075	12245	19617
2	25035	21255	23871	18572	23144	19603
3	24772	22409	26065	21014	27060	20446
4	26067	24636	26401	22507	27682	23305
1980 1	27095	23360	28550	25135	29333	22714
2	25105	22582	27778	22776	30515	24688
3	26910	25844	27787	25412	28952	24606
4	26470	23881	29382	24692	26644	24139
1981 1	27697	25117	31292	23513	28831	22638
2	34681	26702	29599	23561	31494	24161
3	31164	25290	30418	24056	31843	25809
4	25230	24446	25918	24055	25671	24359
1982 1	25048	23980	29286	25490	27441	23374
2	24244	24870	27044	26165	28744	25624
3	26585	25167	27502	26394	29432	26634
4	25757	25107	28850	24729	28211	27495
1983 1	27613	27753	28446	26923	28862	26843
2	28186	29326	29938	28067	30504	28227
3	30718	30296	32876	26758	30408	28740
4	31540	30321	31310	27487	37242	28616
1984 1	31857	28609	32263	27764	34691	31421
2	33507	34013	35285	32856	37390	31723
3	32487	33213	39154	31264	36205	31410
4	37969	37916	36432	31105	39818	31199

* Prices at completion stage

	Greater London	South West	Wales	Scotland	Northern Ireland
	20289	14529	13066	17271	16605
	20599	16327	13261	17592	17977
	21171	16410	13396	17847	17146
	25098	18458	15549	20779	18478
	29481	19673	16685	19851	19874
	40259	21820	17920	22558	21984
	38728	23846	20026	25859	23242
	39116	27888	20689	27254	24682
	41036	27784	21743	28653	24682
	37755	29847	21958	28167	28837
	39668	30289	24301	30952	26115
	45375	30257	23191	30743	28662
	46651	30633	23676	29309	27998
	44441	29853	25102	33496	25771
	46306	29726	23606	31077	26401
	49391	31139	24724	31478	22958
	35851	26325	24125	29467	26969
	39395	28603	23527	27575	27611
	53731	28845	24480	30902	26212
	34063	30724	23828	31583	27246
	40253	30496	24178	33235	26621
	37037	32287	26036	31766	26510
	45257	35071	26289	33251	25932
	47861	33215	26912	33508	28128
	52170	36334	26558	33655	26660
	45970	36534	26137	33344	29224
	60522	38941	29015	39677	31290
	60699	40283	28370	40020	30827
	74455	39059	28276	38876	29746

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AVERAGE PRICES (at approval stage) 1977-1984

9.10 REGIONS: FLATS & MAISONNETTES

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1977 4*	8108	9762	10606	8631	10933	10717
1978 1*	8409	10218	10697	7176	9310	7775
2*	8243	9970	11351	10715	9064	9248
3	9060	9672	12506	9521	11885	10390
4	8557	10637	13627	11298	11172	10639
1979 1	8885	11221	12547	9785	12496	11209
2	8528	10046	12894	10705	12989	11837
3	10313	12584	14995	12783	15692	11075
4	10532	24740	13948	10399	15504	15324
1980 1	11288	15752	16990	11652	15327	14794
2	11241	14976	17656	12988	16439	16340
3	12396	15849	17331	12741	16822	15667
4	10484	15557	17494	13770	16500	17147
1981 1	11822	15353	16893	14034	12232	17398
2	10682	14867	16937	14467	9872	15793
3	13001	14214	11629	13272	14283	15698
4	13249	19315	13055	11084	16261	17324
1982 1	11800	15160	16909	14805	16528	17409
2	12634	14262	15514	13712	16343	17171
3	13365	15259	15976	18611	15896	16820
4	13278	14480	15828	14480	16421	17099
1983 1	14975	17720	18318	16990	16764	20518
2	14151	16365	18203	16303	17240	21137
3	14963	18452	17035	15832	17682	18985
4	13305	18345	20171	16332	18367	18913
1984 1	15126	17621	18485	18223	18496	20944
2	14495	17525	17717	17554	17709	21684
3	14454	18725	18607	16075	17579	22070
4	14160	17908	22487	16021	16967	21283

* Prices at completion stage

£

Greater London	South West	Wales	Scotland	Northern Ireland
13276	12135	9946	10180	
13925	12388	11474	10090	
14123	13132	11185	10589	
16085	13075	12692	11285	29500
17569	14222	15217	11922	
18835	14656	9406	12714	
20313	15696	13685	13492	
22188	16120	15703	14554	
22971	18030	14663	14430	
23453	18307	16564	14364	
24096	18785	19002	14991	
24253	19294	16497	15943	
24269	19759	14257	16073	
24505	18461	14189	16769	
24938	16536	7137	16389	
23499	18651	13915	17380	
26553	17399	15648	17466	24311
26044	21173	12548	18542	
26207	20802	17134	19053	
26760	20940	19261	19297	
27308	22522	20221	19599	15260
28144	21938	17220	18574	20131
29779	22532	19047	20586	25288
30949	23645	18476	22063	22610
32122	22888	20946	21810	32709
31721	24532	20452	21192	25010
31139	22075	19828	20471	
32076	23070	20779	20812	
32922	22096	18961	21029	24571

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1980-1985

9.11 REGIONS: FIRST-TIME BUYERS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1980 1	13669	13405	14173	13616	16495	17735
2	13339	13506	14503	14028	15752	18134
3	14081	13771	15172	14226	16835	18501
4	14273	13774	15537	14802	16841	18818
1981 1	13957	13589	15377	14638	15793	17931
2	13356	13468	14818	14015	14835	16617
3	13361	13721	14694	14913	15710	17487
4	16512	15910	17799	15684	17271	18536
1982 1	15677	15492	18476	16161	18451	18176
2	14394	15000	16347	16019	17922	19035
3	16506	17921	18042	17631	18755	19931
4	17272	17111	18281	16495	18603	20325
1983 1	18342	18185	19235	17586	19939	21493
2	19690	18405	19487	18600	20276	21631
3	19745	20173	20250	19173	20559	22420
4	19909	19846	21429	19506	21829	22757
1984 1	19961	20320	21301	19702	21228	23247
2	18412	17924	19015	19342	19833	23072
3	18439	18248	19061	19288	19880	23803
4	18195	18524	18834	18763	19547	24036
1985 1	18246	18432	20009	19049	19817	25518
2	18364	18679	19033	19132	19742	26219
3	18278	19305	19556	20584	20610	26475
4	17873					

h	Greater London	South West	Wales	Scotland	Northern Ireland
4	24450	18729	14408	16556	20595
0	24657	19938	15579	16659	18401
1	24905	19796	15603	17694	18779
8	24816	19413	15371	17177	15388
8	24705	19200	14786	16100	12614
3	25122	18763	13359	15977	12080
7	24261	19055	14305	16137	9969
1	27979	18947	15716	18135	19441
3	28241	20591	15738	18717	18696
7	30178	20697	15741	19528	18473
5	28940	22489	17680	22072	19102
5	32429	24199	17515	22705	19100
4	33342	24097	18203	22711	19760
7	35599	24415	18575	23085	18908
2	36902	25598	19254	23111	20026
9	38184	26288	19234	23770	21161
1	34152	26175	20210	24613	20653
2	33427	25161	19553	23228	22155
4	34320	24804	19693	22714	21994
5	35684	25982	19378	23292	21978
2	36598	25203	20174	23464	21252
7	37327	26285	19538	24105	21754
2	39312	26906	19605	23741	21391
	40706				

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1980-1985

9.12 REGIONS: FORMER OWNER-OCCUPIERS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1980 1	22177	21508	24552	22767	26739	26548
2	22430	22281	24762	24140	27403	27531
3	22542	22642	25323	25487	27100	27942
4	22739	22475	24613	25538	26761	28884
1981 1	23374	23028	25754	25096	27517	28193
2	24148	23589	26071	26784	29281	29286
3	24867	22561	24675	25885	30987	29716
4	23087	22040	23732	21215	24805	24919
1982 1	22285	21470	23913	22521	24776	25633
2	23456	22283	24753	22164	23757	22952
3	23736	23000	24508	22960	24798	24879
4	22370	22857	24606	21209	24674	25756
1983 1	24251	23799	24859	22636	24785	25361
2	25316	24479	25682	22688	25040	27626
3	26096	24868	27006	23394	26480	28793
4	27640	26206	27381	24998	27423	29195
1984 1	26808	24679	26983	25087	26812	30104
2	29596	29675	31352	30994	33461	35934
3	30042	29098	31858	31102	33253	36274
4	29876	29672	30892	31026	32688	36951
1985 1	29134	29523	29815	30479	31865	36446
2	28048	28881	31105	31834	33345	38305
3	30802	30780	32445	32672	33404	39942

h	Greater London	South West	Wales	Scotland	Northern Ireland
8	37349	28103	23859	25894	26575
3	39038	29438	24116	27051	26252
9	37782	30215	24370	27522	30425
2	38403	29781	23887	27858	29712
7	38723	29411	24487	29081	27329
4	39174	30968	25267	29938	28171
3	38590	30894	25120	30316	27338
8	42727	27596	22473	28537	23942
6	42042	27244	22372	28326	24102
6	43533	28408	23173	29772	24497
2	43147	28761	23350	30666	25145
1	42915	29479	23735	30137	23953
1	43366	29840	22409	28206	23371
2	46948	31867	25215	29757	23072
0	49996	32554	25463	28289	23807
5	51394	33217	26968	33596	27302
0	52078	32943	26056	33050	26916
6	51500	38084	30234	37165	32205
0	53786	37369	29787	37273	31298
9	53438	37496	30078	36759	31325
5	55192	38198	29663	36973	32815
1	57991	40228	29117	36795	30794
6	58080	41325	30102	37638	33560

ABBNEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.13 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: DETACHED HOUSES

Year	UNITED KINGDOM			NORTH			YORKS & HUMBERSIDE			NORTH WEST		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	19658	21155	23062	16493	20204	21445	16209	17266	23305	17586	19234	24621
1978 1*	20336	21706	23492	16782	18808	26189	15658	16660	19631	17959	19152	20181
2*	20706	22763	23941	18792	19710	32131	16311	19604	19885	18502	20506	22311
3	23792	27673	27983	18949	22860	24679	19084	22155	21199	21759	23509	30514
4	25118	28650	28147	22462	24148	37636	19766	21414	20015	23695	24639	32031
1979 1	26603	30937	30445	22753	24883	29900	21232	24540	26764	24120	25895	28221
2	28768	34052	34991	23697	26530	26136	23020	23587	26517	26852	29186	32491
3	30844	36619	36985	26147	28694	32134	24564	27101	25170	28195	32687	35370
4	32113	39775	39289	28164	32210	29439	24732	30009	28295	30435	35420	35410
1980 1	33695	39602	40816	27935	33050	34645	26613	31608	33503	31617	33868	32893
2	34023	41975	45499	27771	32736	32450	28365	31935	33562	31445	35899	45592
3	34910	41507	43653	26675	30769	39232	28804	31230	33472	34419	36899	45390
4	35372	41256	42850	28342	30807	38136	27490	30020	33463	31345	36050	39268
1981 1	36150	40546	41554	31399	31740	36870	28867	32855	34992	32591	36341	45801
2	36931	42053	43926	30299	33335	40341	30496	31292	36269	32681	36922	47820
3	37578	41269	42276	35479	35031	28042	30069	32182	30452	31780	34417	49848
4	34612	34279	35123	29713	29308	33648	28947	29299	25168	28181	34009	33384
1982 1	34234	33858	34763	30167	27583	28126	27714	27773	28517	28975	32330	35139
2	33992	34429	36450	29522	26942	28743	28573	26874	27583	28696	32240	29273
3	34219	36388	36978	31677	28433	28503	29633	31702	30521	29894	32733	32249
4	35554	35925	38132	31679	26475	26632	29225	29052	31232	31086	30151	36341
1983 1	37076	38898	38315	33306	30858	31176	31295	31865	28355	33824	33903	35753
2	38934	40027	40991	33152	33386	36243	30301	33268	27085	35738	34217	36659
3	39451	41612	44554	31127	32982	41786	33790	34200	40929	34554	36169	44772
4	40010	41749	43657	32449	34675	34513	32393	34698	39461	36770	38365	38659
1984 1	40433	41763	43344	33131	31742	29773	35871	32299	31970	36582	35501	44218
2	45259	47479	51228	36504	39938	52067	37050	39216	41392	40492	41905	49415
3	44998	46995	50532	36926	42869	43153	36339	37751	44631	40741	42180	54034
4	44795	48131	49298	37739	41053	47002	35335	38395	42386	36204	41001	49570

* Prices at completion stage

MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
Post- 1919	Pre- 1919		New	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919
2	16859	19041	17432	18533	20763	16563	17530	21216
4	15842	20771	18110	18554	18299	17141	17527	19695
3	16795	24139	18773	19415	21023	16403	17788	23517
7	19205	20589	22165	23948	21673	19999	21503	22379
5	20501	22818	21228	22844	25592	21520	24285	24977
5	21985	21424	22762	26467	27717	22856	25498	28865
1	22923	35618	24750	27468	29980	24562	27202	27892
2	25755	29776	29188	31690	30041	25803	29974	28997
4	29999	25062	29688	32724	39754	26887	29288	35984
5	27947	30023	32433	33440	41462	29408	31241	37443
5	29934	32608	31026	35832	33888	28687	33250	35884
7	31533	34163	30573	34217	41661	30098	33829	37022
7	31316	32524	30322	34331	35038	32442	32366	39612
5	29089	34667	31829	33038	37901	31222	30922	39768
7	30442	34904	33777	36180	35794	30522	33488	42376
5	30948	33345	36386	35790	44514	32491	32391	37117
1	24916	28322	29777	29908	32435	30471	29728	28725
7	27368	28770	31745	29444	31119	33479	29965	34313
7	27919	34980	30406	30147	31796	31340	29630	30697
7	29146	29395	31082	30607	32899	30455	31803	39703
7	28328	30246	32116	29259	34216	30403	32259	42657
7	30570	27648	32195	33155	35862	32251	32743	30990
7	31407	32682	34879	32687	38284	34918	35094	39449
7	33272	33081	34876	35789	40227	35030	34943	39783
7	32635	35059	35998	34015	38946	36226	34492	44100
7	32531	38249	34820	34131	31004	36307	36298	40320
7	35988	44108	41921	39856	43390	40954	41566	47504
7	36267	37776	40328	38526	40867	43523	41550	50002
7	35696	42138	39562	38691	41144	42584	43365	47280

BBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

13 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: DETACHED HOUSES (continued)

Year	SOUTH EAST			GREATER LONDON			SOUTH WEST			WALES		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	23342	23889	28453	36515	29701	24867	18494	19103	20080	17457	16711	16540
1978 1*	23392	25096	28536	32853	31808	34411	19903	20036	22595	18574	17277	15447
2*	24601	25425	28636	36773	34811	26076	19827	21756	23506	17425	17940	16799
3	29385	32362	35135	39033	39979	32659	22521	25419	25832	19128	20077	19504
4	30892	34364	33657	41511	38455	34007	24905	24892	26885	20712	24030	20781
1979 1	33276	36398	34686	48060	46764	42507	25176	27719	30668	22233	22120	20155
2	35136	40873	44402	48164	51289	45943	27088	30495	29836	25590	24461	22190
3	37468	43285	50397	51019	58811	48441	30317	32005	32521	27164	26303	24462
4	39461	48338	53075	64625	55519	43084	31153	34470	36555	25940	27958	26007
1980 1	40921	46716	52081	57919	62000	59796	34469	36925	36883	28569	33926	27579
2	39964	49882	61973	57400	63709	62286	33692	40039	40248	33026	31357	31769
3	41479	49123	53160	68378	63118	49169	34233	37896	47340	30875	30897	30289
4	42962	48677	53809	63314	59676	54150	34500	35868	42560	31950	31378	26040
1981 1	43486	47640	49523	61492	61930	57291	33765	36439	40575	31670	29624	25997
2	43200	49660	55558	56028	61874	52082	35624	37387	41239	35772	31776	28615
3	44098	48821	52985	54954	61664	52503	35227	38760	43457	31764	33453	31588
4	39977	41158	45151	70690	48942	40166	34591	31306	38699	27511	28018	24557
1982 1	38886	39980	43000	62795	49427	40157	33302	33014	34918	29628	25521	26586
2	39753	41853	48021	44465	52241	50870	34757	34160	34248	28536	27083	23757
3	41740	43633	46273	45241	51840	48640	34242	36176	36944	29586	28454	25558
4	43474	44972	49081	62019	52518	45195	34869	36306	39914	30962	28413	25229
1983 1	44164	47475	50395	70939	61812	45296	37715	39383	43185	34133	27455	27324
2	47202	49414	50176	57880	58837	61738	39572	40167	43146	32336	32085	32333
3	46773	52524	55466	77541	62078	57132	41056	42466	42357	30841	32830	32811
4	47923	51026	56846	69997	63955	53304	41013	40096	44044	36962	31491	30985
1984 1	50318	52990	57169	67618	66207	59064	40064	41008	41288	33434	31840	33368
2	58117	61257	69627	67173	79580	61287	48856	47478	52231	41503	37402	32757
3	59315	60134	70241	62400	87333	81073	46100	44697	44852	37409	35490	31945
4	60488	63453	67901	73293	84185	73244	45394	47584	44355	39149	37996	34021

Prices at completion stage

TLAND	NORTHERN IRELAND				
	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919
29	19917	20472	22673	21031	20795
16	20955	20061	23190	19343	16700
25	22019	19542	25468	19202	25750
15	22908	22976	24743	23243	44357
38	24113	23322	23780	25144	29158
40	26087	27720	25250	21754	34813
70	27086	25229	29210	24497	22490
71	29931	28454	32396	29773	27775
57	31103	33287	32396	29773	27775
77	30368	33457	26708	33457	20986
11	33331	32050	35240	27558	30486
07	32826	35269	31005	33323	46484
17	31666	35157	39025	31579	26292
40	31116	33114	33195	28425	21978
31	36406	35249	28611	27008	21797
25	37146	33371	33090	27432	22631
55	30335	27368	36116	28100	36085
18	31898	32730	35045	32064	25924
09	29175	33631	30322	29285	25608
53	32765	35109	28828	32919	22716
43	33461	32569	30217	28294	26888
51	33608	36704	26943	34134	28222
21	37558	34919	29289	29237	18456
54	32256	34240	32682	31360	25999
20	36898	35064	36229	34180	34816
31	37210	37780	34718	26529	30751
55	41192	44014	38768	35720	26474
32	43170	42975	37318	32418	37302
72	40723	40107	42340	38224	25104

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.14 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
SEMI-DETACHED HOUSES

Year	UNITED KINGDOM			NORTH			YORKS & HUMBERSIDE			NORTH WEST		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	12020	12890	13616	11256	11817	14789	10034	8958	10711	10528	10897	10572
1978 1*	12409	13181	14540	11633	12395	14151	10176	9392	11153	10973	11134	12504
2*	13073	13706	15337	11983	12486	14964	10706	9573	10721	11683	11612	13289
3	14657	15733	16812	12947	13682	15100	12547	9145	14116	12943	13153	12102
4	15570	16904	18493	14182	14140	16486	12460	10577	13959	13497	14087	13508
1979 1	16394	18273	19410	15052	14498	15300	12970	12439	14514	15078	14792	15076
2	17569	20010	21158	15314	19363	18077	13627	13427	13346	15022	16151	16924
3	19157	20938	23736	16149	16929	24873	14176	14284	16308	16072	17067	17969
4	19841	22212	25445	16788	17356	38571	16208	15172	18348	16932	17861	20879
1980 1	20644	22803	26532	18239	18614	22727	15917	16053	18937	17385	18481	21666
2	21205	23515	27951	18292	19895	26684	16880	17142	18563	18509	19944	22294
3	21660	23955	26542	19811	19894	23633	17002	17853	20263	18872	20046	23054
4	21848	24175	26887	19115	19618	27603	17617	18003	20380	20378	20419	21416
1981 1	22716	23817	27632	20974	18309	22635	18348	18007	20711	19878	20425	20223
2	22746	24035	28421	20092	18836	25518	18672	18436	21756	19630	20847	22231
3	22262	23148	27042	20970	17017	25425	17884	18100	20370	20090	20545	21434
4	23741	22074	23772	19590	17347	21309	20317	16098	18099	21271	19794	19878
1982 1	24429	22447	24256	22498	16564	22823	19045	16698	20262	21520	20324	21827
2	24295	22414	25326	21476	16679	22511	19946	17251	20276	20276	20280	20813
3	24033	23940	24704	20277	18313	20192	20472	19631	21439	22177	20953	21908
4	24419	24383	25968	22650	18532	20855	20393	19371	21772	21496	21320	22502
1983 1	25398	24535	27102	22765	19537	25065	21020	19224	22689	22236	21618	23612
2	25803	25689	28090	22432	21502	25196	21045	19693	23620	22240	21858	25200
3	26454	26723	29251	22739	21865	29022	21305	20637	22550	23441	22657	27483
4	27274	27636	29945	23064	22280	28140	23146	21201	23530	22793	23449	25908
1984 1	27610	27152	29994	24068	22565	23390	23096	21727	24345	24181	23245	23938
2	27143	28444	32152	23845	23562	26896	23231	22741	26727	23331	24514	25404
3	26803	28962	33396	25584	23821	32492	22482	23098	24179	23302	24527	25704
4	27139	28553	32820	22213	22966	28846	23638	22094	28601	23626	23877	25574

* Prices at completion stage

EAST MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919
106	9676	10413	11046	11092	11846	10823	10946	10512
127	9898	9168	11046	11355	10889	10923	11186	12191
106	9911	12357	11865	11822	11821	11400	11966	11586
168	10251	11864	13161	13346	14545	13114	13299	14692
137	10524	10595	14418	13963	14677	13991	14093	15431
126	12656	11075	14462	15228	18378	15007	14260	15829
143	12952	12348	15687	16049	15873	17691	16179	16702
191	14439	14267	17203	17314	19848	16573	17800	17980
126	15310	15408	17880	17886	20298	18305	19365	17228
161	15799	13599	19207	18700	21245	18944	19218	21962
125	16340	15078	17890	19718	22885	20166	20577	21355
182	16891	15962	19554	19595	22067	20824	20316	21524
159	17215	18794	19711	19882	20950	19798	22663	22269
157	17430	18118	20106	20093	21413	20366	19929	23757
110	16843	15304	20267	20989	22056	21871	19951	24105
165	17156	17882	19904	19526	26429	19838	20138	23747
156	17780	18558	21876	19818	22749	21458	20271	21801
178	17877	17301	21526	20092	22745	21362	21178	24251
131	17217	18118	21766	19359	21778	21429	19194	25060
158	18315	18090	22629	20479	20689	21107	20610	20860
186	16799	17358	22382	20357	22276	22452	21073	23327
178	17012	19156	23703	21731	23234	22367	21721	22267
139	17325	23648	23704	21417	22365	23053	22372	25875
181	18448	20998	23394	21901	25300	24207	24781	26541
197	20404	22123	23795	22472	23359	25645	24041	25886
151	20947	22956	25029	22512	25898	24794	25180	25858
194	21872	22888	22815	23185	24850	24746	26646	27691
163	22315	22318	22922	24563	27593	26171	26847	29605
182	21582	21668	24164	23147	25590	25751	27057	28088

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.14 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
SEMI-DETACHED HOUSES (continued)

Year	SOUTH EAST			GREATER LONDON			SOUTH WEST			WALES		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	13738	14693	14277	17447	18237	18483	12065	12316	13050	11556	11016	10022
1978 1*	14341	14958	15797	19228	18915	20392	12481	12466	14040	11523	11398	11104
2*	15101	15386	15706	19804	20719	20630	12878	13080	14616	11258	11589	10966
3	18307	18817	18302	21060	24602	22476	15153	14882	15617	11977	13122	11883
4	19216	20294	19923	37356	26836	26564	15531	16116	16647	13881	13728	13423
1979 1	20167	21722	20398	24038	28532	28605	17216	17316	17645	14466	14549	13120
2	21294	23314	22871	27790	31604	32413	17924	18787	19092	15853	15473	14687
3	23953	25487	25507	36255	32015	34119	18893	19995	22632	16866	17548	15845
4	24939	26974	27091	40592	33560	35508	20559	21362	27941	17727	16038	17543
1980 1	25519	27452	27138	40411	33943	40306	21680	22600	24075	19208	17399	15778
2	26883	28117	29685	31317	34893	42998	21923	22253	26236	19582	18168	17243
3	26189	28442	28993	30443	35989	36098	21671	22975	25124	21854	18221	18569
4	27023	28314	28039	30564	35616	38605	21805	23147	26716	19416	19048	18496
1981 1	27255	28416	30260	37744	36581	37122	22354	23414	27195	19323	17731	16987
2	27113	28448	31210	30712	36683	38753	22401	23437	27149	20545	17279	16852
3	27154	28287	29642	32390	36157	37431	22914	23173	26675	19688	16584	17735
4	27115	27157	28660	33044	32013	32364	22379	21264	24145	22321	16983	17014
1982 1	27642	27508	28924	34610	32676	31993	23948	22117	24801	24245	18707	16773
2	28438	27703	30698	32446	32129	34602	24900	22689	26818	21427	17917	19546
3	28219	28307	29931	35791	35196	34611	24605	24117	25117	21216	19695	18185
4	29244	29233	31604	35285	36819	36505	25203	26241	28745	21592	19545	19102
1983 1	31903	29571	32705	34872	37498	39068	25229	24123	28456	21176	19544	19697
2	31804	32101	34456	43744	39764	39497	26563	25457	28384	22513	20714	20548
3	32746	33199	36212	40998	42513	41397	27356	26927	28692	23594	21148	22814
4	34121	33934	37520	44365	42520	44528	27595	28729	29742	23537	22121	22373
1984 1	34561	34688	36945	40404	35000	45407	27759	28258	30519	22264	22492	24601
2	35371	37160	37983	42839	48516	51043	27277	29812	33133	24292	22897	19968
3	34483	38265	39663	49589	49304	52048	28046	29018	34794	24141	24183	21914
4	35351	38227	39457	43928	50417	51347	28535	29599	31878	25434	22587	21134

* Prices at completion stage

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OTLAND			NORTHERN IRELAND		
W	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919
809	14722	16284	12066	11691	14192
823	14433	16225	12388	11857	17350
335	15335	18104	12804	13231	22625
560	16320	18453	13938	13823	10300
315	17106	18036	15326	14925	21480
960	17379	20259	15924	15573	15200
248	19213	23519	15892	15889	14925
222	20158	22057	17504	17859	23725
825	21506	22171	17504	17859	23725
487	20945	24707	19371	19118	22500
510	21309	25199	20461	18707	23653
781	21448	23544	21755	18552	30036
536	21637	25817	20754	16589	22750
484	19105	29116	21167	14097	26208
776	20253	27854	20445	12305	13944
156	19861	22892	20039	11339	19175
079	20581	24252	21419	19273	21082
326	21165	24985	21771	19660	18307
295	22584	25811	22957	19785	31962
516	24400	24529	21422	20435	23230
781	24194	25705	23491	20668	20802
059	24765	26787	22123	20200	23689
578	25226	26799	21035	20284	12667
494	24731	25549	22774	20138	21861
970	27305	29012	23478	21867	23659
336	26852	28288	22975	22688	27614
739	29527	31471	23029	21698	25830
757	28749	33643	23373	22608	
305	29675	34057	24052	22626	24796

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.15 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: TERRACED HOUSES

Year	UNITED KINGDOM			NORTH			YORKS & HUMBERSIDE			NORTH WEST		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	12182	12257	9717	11144	9170	7505	8837	5579	6233	9899	8209	6676
1978 1*	12476	12629	9992	11397	9139	8353	9429	6703	6401	9991	8919	6701
2*	13342	12684	10405	11385	9119	7805	9819	6738	6776	10355	8507	6826
3	15122	15075	12051	12101	11497	8940	10871	6574	6905	13758	10255	7448
4	16086	16070	12584	12886	10184	9334	11333	6912	7762	12948	11520	8357
1979 1	17387	17113	13605	12928	10360	8995	11839	9137	7757	14382	10403	8843
2	17909	18863	14626	14623	11549	9684	12605	10563	8682	15194	11408	9408
3	19823	20367	16134	14673	12450	10003	13245	10990	9687	19468	12097	10319
4	20748	20653	16269	15806	13246	11437	14340	11732	9625	16816	13954	10050
1980 1	21280	20923	17426	15887	15364	10600	14305	12040	10345	15898	13548	10564
2	21930	21902	17902	15900	13255	11253	15865	13207	11095	17640	14432	11295
3	22032	22079	17492	17706	13678	11645	16855	13279	10830	16716	14856	11853
4	22039	21971	17924	17817	15365	11692	16440	13216	11099	16509	15314	11687
1981 1	22557	20686	18126	18183	13194	12040	18410	13776	10827	17983	15297	12382
2	22975	20511	18856	12342	12017	9138	13540	14610	18190	16826	14147	12176
3	23659	19168	18149	19412	12024	13091	16138	12803	11687	17074	13356	12618
4	22738	18583	18073	18243	14181	12860	18546	12971	11660	18348	14911	13182
1982 1	24220	18259	18025	17402	13302	12972	16690	13284	12084	17831	14610	12645
2	22538	18135	19020	18864	12618	13471	16448	13003	12724	20632	13760	13188
3	22339	19956	19632	19249	13284	14171	17509	15490	13442	23092	15291	13274
4	23390	19758	19694	20367	13667	13289	17804	15048	13270	20111	16160	14145
1983 1	24699	19633	19988	21094	13947	14518	27687	14822	14064	22439	15061	14024
2	24076	20494	20969	19970	15307	15420	20993	14949	15243	20069	15108	14129
3	21608	21552	21599	20858	15435	16275	20155	15874	14333	24353	16601	14013
4	26036	23501	22222	27671	16875	16928	27340	16476	15443	22318	17187	15633
1984 1	25663	23345	22496	20953	17745	16639	22958	17124	14611	22339	17311	15781
2	27459	25523	21376	20805	17263	16423	20066	16895	14885	22234	17456	15692
3	27789	25895	21448	20554	17546	16194	20083	17392	14692	21413	17275	15546
4	27481	26305	21739	20229	17173	15909	22199	18084	14594	21809	17391	15913

* Prices at completion stage

T MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
Post-1919	Pre-1919		New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
46	8110	6417	10216	8975	7753	9555	9633	8854
60	7880	6559	10277	9547	7398	10045	10149	8994
27	7668	6573	11036	9781	7393	10814	10632	8770
91	9437	6946	12550	10992	9148	10965	10437	9725
67	8746	7752	13839	11380	9138	12759	11660	11453
45	10317	8079	18056	12361	9377	13097	13326	11365
50	11155	7828	15297	13442	10272	14506	15254	13764
83	10686	8645	17412	13942	11083	15185	14732	14013
00	11092	7933	16308	14549	12174	16102	14889	14371
15	12302	8776	18703	15475	12638	17058	16622	15566
25	13071	9567	17794	16089	13025	21775	17951	15012
77	13305	10798	18147	19335	12782	18267	16635	15550
52	13594	10999	18715	16156	13840	18706	17271	16277
10	13710	10904	17582	15450	12870	19071	16772	16378
95	13475	11016	18325	15897	13409	18314	14054	16900
17	13413	11100	19868	16137	13317	19948	16886	17994
08	13424	12359	22300	16484	13979	19857	16691	18373
67	14476	13154	43237	15896	14003	20429	18241	16966
64	14150	12242	17541	14211	15134	19011	14929	18406
51	15497	13442	17894	16442	16220	19084	17045	18757
49	11924	13105	24230	16017	15079	20900	17327	20371
26	14197	14101	18559	16096	15074	21694	19018	19498
83	13459	14232	20994	15254	16414	21845	18771	20129
30	13633	14557	21602	16352	15995	20863	21000	21720
16	17194	15515	21114	19394	16777	25122	21416	23085
83	16931	14640	19984	17613	16868	24459	21587	23160
08	17942	15047	20061	18108	18191	22683	22085	20996
22	17135	15418	20821	18108	16157	24325	21943	22534
71	17416	15397	20506	18275	15678	25317	24491	22868

BEY NATIONAL BUILDING SOCIETY

ERAGE PRICES (at approval stage) 1977-1984

5 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: TERRACED HOUSES (continued)

r	SOUTH EAST			GREATER LONDON			SOUTH WEST			WALES		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
7 4*	13320	13110	11054	22659	16180	14483	10789	10525	9636	9511	9556	8052
8 1*	13625	13520	10985	18080	16505	14535	11306	10814	10292	10088	10021	8160
2*	14701	13784	11521	20354	16763	16084	12106	11479	10070	12037	10270	8278
3	16756	16501	13532	25031	20197	17676	13137	12896	11928	11165	12064	9402
4	18253	17760	14072	24223	21657	19001	13830	13211	11861	11892	11955	9557
9 1	19316	19076	15077	26084	23474	21514	15358	13979	12302	12879	11960	10230
2	19725	20467	16488	26885	25605	23349	16403	16104	13314	12667	13395	10432
3	22351	22027	18730	28717	27813	25058	16469	19088	14566	15054	13101	15046
4	23115	22728	19231	29767	27853	27011	18384	18684	16435	15196	11572	11528
0 1	24354	23206	20301	31683	28877	28029	18901	18272	16179	17740	12813	12067
2	23749	24069	21087	36522	30026	27905	21447	19321	18084	17475	14113	12365
3	24663	24445	20929	37872	29488	27703	20556	19452	18369	17405	14567	13078
4	24513	24296	20630	34446	29660	28208	20874	19212	18111	16854	15520	12966
1 1	24880	23479	21385	33387	29714	28299	20796	18467	18496	15841	15126	13255
2	25590	24515	22203	32409	31004	29231	21680	19618	20147	16290	11274	13138
3	26731	23271	22165	32108	28507	28191	20329	19551	18955	19266	13092	13297
4	26090	24275	22771	33110	27624	29246	21290	18917	19900	21293	13932	13620
2 1	26882	23505	22525	31767	27100	28715	20903	18822	20397	18645	14502	14030
2	27781	23573	25052	31759	28023	29525	22092	19871	21423	21057	15194	14490
3	26806	25381	24816	34900	30312	30325	22840	20875	21199	22004	16071	15105
4	28155	25649	25287	34025	30840	31190	22942	21274	21590	21300	15728	14770
5 1	29312	26453	26097	32724	30946	31885	23709	20889	22723	21411	13926	14683
2	30234	28769	27044	38627	33197	33339	24524	21773	24328	18755	16561	15674
3	30365	29734	27990	38247	35814	35489	24151	23794	24955	23113	17753	15961
4	32192	30552	28381	37614	37141	36888	25185	26285	23755	20517	18274	16556
6 1	33142	31289	28440	42821	37018	37447	24263	24685	23862	20435	18181	16499
2	32404	31612	28847	42715	39757	37918	25127	24338	23359	26210	18530	16703
3	32358	32809	29017	43151	39725	39859	25272	24924	23580	21706	18402	16773
4	31848	32553	29274	43461	41348	39799	25085	24839	26371	21983	19054	16273

Prices at completion stage

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I	SOUTH IRELAND		NORTHERN IRELAND		
	Post-1919	Pre-1919	New	Post-1919	Pre-1919
78	12948	11744		8280	10375
73	13723	12723		9393	10321
02	13555	12657		12411	13814
112	14262	14889	12250	9300	12694
117	15465	15080		11343	10800
73	16521	13808		9679	11088
97	16944	15752		12267	13000
59	17695	17660		13457	15350
35	17495	19679	13000	13457	15350
19	17354	19169	12500	14482	14620
85	17648	20449	17625	12369	12195
42	17142	20376	17257	11729	14785
27	18025	21783	16481	10404	14637
42	13858	19760	18772	9375	12257
26	13681	23737	17637	7199	12807
51	13426	23590	16500	7205	14072
71	17086	21130	23076	14084	14586
91	16700	21998	16980	12817	15713
73	18693	21941	22873	12394	16395
37	19661	24629	20168	15229	14677
39	18590	22794	23684	13904	15300
76	15338	21452	21486	14830	12093
19	15402	23181	17400	15826	12255
60	15012	25307	22704	11589	12858
72	23040	24277	17042	14261	14334
84	21750	28535	20914	13444	16059
26	22782	27409	21007	14618	15193
05	22025	24779		14217	16007
51	23491	27210		17565	14226

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.16 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: BUNGALOWS

Year	UNITED KINGDOM			NORTH			YORKS & HUMBERSIDE			NORTH WEST		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	14123	15177	15233	14014	14220	13770	11620	12710	11750	15357	14118	11500
1978 1*	15433	15957	15739	17576	15177	9500	12244	13071		13877	14090	8423
2*	15503	16235	15456	14267	15788	9000	12582	13102	9333	15673	15811	22090
3	17657	19089	19965	17416	16755	13425	15132	15360	17375	18662	16881	32500
4	19154	20458	22982	17521	19039	14333	16007	16187	25667	17743	19318	13248
1979 1	21151	23956	26250	19999	20933	14750	17737	20107	18759	22022	23145	40725
2	23348	25769	25768	22565	27619	15000	18082	23867	19583	23174	24412	
3	24232	28974	25318	20567	26535	17300	21431	23057	26962	22648	27654	27237
4	26297	29408	32027	24215	27222	17425	19266	27445		25909	26908	14037
1980 1	27993	29801	29030	27363	27023	25000	23334	23055	30998	25911	29653	36750
2	27399	31110	29748	24599	24982	36500	21035	23972	21325	26980	28142	32000
3	29368	30798	30537	30527	25463	38500	24906	26476	17000	26018	28612	24516
4	27716	31158	32407	24429	27043	30500	23885	23940	20147	27634	29671	43250
1981 1	28741	31294	28596	27678	27840	25943	24241	25276	34500	30400	31659	34000
2	30336	31817	31564	33024	34630	42620	24153	28079	18711	27743	30434	
3	29142	31696	30321	28104	30911	45750	24642	26005	16817	28124	30679	40813
4	28891	27883	29088	25750	23935	37445	23943	24571	29625	23972	27142	16715
1982 1	30335	29085	26706	24860	26371	13586	24368	24105	17874	28066	29802	25267
2	31589	31161	27901	28194	23390	19025	24650	24842	26641	24228	27611	39950
3	31809	30033	30505	29611	25915	21731	25738	24862	34375	25372	27723	51333
4	32017	32152	30122	30277	24441	23455	25858	24698	34031	27500	29229	32500
1983 1	31952	31562	32567	30281	27101	26187	26570	28151	12000	26300	29103	24136
2	34335	33934	37023	27056	29883	19502	29010	29372	34738	30503	29666	39600
3	33752	35123	37628	31834	29037	50000	30833	30271	30875	29686	33651	38725
4	36428	36241	46162	29678	31582	30500	33361	30341	23454	32571	31220	18000
1984 1	36311	35553	36506	32524	32845	16484	26619	29190	28950	30111	32756	37733
2	36441	38403	37752	39403	32097		30190	35490	30871	36137	34934	50899
3	35966	38645	37321	40115	31156		31613	33810		39054	39259	29416
4	36457	39707	43433	33506	38748		34496	38989	50890	37080	36264	43745

* Prices at completion stage

District	EAST MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
	Post-1919	Pre-1919		New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
40	12282	16060		14213	14181	9500	11735	12422	
30	14193	12867		15418	15866		13064	13019	9250
75	12603	25000		13649	16561	14750	13539	13411	20000
61	14854	12125		18385	17601	23375	14176	14984	9167
10	16135	12000		19780	18879	11000	15967	16323	17000
53	17021	39000		18978	22844	37333	16939	20357	22800
71	18487	19250		22358	24251	12416	17946	20141	22400
60	22349	18408		24234	28275	35000	19405	21039	16455
65	22621	17975		27234	26527	39625	22247	23359	33750
28	22142	31750		27313	30426	33875	24301	22269	17125
02	22673	15750		29545	31071	30000	25973	23886	29750
54	25569	30250		27810	30837	23590	24015	24521	28187
98	24339	42000		26922	24720	69750	23202	23840	42833
39	24716	14333		28629	29056	25983	22816	22945	15050
91	21866	52167		28383	32710	25375	27600	23280	
12	23794			32288	31695		23737	26311	19750
11	23703	24828		29424	25291	23723	24824	24217	20000
85	25749			28913	26968		22887	23566	23125
19	25889			28509	29448	20687	30155	24333	18639
03	26218	23845		28409	29887	27850	31037	24866	20911
68	24431	32000		30013	27832	20240	30019	26266	23500
42	26527	39167		27846	29142	34250	26964	26870	26500
82	26991	31750		28792	30807	39833	28600	27751	27960
57	26359	30000		28823	30632	46750	28474	28445	49983
42	26746	45833		45169	34455	35910	27750	28980	33000
03	26261	31564		34415	34663	39514	29842	31947	38803
56	32393			40861	36599		28557	32299	
54	31299			36279	36181		28638	31915	
32	31324			44907	38659		30048	31406	31649

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.16 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: BUNGALOWS (continued)

Year	SOUTH EAST			GREATER LONDON			SOUTH WEST			WALES		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	16875	17335	17994	14950	20784	12800	13066	14631	24400	12190	13343	13550
1978 1*	18459	17528	19525	14995	20649	21817	16021	16380	18433	12955	13468	12094
2*	19422	17987	14250	25024	20849	17995	15329	16847	12083	13407	13421	11000
3	20807	21990	26450	31188	24531		17145	18793	20833	14614	15925	13250
4	26420	24104	34188	32875	29860	22800	17578	20599	19425	16492	16793	16375
1979 1	28043	28213	37305	48333	38984		21531	21975	19650	18504	17599	17500
2	32001	29872	28317	46750	32181	68791	22866	24007	25830	18987	20933	17977
3	33923	33733	39066	48676	40571	20290	25548	28701	25458	18834	22161	19055
4	34640	34420	49227		39963	49983	25481	28086	39500	19955	23616	11174
1980 1	35240	35793	36069	26117	39275	40250	27766	30431	28562	22467	22097	12983
2	36988	36854	49654	85750	39739	27387	27237	30722	34166	21057	26735	21315
3	39058	36561	37861	54000	44405	54625	32232	29969	27690	21991	23874	20258
4	33882	37941	35394	53625	42261	77590	28854	31144	20000	24410	24277	18649
1981 1	35894	35917	44623	67000	42777	40000	28178	29999	33883	23049	26670	18425
2	41802	38666	42794	62375	44972	56250	29654	29591	40167	23691	24282	15606
3	37369	37464	42992	40000	49209	57833	29556	30763	41814	25148	25471	15594
4	29965	31992	38688	44626	34976	27233	26858	26145	32490	26420	23472	22368
1982 1	33932	33149	31188	46430	38004	37370	28817	28362	36765	25350	23211	17085
2	38017	34796	32929	65225	53972	26871	29375	28548	34255	24534	25701	16473
3	41657	35434	31571		34076	46000	31254	30607	28104	25059	23757	21092
4	39853	40836	35198	54194	43195	34635	30979	30092	33830	24760	24682	18771
1983 1	40396	37779	50656	34034	36909	29417	34724	31817	25462	23914	27196	14995
2	43590	40581	48631	63500	45764	36703	36792	34270	47279	26264	26507	22775
3	42180	41491	45271	44784	51985	41013	34203	33057	29114	25274	27827	15533
4	42165	42058	82932	61225	57625	43870	39536	34904	41313	28236	26023	27114
1984 1	47447	42375	52393	44693	47057	28850	38748	35558	38423	28329	26222	20878
2	52630	48123	53739	77033	59930		38858	38852	52674	28556	29401	24724
3	50458	48580	47839		60699		46825	39430		28587	28489	24372
4	46781	51227	62472		74455		44406	37940	56869	30123	27681	26439

* Prices at completion stage

£

T LAND	NORTHERN IRELAND				
	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919
29	18114	11190	16760	16629	11375
16	18290	15696	18125	17977	8200
13	18531	17856	17025	17270	
20	21492	15514	18521	18526	13371
26	20326	21667	21337	18493	17000
22	23537	19171	21115	23384	13500
13	26679	20523	23479	23478	12250
18	28498	22896	23208	26716	21906
17	29379	23268	23208	26716	21906
19	28113	26577	30270	28000	22000
18	32369	25667	25971	26175	30000
19	30549	27565	30195	26694	39401
21	29630	25821	28978	27498	22933
13	36254	20683	29829	22927	19307
10	31010	27223	29643	24896	22125
13	31562	28995	26351	23367	13416
2	28723	28303	28039	26955	24059
10	27078	17682	29407	27164	23669
13	30431	27452	27079	27211	15228
11	31603	27294	28337	27096	22716
10	34627	24576	27032	27200	20902
19	31550	29745	28852	26802	16740
18	34243	25181	28941	25369	17961
10	33140	29573	29360	28697	18717
14	35056	25484	29731	25815	21028
8	34293	27110	29699	29741	23253
13	40144	29110	29932	32648	21288
17	41169	33157	29713	31676	24986
6	38982	38118	30686	29485	21376

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.17 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
FLATS & MAISONNETTES

Year	UNITED KINGDOM			NORTH			YORKS & HUMBERSIDE			NORTH WEST		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	12669	12213	11741	8619	8065	8002	7864	10470	11833	10494	10756	9700
1978 1*	12102	12689	12506	9058	8293	7281	9526	10397	13450	10478	10119	13700
2*	13183	13043	12281	9271	8336	6456	9006	11050	20000	9808	12027	14079
3	14814	14842	13775	12402	8083	7706	8666	10750		13949	12080	9588
4	15604	15679	15144	9400	9556	6708	8938	13853	7000	14270	13383	7500
1979 1	16090	16903	15920	10957	8799	7182	10018	12500	11440	13144	11872	14083
2	17209	17827	17241	10877	8563	7826	9390	10441	11916	14187	12632	5840
3	20563	19593	18723	12182	11251	8683	11996	12303	15737	15084	15193	12750
4	20620	20018	19719	13330	10800	8150	13683	16223	9482	14778	13203	13050
1980 1	21158	20653	19366	15781	11329	8700	17268	14195	19100	19135	16636	13737
2	21689	20843	20860	15274	10768	9817	15797	13800	14483	14129	18423	19415
3	21619	21170	20592	12585	12190	12608	15409	15258	20333	20032	17637	14418
4	22223	21542	20854	14991	10903	9262	17260	15405	13635	19221	16054	20890
1981 1	22489	20920	21448	21833	12340	10760	15232	15755	14337	17966	16898	14627
2	21670	19480	22083	12342	12017	9138	13540	14610	18190	16288	16062	22891
3	22555	20101	21374	13211	14800	11523	14662	14269	13200	14882	10154	10421
4	21165	17721	17301	13516	13027	13457	14875	21734	19455	15046	12775	12834
1982 1	20998	18357	18512	13038	12054	11257	15363	16017	14036	16707	17812	14908
2	22866	17930	21909	12943	12074	13130	30478	11469	23688	18141	15331	13961
3	20258	19488	19698	13254	14731	11988	17025	14883	15909	17431	15318	18759
4	21291	18931	20945	14221	14881	11626	21380	12231	21275	16713	15551	16538
1983 1	22255	20373	20129	14592	14789	15347	17817	17962	16789	22380	17648	19204
2	21757	20642	22600	17869	14267	13690	18618	15811	17499	21169	18115	17617
3	23148	21300	21331	16502	14798	15064	23895	18324	16739	20965	16092	20516
4	22427	21979	23075	17141	13680	12442	19815	17779	18945	18152	20005	21018
1984 1	23705	22002	22150	22401	14294	14429	19262	15791	20566	19280	19063	16786
2	25396	25178	24569	18577	14289	13659	17641	16490	23312	19457	16619	22167
3	25908	25965	24991	16144	14534	13833	24706	16365	21875	18097	18756	18951
4	25994	26242	25371	14606	14271	13806	19363	16778	21575	19223	23688	22387

* Prices at completion stage

MIDLANDS		WEST MIDLANDS			EAST ANGLIA		
Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
34	7807	13224	9681	9250	7913	12325	
51	7150	9228	9425	7267	8630	6920	
05	13390	12763	8811	9500	9017	9525	
00	8518	12875	11418	21588	10136	10283	11375
	11408	11331	11132	11300	9642	9336	22750
71	8733	14030	12444	9488	9723	10681	16123
20	9325	16091	12512	12435	12708	11209	15750
25	11029	39884	12603	12481	11283	11433	9316
29	12288	16955	14377	31816		17208	11180
36	11322	19245	14785	12343	16025	15495	11010
71	12179	18277	16140	16400	25897	14755	20533
32	12422	20656	15571	16546	17330	15633	8000
79	13340	18509	16122	14900	16861	16967	18078
15	12895	17173	10893	17734	15929	17519	25000
33	15914	17491	8996	10360	16430	14492	20750
33	12966	17086	13580	15733	14492	15789	20100
19	10528	16893	16270	13325	16050	17403	
33	12164	16525	16681	16141	15944	15665	21380
17	13064	19856	15352	31032	16198	15166	33415
10	19547	16482	15847	15851	20284	14223	20357
17	12191	18469	15683	18990	15459	17630	12267
15	18029	15089	16496	19263	19042	18970	24088
19	14959	15905	17083	18494	17453	18513	37852
2	15672	18139	17484	19880	22057	18688	16187
18	15555	18250	17479	21078	21697	17985	22040
12	17209	19324	17689	20925	28477	17944	21532
14	17351	18337	16856	25795	25101	20091	23125
14	15400	18346	17472	17432	25207	20755	
7	15652	18979	16058	22886	23475	20731	17970

ABBEY NATIONAL BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1984

9.17 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
FLATS & MAISONETTES (continued)

Year	SOUTH EAST			GREATER LONDON			SOUTH WEST			WALES		
	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
1977 4*	12271	11946	10272	15322	13352	12898	16285	10578	9329	10135	10931	
1978 1*	12338	12566	11081	16416	13949	13690	11125	13195	12671	14598	11190	7500
2*	13091	12996	11397	17516	13994	13884	13753	13652	11750	13350	10636	9875
3	14333	14281	13293	19035	16744	15128	13367	13573	11996	13288	11665	14663
4	15410	15491	14229	21041	17486	17166	15228	13739	14968	11788	16006	16983
1979 1	16692	16622	14192	20387	19378	18110	13680	14928	14686	8750	8025	13875
2	18124	17445	15159	23385	20595	19850	15483	16093	15245	8950	15093	10425
3	20526	19483	16785	25976	22559	21506	15849	16541	15460	14297	13835	21000
4	21817	20349	16974	27014	22924	22669	17928	17195	19402	17375	14083	15208
1980 1.	21698	20597	17962	25753	23782	22949	24729	17922	16805	11800	18466	13475
2	22804	20527	19740	26357	23491	24369	20252	17720	19502	22500	19186	15875
3	22532	20827	17888	26937	24152	24120	24015	19019	17751	16890	16806	14850
4	23522	21148	19216	26519	24445	23962	19976	19244	20211	17443	14799	11630
1981 1	24779	21496	19056	28394	24226	24426	19641	17904	18622		14442	13355
2	23605	20343	19238	28646	23961	25414	17077	14379	19725		6574	12500
3	22955	20568	19347	28067	22274	24165	20522	17766	19307	16550	13295	9833
4	27335	20739	19199	31546	26165	25334	21796	15414	19619	15508	15345	15987
1982 1	23982	21802	21918	29895	24452	26745	22752	20534	21762	15210	13157	7666
2	25684	22973	21969	31419	24458	26761	21710	20043	21582	19626	15494	17332
3	23620	23533	21265	30923	25342	27885	21869	21626	19781	18484	19041	21946
4	26892	22951	22574	30720	26748	27661	20094	24025	21694	19366	19564	21530
1983 1	28431	24765	22729	36533	27675	28274	24257	21745	21590	18877	18169	15093
2	27712	25532	24689	32782	28110	30826	21577	22664	23028	17750	19472	18724
3	26924	26750	23774	40238	29295	31952	26991	23644	22879	27498	19588	13638
4	27616	26559	25015	34565	31946	32184	21681	22854	23314	25860	20736	21083
1984 1	29144	27238	24853	33751	31064	32160	24183	24572	24534	26314	20708	18350
2	27399	27553	23440	35279	30650	31178	21700	21360	23216	27292	18416	15728
3	28052	28132	23541	34625	31601	32263	22313	23626	22832	28663	18970	23786
4	28191	27856	24600	35422	32827	32758	21752	22135	22260	23326	18212	19362

* Prices at completion stage

£

LAND			NORTHERN IRELAND		
	Post- 1919	Pre- 1919	New	Post- 1919	Pre- 1919
5	11311	9720			
2	10526	9685			
8	11569	9979			
4	12334	10881			29500
2	12441	11658			
8	13301	11928			
1	14495	12860			
1	15131	14211			
2	14473	14325			
5	14804	14031			
4	16507	14319			
5	15987	15481			
5	17035	15575			
7	16140	16527			
9	15547	16009			
7	16868	16998			
0	16095	16953			
5	19574	17619			
7	19279	18377			
4	19029	18371			
3	19398	18644	21514	13250	15000
4	16841	18963	20818		20000
4	19752	20185	21092	36500	17000
9	21739	21445	22313		22667
4	22711	21001	23356	36000	
5	22527	20229	22681	25387	
7	22006	19761			
3	22765	19973			
3	22656	20142	24571		

10. Anglia Building Society

10.1 TECHNICAL DETAILS

(a) Source of data and timing

Society's own records of prices at the valuation stage

(b) Types of data and periods covered

Percentage price changes: 1969 to date

Index of average prices: 1974 to date

Because of inconsistencies in the presentation of the published data for the United Kingdom before 1974 and for the regions before 1983, we have not reproduced the earlier data.

Available data

DATA BREAKDOWNS	DATA TYPES	
	INDEX NUMBERS	PERCENTAGE CHANGES
HOUSE DATA		
All houses		*
New/Non-new	*	*
Type		
Size		
Age	*	*
LOCAL DATA		
Regions		*
Sub-regions		*
Towns		*
BUYER DATA		
First-time buyer		
Former owner-occupier		

(c) Frequency

Percentage price changes: biannual since 1983, previously annual

Index of average prices: annual

(d) Geographical coverage

United Kingdom subdivided into regions and selected sub-regions and towns (termed survey areas by the Society). The number of survey areas has increased with time, there being 30 at present (for details see Tables 10.4 and 10.5).

CROSS-CLASSIFICATIONS OF DATA

(e) Method of analysis

Valuations are based on capitalized 1939 rental values of properties (related to floor area, type of property and characteristics). A post-war multiple (pwm) is applied to this 1939 valuation to provide a current valuation for each property. The pwm is taken as the multiple currently obtaining in each corresponding region as based on surveyors' experience.

The above valuation (which is referred to as the "old" system) is compared with and checked against a new "direct" system of valuation, whereby an adjustment (devaluation) is made to the recorded selling price of each house by one of the Society's valuers. This devaluation technique is used to make allowance for variations in house attributes which would otherwise make comparisons of property prices inappropriate. Due allowance is made in the devaluation for such factors as fixtures and fittings, garages, central heating, environmental factors, etc., which may have affected prices. The worth of these items is then discounted from the respective figures before inclusion in the data. By such means the analysis of house prices is keyed to a common base.

All sales at non-market prices, such as those to sitting tenants and council house tenants, are excluded from the analyses.

LIST OF TABLES

Percentage price changes

- 10.1 United Kingdom: age of dwelling. 1974-
- 10.2 Regions: age of dwelling. 1973-1982
- 10.3 Regions: age of dwelling. 1983-
- 10.4 Survey areas: age of dwelling. 1983-1985
- 10.5 Survey areas: age of dwelling. 1986-

Index of average prices

- 10.1 United Kingdom: age of dwelling. 1974-

CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Numbers in the grid below refer to the corresponding tables compiled for this data source

ALL HOUSES		NEW	NON-NEW										
				AGE				TYPE					
										SIZE			
		10.2-10.3		10.2-10.3						REGIONS			
		10.4-10.5		10.4-10.5								SUB-REGIONS	
												TOWNS	
												FTB/FOO	
HOUSE DATA										LOCAL DATA		BUYER TYPE	

(b) Three-way classifications

None

10.4 PUBLICATIONS

(a) **Data**

Housing Market biannual (previously *Voice of Anglia*). Anglia Building Society, Northampton

(b) **Description of methodology**

None

(c) **Supplementary studies**

None

FLIA BUILDING SOCIETY

CENTAGE PRICE CHANGES AND INDEX (at valuation stage) 1974-

UNITED KINGDOM: AGE OF DWELLING

PERCENTAGE PRICE CHANGES				INDEX (31 December 1973 = 100)		
ALL	New	Post-1919	Pre-1919	New	Post-1919	Pre-1919
	2.0	2.0	3.0	102.0	102.0	103.0
	8.0	7.0	7.0	110.2	109.1	110.2
	10.2	7.8	6.2	121.4	117.7	117.0
	7.5	6.6	7.3	130.5	125.4	125.6
	31.5	30.0	24.5	171.6	163.0	156.3
	35.0	32.0	33.0	231.0	215.2	207.9
	8.8	8.4	14.6	252.0	233.3	238.3
	7.8	2.6	5.7	271.7	239.3	251.9
	6.2	5.5	4.1	288.5	252.5	262.2
9.0	8.5	8.2	9.5	313.0	273.2	287.1
8.6	7.9	9.0	8.9	337.4	297.8	312.7
10.2	9.5	10.2	10.9	369.5	328.1	346.7
17.2	17.1	16.7	17.9	432.7	382.9	408.8

ANGLIA BUILDING SOCIETY

PERCENTAGE PRICE CHANGES (at valuation stage) 1973-1982

10.2 REGIONS: AGE OF DWELLING

Year	North Eastern	North Western	Midlands	East Midlands	West Midlands	East Anglia	London & South East
NEW DWELLINGS							
1973	15.0	22.0	16.0	1.0	16.0	24.0	17.0
1974	2.0	8.0	(0.5)	(2.5)	4.0	1.5	(2.0)
1975	6.0	8.0	8.0	6.8	12.0	4.5	7.5
1976	11.7	10.7	6.8	7.4	9.7	9.0	10.3
1977	6.3	10.7	8.3	3.0	7.0	6.2	7.9
1978	32.1	30.4	32.4	22.5	44.0	32.3	38.0
1979	26.0	37.0	33.0	40.0	48.0	36.0	30.0
1980	9.0	10.0	8.5	7.9	10.5	6.3	6.5
1981	13.3	7.3	13.8	9.0	0.0	6.8	5.8
1982	5.7	0.7	6.0	4.1	0.0	4.0	5.1
POST-1919 RESALES							
1973-	18.0	23.0	11.0	0.0	15.0	12.0	9.0
1974	1.5	6.0	(1.0)	(1.8)	4.0	(3.0)	(1.0)
1975	4.0	9.0	5.5	6.0	8.0	6.5	4.5
1976	8.2	7.3	5.1	5.6	7.9	6.8	7.2
1977	6.2	13.0	6.0	4.0	8.5	3.7	4.3
1978	23.5	30.6	30.8	24.9	29.8	38.2	53.0
1979	28.0	32.0	31.0	36.0	37.0	27.0	28.0
1980	13.4	1.0	12.3	9.0	6.2	8.2	4.0
1981	0.8	4.2	2.3	3.2	6.9	2.9	0.5
1982	5.8	2.8	3.9	4.7	(2.7)	8.0	7.7
PRE-1919 RESALES							
1973	20.0	37.0	14.0	12.0	21.0	21.0	8.0
1974	5.0	9.0	2.0	(1.5)	6.0	4.0	3.0
1975	4.0	6.5	5.5	5.5	6.5	6.5	6.0
1976	7.7	4.0	5.6	3.0	6.6	7.1	2.0
1977	5.6	14.5	(1.2)	0.0	7.0	6.5	4.8
1978	12.4	11.8	21.9	17.0	13.9	29.0	44.3
1979	23.0	48.0	21.0	33.0	30.0	35.0	40.0
1980	14.0	6.5	33.4	19.5	7.5	11.9	8.4
1981	6.4	4.8	5.8	4.7	11.5	9.7	0.1
1982	10.2	5.5	5.8	5.5	5.4	5.4	4.7

Figures in brackets are negative

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th don	South West Midlands	Western	Scotland
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0	2.0	11.0	12.0
0)	(2.5)	5.0	8.0
0	7.0	10.0	12.0
4	8.7	12.3	20.0
	6.1	8.0	12.0
9	30.0	23.4	14.0
0	37.0	36.0	30.0
3	2.1	17.0	14.5
5	5.6	0.0	8.9
2	11.8	2.4	14.4

0	4.0	19.0	23.0
0)	(1.5)	2.5	5.0
0	7.0	10.0	10.0
	4.8	7.0	18.4
	5.0	7.5	7.7
	30.2	24.2	14.8
	35.0	36.0	27.0
	4.1	12.0	15.0
	5.2	3.7	3.7
	4.2	0.4	6.8

0	7.0	40.0	50.0
0)	1.0	7.0	6.5
	11.5	11.5	10.0
	4.1	6.1	13.1
	4.5	12.0	20.0
	29.4	17.5	13.4
	37.0	21.0	33.0
	9.1	33.5	0.0
	7.2	21.8	11.8
	(5.2)	4.2	(5.6)

ANGLIA BUILDING SOCIETY

PERCENTAGE PRICE CHANGES (at valuation stage) 1983-

10.3 REGIONS: AGE OF DWELLING

Year	North & Yorkshire	North West	North East Midlands	East Midlands	West Midlands	South Midlands	East Anglia
NEW DWELLINGS							
1983	1.1	4.0	5.0	15.2	4.8	13.9	11.2
1984	9.0	5.2	3.2	9.8	6.2	10.0	11.0
1985	10.0	2.5	7.3	8.6	6.8	15.0	12.3
1986	13.0	10.9	7.9	19.1	11.5	16.0	20.0
POST-1919 RESALES							
1983	3.6	5.1	5.5	8.1	7.2	11.0	9.2
1984	1.0	1.4	8.2	9.6	3.4	18.0	10.2
1985	10.0	3.4	5.0	11.8	7.8	12.0	16.7
1986	13.0	10.1	8.9	20.6	10.2	15.3	16.4
PRE-1919 RESALES							
1983	5.8	5.2	2.1	8.3	5.1	9.4	9.3
1984	8.0	3.6	5.9	8.0	3.4	21.0	13.3
1985	9.0	0.0	9.0	10.8	6.8	10.0	12.4
1986	10.0	10.5	8.8	20.9	11.4	17.4	21.4

on & h East	South	South West	Scotland	Northern Ireland
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8.7	-	4.9	(2.0)
7.7	7.0	2.3	(1.7)
12.8	6.9	3.6	6.0
20.0	15.0	8.0	5.0

9.4	6.0	2.0	4.5
11.2	5.0	13.9	1.9
14.1	9.6	0.2	2.8
15.8	18.0	11.0	0.1

10.1	12.0	14.6	3.2
11.5	5.0	14.0	4.6
10.8	2.4	2.0	1.5
24.3	14.0	5.0	1.0

ANGLIA BUILDING SOCIETY

PERCENTAGE PRICE CHANGES (at valuation stage) 1983-1985

10.4 SURVEY AREAS: AGE OF DWELLING

Year	North & Yorkshire			Cheshire & South Lancashire			North Lancashire			Nottinghamshire & South Yorkshire			Lincolnshire		
	N	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1983	1.0	3.5	6.0	5.0	5.5	9.0	3.0	6.0	3.0	1.0	4.5	1.0	10.0	6.5	5.0
1984	9.0	1.0	8.0	4.4	2.5	4.8	6.1	0.4	2.5	5.0	8.0	4.0	1.5	8.5	7.8
1985	10.0	10.0	9.0	(2.0)	3.7	0.0	4.5	3.0	0.0	8.0	6.3	12.0	6.7	3.6	6.1

Year	Birmingham			Western			Cambridge			Suffolk			Norfolk		
	N	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1983	7.5	6.0	5.0	2.5	8.0	5.5	10.0	7.5	7.0	14.0	10.0	10.0	9.5	10.0	10.5
1984	0.5	1.5	0.8	12.0	5.4	6.0	10.4	9.2	11.2	11.6	15.0	16.5	11.1	6.4	12.2
1985	5.5	7.5	4.1	8.0	8.0	9.5	14.3	20.2	17.3	14.0	19.0	13.0	8.5	11.0	7.0

Year	Mid Surrey & South London			North London, Middlesex, Herts			East Sussex			North Kent & South East London			Berks, West Surrey & North Hampshire		
	N	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1983	18.0	17.0	16.5	8.5	15.5	8.0	4.0	11.0	22.0	-	14.5	16.0	13.5	15.0	12.5
1984	7.0	11.2	11.9	15.6	17.0	15.2	13.3	11.8	3.3	-	12.5	18.0	11.0	11.0	12.0
1985	9.5	10.3	17.6	22.0	17.0	16.0	8.0	7.0	18.0	-	10.0	15.0	14.0	15.0	12.5

N = New properties

M = Modern (post-1919) resales

O = Older (pre-1919) resales

Figures in brackets are negative

Buckley	Northamptonshire					Bedford			Midlands			Leicester		
	M	O	N	M	O	N	M	O	N	M	O	N	M	O
5	6.0	4.5	15.0	7.0	10.0	14.5	11.5	11.0	18.0	6.0	8.0	22.0	6.0	10.5
7	6.3	0.3	1.2	12.0	12.2	15.9	12.0	15.2	6.9	6.7	4.6	13.2	11.3	7.6
7	7.8	5.1	13.8	7.8	9.8	10.0	18.4	18.6	8.5	18.0	17.5	6.0	6.8	3.0

Thames lands	Essex			Thanet			Medway Towns			Kent Weald				
	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1	10.0	9.5	7.5	10.0	21.0	10.0	6.5	11.5	10.0	4.0	10.0	10.0	8.0	9.0
1	18.0	21.0	4.2	6.6	13.0	3.8	2.1	10.0	14.0	17.5	4.0	10.0	12.0	7.0
1	12.0	10.0	15.0	6.0	15.0	10.0	18.0	18.0	12.1	10.1	10.8	8.0	11.0	15.0

Shire	West Sussex			South West				
	M	O	N	M	O	N	M	O
	2.5	3.0	5.0	10.5	15.0	15.0	6.0	12.0
	8.0	12.0	7.1	14.7	10.5	7.0	5.0	5.0
	9.0	10.0	14.5	18.3	9.8	6.9	9.6	2.4

ANGLIA BUILDING SOCIETY

PERCENTAGE PRICE CHANGES (at valuation stage) 1986-

10.5 SURVEY AREAS: AGE OF DWELLING

Year	North & Yorkshire			Cheshire & South Lancashire			North Lancashire			Nottinghamshire & South Yorkshire			Lincolnshire		
	N	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1986	13.0	13.0	10.0	17.2	8.2	8.0	4.5	12.0	13.0	-	-	-	9.8	10.6	10.6

Year	Birmingham			Western			Cambridge			Suffolk			Norfolk		
	N	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1986	11.2	11.3	13.8	11.8	9.1	9.1	28.5	18.8	18.7	17.0	10.0	23.0	14.5	20.5	22.5

Year	Mid Surrey			North Kent			North London, Middlesex, Herts			East Sussex			Maidenhead		
	N	M	O	N	M	O	N	M	O	N	M	O	N	M	O
1986	24.0	30.0	21.0	18.0	18.0	27.0	22.0	22.0	25.0	37.0	23.0	26.0	-	-	-

N = New properties
M = Modern (post-1919) resales
O = Older (pre-1919) resales

Figures in brackets are negative

Northamptonshire			Bedford/ Milton Keynes			Midlands			Leicester				
M	O	N	M	O	N	M	O	N	M	O	N	M	O
13.5	11.5	20.0	27.0	30.0	27.0	23.5	21.0	20.5	22.2	29.1	17.0	17.0	13.0

Essex			Thanet			Medway Towns			Kent Weald				
M	O	N	M	O	N	M	O	N	M	O	N	M	O
15.3	17.4	20.0	28.0	21.0	11.0	18.0	19.0	24.0	21.0	23.0	24.0	27.0	25.0

South Hampshire			West Sussex			South West				
M	O	N	M	O	N	M	O	N	M	O
20.0	22.0	23.0	12.0	24.0	15.0	15.5	27.0	15.0	18.0	14.0

Halifax Building Society

TECHNICAL DETAILS

(a) Source of data and timing

Society's own lending records at the mortgage approval stage

(b) Types of data and periods covered

Current data:

Average prices: 1983 to date

Standardized index: 1983 to date

Historical data:

Average prices: Jan 1975-Dec 1982, monthly

1976 Q1- 1982 Q4, quarterly

Index: June 1975-July 1983, monthly

Available data - current

DATA BREAKDOWNS	DATA TYPES	
	AVERAGE PRICES	INDEX NUMBERS
HOUSE DATA		
All houses	*	*
New/Non-new	*	*
Type	*	
Size		
Age	*	
LOCAL DATA		
Regions	*	*
Sub-regions		
Towns		
BUYER DATA		
First-time buyer	*	*
Former owner-occupier	*	*

Available data - historical

DATA BREAKDOWNS	DATA TYPES	
	AVERAGE PRICES	INDEX NUMBERS
HOUSE DATA		
All houses	*	
New/Non-new	*	[*]
Type		
Size		
Age		
LOCAL DATA		
Regions	*	
Sub-regions		
Towns		
BUYER DATA		
First-time buyer		
Former owner-occupier		

[*] Non-new property only

(c) **Frequency**

Current data: average prices - monthly and quarterly
 standardized index - monthly and quarterly
 Historical data: average prices - monthly and quarterly
 index - monthly

(d) **Geographical coverage**

United Kingdom, subdivided into official standard regions (defined in Appendix B)

(e) **Method of analysis**

Current data

Average prices: simple averages, excluding properties sold at non-market prices.

Standardized index: the indices are standardised to take account of the influence of changes in the composition of dwellings mortgaged in each time period according to thirteen characteristics as follows:

Location: official standard regions

Type of property:

- house
- bungalow
- converted flat or maisonette
- purpose-built flat or maisonette

Each type of property is sub-classified as follows:

- semi-detached
- detached
- terraced

Age: estimated age in years

Tenure: freehold/leasehold

Number of habitable rooms

Number of bathrooms
 Number of separate toilets
 Central heating: none, full, partial
 Number of garages
 Number of garage spaces
 Garden (yes/no)
 Land (area of land if greater than one acre).
 Road charge liability (amount).

Estimates are made in each time period of the influence of each characteristic on prices using multiple regression analysis. These estimates may be regarded as "characteristics prices". The indices are derived by comparing base-weighted averages of the characteristics prices with average prices in the base period (1983).

The formula is as follows:

$$I_{it} = \frac{\exp(\sum b_{jt} Q_{jt})}{\exp(\sum b_{jt} Q_{jt_0})} \times 100$$

where I_{it} is the index for the current period

where b_j are regression coefficients for each characteristic

where Q_{jt_0} are the weights and represent the proportions of the qualitative variables and the means of the quantitative variables present in the base period.

Properties which are not for private occupation and those that are likely to have been sold at non-market or discounted prices are excluded from the analysis.

Detailed descriptions of the methodology are given in the references cited in 11.4(b).

Historical data

Average prices and indices: The series of average prices for the United Kingdom shown in Tables 11.8-11.11 include previously unpublished data supplied by the Society. The prices are simple, unadjusted averages, excluding properties sold at non-market prices, and are calculated on the same basis as those currently produced by the Society. They, therefore, form a continuous series of unadjusted average house prices from 1975.

The series of average prices and an index, shown in Table 11.12 were originally published as the "Times/Halifax house price index", which appeared monthly in *The Times*.

LIST OF TABLES

Average prices (current series)

- 11.1 United Kingdom: all dwellings, age of dwelling, type of buyer, type of dwelling. 1983-
- 11.2 Regions: all dwellings. 1984-
- 11.3 Regions: age of dwelling. 1984-
- 11.4 Regions: type of dwelling. 1984-
- 11.5 United Kingdom and regions by age of house: type of dwelling. 1984-

Standardized index (current series)

- 11.6 United Kingdom: all, new, and existing dwellings, type of buyer. 1983-
- 11.7 Regions: all, new and existing dwellings. 1983-

Average prices (historical series)

- 11.8 United Kingdom: all, new and existing dwellings. 1975-1982 - monthly
- 11.9 United Kingdom and regions: all dwellings. 1976-1982 - quarterly
- 11.10 United Kingdom and regions: new dwellings. 1976-1982 - quarterly
- 11.11 United Kingdom and regions: existing dwellings. 1976-1982 - quarterly
- 11.12 Great Britain: existing dwellings. June 1975-July 1983 - monthly

Index (historical series)

- 11.12 Great Britain: existing dwellings. June 1975-July 1983 - monthly

1.3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Numbers in the grids below refer to the corresponding tables compiled for this data source

Average prices and standardized index() - current series*

ALL												
HOUSES	NEW	NON-NEW										
			AGE									
			11.5	TYPE		SIZE		REGIONS				
11.2,11.7*	11.7*	11.7*	11.3	11.4				SUB-REGIONS		TOWNS		FTB/FOO
HOUSE DATA							LOCAL DATA					BUYER TYPE

Average prices - historical series

ALL												
HOUSES	NEW	NON-NEW										
			AGE									
				TYPE		SIZE		REGIONS				
11.9	11.10	11.11						SUB-REGIONS		TOWNS		FTB/FOO
HOUSE DATA							LOCAL DATA					BUYER TYPE

(b) Three-way classifications

Average prices (current series):

Regions by age of dwelling by type of dwelling: Table 11.5

PUBLICATIONS

(a) Data

Monthly press release and quarterly *Regional Bulletin*. Halifax Building Society, Halifax. Until 1983 the data on average prices were published in *The Times* under the title "Times/Halifax house price index".

(b) Description of methodology

Fleming, M.C. and Nellis, J.G., (1984) *The Halifax House Price Index: Technical Details*. Halifax Building Society, Halifax (available free from the Society).

Fleming, M.C. and Nellis, J.G., (1985) "The application of hedonic indexing methods: a study of house prices in the United Kingdom", *Statistical Journal of the United Nations Economic Commission for Europe*, 3, pp. 249-70.

(c) Supplementary studies

Loans for council house purchase *Regional Bulletin No. 4* (1984 Q4).

Loans for new houses. *Regional Bulletin No. 5* (1985 Q1)

House prices - the North/South divide. *Regional Bulletin No. 6* (1985 Q2)

Halifax loans for council house purchase. *Regional Bulletin No. 8* (1985 Q4)

House prices - the North/South divide. *Regional Bulletin No. 9* (1986 Q1)

Percentage changes in house prices from first quarter 1983. *Regional Bulletin No. 12* (1986 Q4)

HALIFAX BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1983 -

11.1 UNITED KINGDOM:

ALL DWELLINGS, AGE OF DWELLING, TYPE OF BUYER AND TYPE OF DWELLING

Year	All	AGE OF DWELLING					TYPE OF BUYER		
		Pre-1919	1919-1945	1946-1960	Post-1960	New	First-time Buyer	Former Owner-occupier	
1983	1	29594				34168	21397	34968	
	2	31200				34953	22173	36455	
	3	32103				35642	22643	37461	
	4	30821				34473	22676	36044	
1984	1	29614	25009	30974	33282	30674	33797	22386	35550
	2	30688	26243	32118	34898	31841	33812	23258	36799
	3	31735	27765	32943	36723	32783	34427	23926	37853
	4	31919	27793	33020	36456	33247	34299	24142	37501
1985	1	31529	27033	32728	35236	32696	35059	24105	39967
	2	32683	28307	34268	36760	33591	36292	24464	38484
	3	32678	28386	34458	36731	33627	37347	24930	39041
	4	34407	29992	36222	38325	35113	40122	25737	41205
1986	1	35164	30799	37862	38468	35619	40892	26453	42147
	2	38266	34143	41203	42383	37814	44492	28029	44953
	3	40475	36528	43889	44089	39947	46566	29607	46856
	4	41285	37329	44180	43792	40852	47710	30751	47485
1987	1	43278	38943	44851	46230	42936	51454	32237	49189

£

TYPE OF DWELLING

	Attached house	Semi- detached house	Terraced house	Bungalow	Flat/ Maisonette
14	27974	22205	33236	25875	
19	28800	23281	34771	26661	
18	29761	24106	36197	27105	
13	29940	24314	35955	28040	
22	29717	24221	35936	28578	
14	30911	24858	37178	29282	
13	30913	24943	37682	29034	
27	32461	26129	38833	30826	
13	33166	27046	39066	32076	
16	35234	29206	41165	35220	
16	37244	30957	43594	37138	
19	37873	32160	43132	38914	
14	39259	34102	44691	42724	

HALIFAX BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1984 -

11.2 REGIONS: ALL DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1984 1	23913	22255	23794	24143	26511	29634
2	24256	23247	24653	25944	27191	30404
3	24867	23407	25868	26075	28197	32250
4	25964	24023	25698	26617	27957	33046
1985 1	25028	22995	25103	26869	27723	32054
2	24752	23818	25751	27213	28587	33594
3	24011	23662	25981	26812	27355	33440
4	24359	24007	26635	27668	28233	34595
1986 1	23895	23966	27439	27407	27834	35407
2	25280	26028	29361	28414	29894	38021
3	26684	26717	30387	30515	31337	40169
4	27034	26778	31407	31227	33297	42432
1987 1	28354	27865	31666	32645	33285	44550

£

Year	Greater London	South West	Wales	Scotland	Northern Ireland
10	40163	32176	24807	28275	25467
19	41220	32490	24727	29396	25203
16	42506	33474	26607	28967	26398
14	43589	34985	26263	29865	26114
18	44799	34140	25873	29547	26083
16	48171	35596	25529	30413	26299
15	49105	35600	25478	30015	27329
19	52988	36653	26040	29491	27735
13	55534	36834	25692	28851	27193
14	60604	38909	27377	31280	29245
15	64622	41844	29720	31952	29944
16	65035	42816	29802	32133	29836
11	69092	44610	30164	34681	29592

HALIFAX BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1984 -

11.3 REGIONS: AGE OF DWELLING

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
PRE-1919 DWELLINGS						
1984 1	18907	16955	17595	18848	22285	26911
2	18965	17858	18548	21066	24360	28551
3	18838	18299	19982	21288	25837	30534
4	20308	18754	20029	21138	23868	30384
1985 1	19870	17578	18850	21596	23050	28545
2	20137	18291	19379	21154	24934	31178
3	19051	18499	20066	22114	23528	31148
4	19727	18847	20355	22353	23906	30491
1986 1	18744	18715	20756	22519	23811	32067
2	19955	20736	22890	23174	25358	35808
3	21596	20818	23608	24695	27729	37708
4	21624	21283	24012	26127	29244	39973
1987 1	23101	22194	25254	24673	27708	41635
1919-1945 DWELLINGS						
1984 1	22139	21858	25172	23425	26594	29947
2	23811	22579	25425	25042	25443	30512
3	24305	23208	26269	25240	26375	34639
4	26071	23032	26598	25669	26345	35710
1985 1	24257	22908	25716	24724	25993	34575
2	23085	23881	26902	26021	26848	33152
3	23086	23121	26682	25705	27154	33660
4	23972	23431	26616	27008	27889	34697
1986 1	23401	23632	28032	26389	26897	34393
2	24886	25755	29353	28222	28562	39193
3	25894	26659	31072	29457	30484	42703
4	26200	26075	31382	30489	32212	42673
1987 1	26230	26708	30914	31294	30666	44505
1946-1960 DWELLINGS						
1984 1	27724	23818	28255	25650	29605	33162
2	27469	25612	30080	27453	30878	31946
3	29323	26733	30145	28568	32694	36338
4	29705	26528	30505	29668	31659	34870
1985 1	28573	25533	29204	29054	29963	36679
2	27879	25550	29144	29573	31490	36888
3	27321	25578	31258	29515	30109	35742
4	28502	26519	30934	28790	31235	37785
1986 1	26354	24937	29765	26672	29150	38766
2	28422	27177	32362	29551	33795	40549
3	28424	28945	35237	31488	35098	40915
4	27907	28059	33983	30747	35618	41138
1987 1	29763	28797	32868	34219	36293	44797

th t	Greater London	South West	Wales	Scotland	Northern Ireland
91	37481	29230	20332	23522	20440
00	37830	29610	20338	25360	19960
12	39678	31172	22000	25187	21349
69	40498	32929	21989	26096	22333
12	41438	32065	22322	25669	20918
38	45551	33196	21030	26536	20656
91	46181	33819	21588	26206	23061
25	51287	34664	21572	24919	21840
48	53875	34044	21329	24211	21414
07	59009	36295	22386	27338	25699
05	62722	40085	24786	27930	24587
07	62845	40746	24448	27920	24842
65	67322	42437	23980	31085	25352
93	43032	33404	24599	30134	20211
97	44818	34043	25518	30650	21015
79	45747	35647	26936	30098	23080
39	47810	36988	26306	31042	20879
94	50048	36275	25326	31280	20769
23	52859	38149	27719	34388	22764
63	53306	38256	27581	33725	22197
52	55680	37897	26332	33162	22196
41	58809	41415	26073	31148	22472
45	63814	34109	28124	34636	24629
29	68145	44793	29957	37199	26178
26	68435	46211	33194	35905	24689
15	71638	46580	32845	36493	23311
84	44478	34282	30289	32804	23376
29	46504	37074	31359	35559	28535
12	46891	37741	31393	35302	26789
71	50050	37981	28978	36660	28151
92	47406	37211	28229	31686	25704
95	53017	40609	30126	33520	27633
21	53250	40853	28961	32884	27791
17	57068	40254	29010	31398	30119
59	56779	41198	26776	30809	28450
99	63321	45006	32207	34965	30457
28	67940	45606	34077	35874	30285
35	66913	46623	35787	33245	28681
10	70604	46742	35151	35474	30165

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11.3 REGIONS: AGE OF DWELLING (continued)

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
POST-1960 (NON-NEW) DWELLINGS						
1984 1	26233	25181	26669	26309	26632	30167
2	26635	26623	27737	27972	26924	30647
3	27852	26642	29298	28268	28114	32326
4	28894	27688	28676	28726	28921	32992
1985 1	27431	26552	28358	28904	28045	32018
2	27585	27452	28888	29183	28757	33629
3	27785	27617	29038	29077	27160	33240
4	27295	27891	29758	29810	27923	35320
1986 1	27071	27541	30806	29431	27897	35877
2	28912	29283	32094	30014	29471	37682
3	29837	30446	32704	32422	30709	39936
4	30408	29946	34349	32803	32152	42693
1987 1	31436	31081	33754	34962	33601	44178
NEW DWELLINGS						
1984 1	31403	28484	30079	29550	30841	32016
2	30689	28893	29657	30467	31982	32003
3	31344	28305	29741	30472	32465	32304
4	30946	30206	29344	31186	31129	35085
1985 1	32037	28691	30705	31548	34014	34366
2	31106	30157	31664	33288	34617	36965
3	32357	31478	33225	31198	34448	38068
4	33132	31979	36209	34866	36238	38880
1986 1	34604	31979	36914	34488	36204	39761
2	34917	32826	37418	36335	40175	41721
3	37918	34541	39555	39776	40610	44106
4	37679	35011	40966	38868	45183	46721
1987 1	38860	37096	44762	42338	44367	48998

th t	Greater London	South West	Wales	Scotland	Northern Ireland
70	39670	32757	26237	30361	26928
28	41547	33013	26212	31928	28260
32	43337	33570	28332	31094	30061
61	42472	35181	27977	32533	30265
70	44681	34304	27939	31563	30215
03	44872	35328	27591	32365	29901
77	47909	35421	27315	31739	31640
40	50785	36091	28150	32289	31286
07	53878	36029	28376	31457	29410
84	56270	37623	30153	32529	30923
07	61716	40764	32203	32937	31360
92	62299	40985	31849	34102	30705
23	65532	43163	31220	35489	31927
75	42435	34507	29271	31235	29412
22	42329	34010	27779	30996	27597
68	42352	35006	30998	31609	28361
56	42427	35723	31140	30851	28720
32	43015	34808	28612	31186	27890
41	46508	36718	28509	31973	29110
52	48982	35862	28531	33719	30630
47	54214	40164	33337	33835	30890
86	55223	40242	32694	34820	30513
93	63850	43275	32652	36980	31756
42	64280	45840	36466	38276	33313
93	70348	48845	35909	37488	34210
14	76985	50941	42134	40723	33096

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11.4 REGIONS: TYPE OF DWELLING

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
DETACHED HOUSES						
1984 1	42210	36561	41893	36555	40558	42197
2	41617	38422	44077	38836	41712	43202
3	41136	39090	44545	38904	42904	46499
4	41437	39973	44069	38782	41107	46913
1985 1	40817	37521	42765	40593	41698	44878
2	40230	39977	44949	40315	44417	48295
3	41978	41099	46501	41653	44561	48208
4	42531	42049	48481	43428	45568	49302
1986 1	42717	41329	48489	43812	44864	52620
2	45400	44500	50049	44556	47314	56271
3	46815	44065	52396	46605	49414	57632
4	45471	44257	53479	47309	51038	60147
1987 1	47618	46377	52450	48377	51586	60952
SEMI-DETACHED HOUSES						
1984 1	24568	22116	23853	21577	23385	25792
2	25462	22667	24467	22292	23657	26783
3	25748	23061	24789	22734	24334	27421
4	26808	23607	25282	22911	24518	28263
1985 1	26195	23270	25007	23390	24550	28019
2	26151	23893	25911	23623	25092	29528
3	26115	23899	25851	24058	24887	30250
4	27108	24291	26308	24633	25445	30983
1986 1	26437	24460	26653	24533	25309	31201
2	27521	25674	27840	25629	26674	33958
3	28333	26317	28399	26460	27500	35381
4	27971	26195	29252	27266	28615	37835
1987 1	28577	27152	29831	28364	29210	39653
TERRACED HOUSES						
1984 1	17176	14959	15833	15597	17298	20516
2	17980	15485	15904	16436	17860	21729
3	18122	15700	16876	16474	18134	22193
4	18941	15853	17057	17031	18298	23209
1985 1	18681	16035	17160	17502	18378	23833
2	18993	16411	17186	17862	19008	24985
3	18298	16322	17330	18146	18344	24851
4	18760	16815	17513	17969	19114	25670
1986 1	18317	17018	18135	19016	19626	26904
2	18665	17662	19004	19363	19843	28061
3	19741	18389	19567	20080	20696	29020
4	19991	18499	19673	21296	21317	30614
1987 1	21256	19168	20600	21690	21711	33189

Greater London	South West	Wales	Scotland	Northern Ireland
81830	45902	38286	41036	39333
85334	48048	38174	44816	38585
84666	49946	39912	43790	38662
89885	51742	40793	43538	41771
94073	50024	39033	41695	38811
93882	53720	39425	47299	41145
98889	56208	40182	46384	45277
104907	56971	42021	47663	44460
115549	55891	41207	46276	41477
119476	59838	42339	48855	46993
124494	63107	46481	48926	45699
129370	64456	45965	48009	44555
137929	65018	46764	49846	44843
48430	29587	23129	29862	23138
49263	30203	23614	31040	23477
51880	30781	24615	31029	24250
52329	31881	23955	31259	24611
54997	32080	24099	31108	24871
58936	33058	24328	32800	25140
59800	33292	24772	32239	25473
62789	33855	25097	32499	24981
67010	35209	25240	32780	25509
70258	36291	26468	33475	26965
76215	38536	27459	33176	27156
76840	40150	27823	33643	27396
80914	41144	28362	35520	26733
39266	24115	17699	26768	15980
40687	24677	18253	27267	15772
41940	25220	18693	28284	16303
42940	26206	18734	28401	15651
44186	26752	19576	26571	16947
46807	27022	18818	28165	15838
49407	27580	19288	28311	16151
52252	28375	19501	28844	16845
55468	28761	18883	27745	16888
59224	29892	19900	28502	18918
62760	31969	20829	28534	18703
64949	32369	20463	30596	18555
68882	34974	20839	31356	18835

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11.4 REGIONS: TYPE OF DWELLING (continued)

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
BUNGALOWS						
1984 1	28533	27997	30836	29681	32597	31131
2	30549	29106	31673	30686	33829	30649
3	32774	29700	33700	31796	35294	31700
4	32235	30859	32800	31757	34967	32577
1985 1	31586	29735	32776	30650	36220	32916
2	32857	31028	33358	32033	36308	34329
3	31782	31097	33821	31417	37790	34464
4	32874	31305	34216	34377	39950	35795
1986 1	33684	30978	35016	32887	35429	37025
2	34310	32500	35866	33897	38323	37523
3	34557	34726	38255	36926	39070	40666
4	35122	33311	37724	37022	44336	42338
1987 1	35756	34031	39019	38490	42239	45135
FLATS AND MAISONNETTES						
1984 1	13962	18253	19569	16037	17625	19450
2	14679	18170	19891	17796	18600	20746
3	15319	17781	20096	18871	18379	24492
4	15107	19859	20364		18999	23078
1985 1	15957	19038	20146	19803	20213	20539
2	15191	18339	19596	18244	18608	21453
3	15033	19362	19327	17245	17843	24083
4	15218	19248	20599	20498	18000	24877
1986 1	15620	18987	21974	19490	17936	23938
2	16396	19067	21377	18619	19075	24785
3	16699	19176	23269	20454	18851	26009
4	17294	19596	22172	24113	20686	27875
1987 1	17876	20596	22939	20850	20940	28985

th t	Greater London	South West	Wales	Scotland	Northern Ireland
36	54150	36301	27712	33367	29048
88	54572	39103	27490	34921	29475
81	59800	39912	28506	34308	31251
83	61047	39750	28473	34813	30201
95	59867	40279	29856	35372	30645
79	68874	41060	28887	37982	30294
85	62770	41423	29231	37012	32287
76	67413	42425	29162	38072	31102
99	67519	43111	31126	36231	31619
24	78433	45081	30402	38314	31946
76	82157	47570	33647	39059	32641
58	81309	50224	33368	38529	32660
57	80366	49584	34382	40354	32200
46	31768	23492	18201	20964	
41	32750	22354	20241	21715	
58	33398	23524	22703	21892	
56	34640	23971	19859	22766	
14	35960	24851	20021	22976	
34	39102	26282	19233	22773	
35	39274	25442	19983	22593	
99	43601	24907	21062	22422	
12	44951	25627	21767	22087	
39	50155	27585	21103	23521	
41	52750	28644	21817	23339	
38	53965	29906	22617	24455	
44	57323	31505		25203	

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11.5 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: TYPE OF DWELLING

Year	UNITED KINGDOM					NORTH					
	Pre- 1919	1919- 1945	1946- 1960	Post- 1960	New	Pre- 1919	1919- 1945	1946- 1960	Post- 1960	New	
DETACHED HOUSES											
1984	1	50061	52168	53227	42738	46262	47699			38136	42846
	2	52486	54424	55052	44421	47838	47947	48843		37798	43160
	3	55020	55625	56536	45266	47881	43048			40332	38851
	4	55069	53859	57412	45380	47718	46045			39628	39151
1985	1	52693	56150	57567	44988	48304				38884	39803
	2	54917	59058	62044	47114	49883	43976			39490	39289
	3	58733	62111	62881	48468	50849	47730			40772	39210
	4	62818	65720	66769	50774	53975	48387			39576	42116
1986	1	65276	69067	71400	52226	54195				40793	41356
	2	68277	73697	74159	54637	58048	54796			42967	42063
	3	71119	75129	73546	56755	60142	55681			42231	47496
	4	71643	74243	76278	57255	60780	51274			42332	45324
1987	1	72553	74557	76009	59738	63607				45417	46911
SEMI-DETACHED HOUSES											
1984	1	32608	28615	28403	26028	26526	31348	23269	25654	24215	24482
	2	32558	29975	29285	26858	26778	30074	25658	25522	24976	24585
	3	34448	30352	30789	27618	27526	28531	26243	26267	25021	25157
	4	34784	30756	30647	27817	27272	32537	27234	26764	25869	25592
1985	1	34343	30651	29857	27848	27734	28859	26560	27297	25330	26020
	2	36361	32169	31019	28399	28288	31677	25200	26981	25559	26303
	3	35947	31796	30878	28516	29355	31091	25823	25175	25874	26383
	4	39349	33357	32201	29443	30133	38887	26943	26274	25888	26313
1986	1	39976	34836	32173	30385	30263	31178	26066	26091	26032	26494
	2	43130	37692	34323	31517	31594	32115	27922	27010	27073	26319
	3	46235	39499	36003	32966	33297	35269	29042	26721	27449	28009
	4	45789	40313	36474	33979	33970	34143	27773	27128	27470	27548
1987	1	47953	40854	38811	35598	36980	36193	27708	29791	27574	28760
TERRACED HOUSES											
1984	1	19652	24434	25584	26374	27697	16210	17056		20126	21443
	2	20532	25559	25550	27319	28193	17141	17166		20889	21748
	3	21653	25969	27553	28127	28278	17277	17131		21770	23998
	4	21658	26376	27835	29084	28369	18328	18243		21642	23661
1985	1	21473	26067	28208	28471	30006	18137	17383		21759	22618
	2	22352	26687	27257	29110	29713	18409	17336		21588	24075
	3	22486	26979	27363	28996	30735	17546	17765		21495	24637
	4	23506	28364	28391	30292	32866	18106	18210		21928	23791
1986	1	24139	30677	27919	30794	34707	17842	18075		21673	
	2	26155	32716	30781	32800	37292	18001	18482	18520	21817	
	3	27866	35603	33941	34318	39425	19500	18382		22041	
	4	28745	36817	34480	36108	39355	19315	19309		23197	
1987	1	30238	38522	35805	38532	44755	20546	19981		25008	

SHIRE & HUMBERSIDE				NORTH WEST					EAST MIDLANDS					
1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	
5	40620	40336	34927	36029	53567	46889	49711	37703	41543	40334	34201	36038	34636	39337
5	42150	43630	36404	36854	57440	48694	51890	39292	43660	43908	38829	38571	36638	40686
5	41926	44051	36224	36771	55331	52794	48192	40652	41886	42415	39916	38797	36656	40472
5	40968	44348	37607	37799	55345	49962	49919	39388	43467	38939	38153	40676	36679	43726
1	44268	42059	35830	36147	50343	48457	46846	39776	43657	46805	37705	43928	38092	43318
7	47731	44573	37147	38492	54129	48407	52585	41870	43344	43038	40990	42539	37793	42965
1	43978	45362	38984	40061	57364	52615	56130	42499	43898	48560	41652	46295	39025	40741
7	43438	50939	40027	41428	65096	52087	55362	44598	46815	52331	42107	44344	40141	45351
7	41576	42824	39535	40224	59269	52845	57214	44973	48228	53068	44439	43851	40675	45102
7	52336	53249	40831	41702	68024	56438	57214	46234	47081	49722	44360	47281	41297	48048
1	48105	51770	42386	41499	64959	62229	60008	47338	50190	51324	45188	46865	44273	49424
1	44546		41868	44041	67348	63575		50068	48441	52758	47079	46328	44869	48895
7	49386	55873	43243	46355	69251	61018	59362	47072	53286	53814	48782	50413	45756	50693
2	21413	21160	21954	22573	27138	24186	25068	22340	23889	21901	21582	20695	21749	21304
2	22261	21937	22510	23954	27440	24477	26144	23331	23475	24131	21421	21465	22427	22145
2	22495	23295	23139	22758	28179	24669	26081	23509	24065	24518	21868	22450	22926	22239
2	22979	23048	23447	23093	29989	25106	26171	24067	23979	23795	21987	22884	23229	22894
2	22576	22795	23306	23265	27468	24973	25478	24287	24467	24977	22215	24002	23717	22752
2	23593	22508	23907	24437	28721	26312	27007	24452	25036	22650	23538	24418	23956	23232
2	23283	22727	23973	23961	29247	25662	27361	24369	25827	25283	23214	23832	24318	23789
2	23697	23326	24175	24406	30819	26072	27322	24705	26513	27146	24190	23838	24208	24728
2	24002	22335	24813	24750	29997	26906	26749	25467	26327	24347	23689	23103	25371	24951
2	25690	23604	25333	25356	32310	28044	28473	26267	27422	26084	25372	24164	25895	25904
2	26135	24735	25811	25536	34155	28531	29766	26506	26751	27830	25603	25761	26687	26421
2	25789	23872	25909	27004	35771	29510	28963	27173	27760	28204	26511	26623	27580	27435
2	26652	25067	26896	27086	38909	29420	29109	27975	29944	28290	27298	27699	29047	29089
2	15320	15916	17745	20719	14866	17295	17272	19758	22524	14394	16028		18516	20771
2	15661		18409	21125	14938	16757	17882	19633	21877	15187	16182	17844	19285	21442
2	16365	15823	18807	21897	15933	17707	17983	20538	21143	15372	16840		19279	21034
2	16484		19049	21808	16194	17272	19122	21270	20569	15854	16231		19375	22450
2	16492		19456	22458	16152	18433	20209	20601	21938	16389	16430		20065	22126
2	16697	16123	19649	22547	16252	17702	19218	20871	23254	16821	17216		20343	21757
2	16764	17366	19705	22232	16479	17766	19775	20796	23928	17038	18339	17400	20594	22797
2	17136	18050	19669	22567	16708	17781	18755	21604	25216	16988	18140	18665	20680	22036
2	17617	17695	19984	24539	17332	18696	19130	21482	25570	18048	18683	18912	21468	22715
2	18165	19439	20518	22345	18240	19182	20157	22047	25142	18447	19284	18754	21326	23959
2	18941	19387	21312	26560	18666	19939	19199	22936	27833	19319	19279		22005	25408
2	18953	20169	21100	23504	18629	20036	21867	23266	28445	20380	20026		23580	26016
2	19019	20122	21501	26701	19648	20498	21328	24025	30419	20523	22524		25343	

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11.5 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE: TYPE OF DWELLING (continued)

Year	WEST MIDLANDS					EAST ANGLIA					
	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	
DETACHED HOUSES											
1984	1	46628	46235	44260	37059	40328	51208	41456		38835	42107
	2	51688	43844	48152	37234	42129	49688	43397		40278	42740
	3	51935	45140	48503	38486	42406	55340	52209		43265	42672
	4	46511	42822	47022	38838	40205	55980	47866		44584	45543
1985	1	45528	45383	47013	38423	43645	50621			41649	45525
	2	49427	44835	55830	41272	44143	52603			45227	47600
	3	52805	51275	53342	39210	45283	57656	44772		45695	47751
	4	51791	51130	51698	41820	44878	54069	50962		47543	48771
1986	1	53297	50937	53781	41516	44452	61764			49521	53634
	2	57485	50936	56807	43166	47253	67690	61251		51849	55303
	3	62752	52521	57592	44431	48693	66940	65426		53676	56521
	4	63949	56608	59471	44503	51958	70718			55492	62811
1987	1	62610	54399	59512	49028	50270	72992			57727	61166
SEMI-DETACHED HOUSES											
1984	1	27301	23210	24065	22336	23354	27583	25750		25476	23746
	2	27218	23331	25154	22556	23846	27917	27674	26809	26432	25264
	3	28186	24130	26017	22996	23514	29556	29233		26296	25511
	4	28066	23791	26326	23734	23797	29841	29712		27223	26288
1985	1	25597	24292	26979	23736	24760	28048	31598		27781	26002
	2	28280	25189	26384	23753	24693	32855	30050	29241	28516	27068
	3	27952	24863	26452	23628	25027	32956	31000		29201	27915
	4	28262	25393	27420	24098	24848	31686	31822	31448	30505	30176
1986	1	28366	25230	25964	24711	24668	32897	31364	31070	31850	29232
	2	30195	26701	28979	25397	25970	37893	34211	32733	32574	32593
	3	30721	27503	29800	26226	26362	39407	36727	32402	33666	33302
	4	33790	28738	28374	27138	28972	40750	40011	37939	37342	32321
1987	1	34480	28167	30288	28462	28583	43150	42437		38619	36139
TERRACED HOUSES											
1984	1	15834	17117		19879	21302	19417			23148	22255
	2	16634	17560	18405	19835	22010	21132			22425	23669
	3	16895	17445		20866	23357	21432			23435	23933
	4	16959	18025		21590	21465	22581			24147	25006
1985	1	17284	17175		20874	22367	22583			25373	
	2	17692	18332	20255	21427	24203	23720			26873	28245
	3	17036	18458	18619	20969	22970	24246			25850	25741
	4	18022	18760	20957	21277	22635	24316	24765		27126	29025
1986	1	18248	19105	19297	21814	25848	25912			27932	29484
	2	18202	20174	20927	22363	26023	27192			29176	30449
	3	19649	20595	22251	22443		28111			30214	29962
	4	19540	20885		24139		29311			31718	32664
1987	1	20051	21757		24340		32496			33468	37481

TH EAST					GREATER LONDON					SOUTH WEST				
	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New
42	65051	66555	56535	58525	86139	84007	77895	75739	82917	47832	45588	45249	44924	46195
55	66136	72181	58977	61116	81678	91365	77451	85997	81172	48127	48386	52556	47533	47658
47	72125	75516	60989	60548	89515	84250	82544	91682	71119	53620	48544	53421	47361	50241
78	67431	77900	61631	61656	80969	89662				56953	50640		48689	51155
36	69967	78201	60868	62281		98435				52228	52006		47588	50171
73	76246	81893	64988	65698		96824	87757	87131		54489	56268	58603	52140	52700
54	80631	84782	67722	68869	85785	104497	94738	98465		61280	56990	64059	53007	54792
29	86403	88855	69972	73914	99605	108984	106415	108496		62587	54746	61371	53616	57142
19	89534	100179	72488	73927	120845	123075	106186	109643		58961	61018	56725	53337	55242
46	96886	101418	77390	80642	131524	121666	120892	106853	115796	64237	67824	67254	56162	56890
39	102629	101472	82613	87197	134169	127578	123890	114156		71925	63560	73146	58701	60681
30	102562	110627	83442	87551		135309		126923		70242	68835	72590	60271	63236
19	101713	106709	88046	91441		131390		133077	144222	69787	69199		62435	63981
34	36768	38012	35356	34816	53099	47767	43834	46593		30777	30276	31321	28832	27743
73	38948	39140	35859	33820	49450	50126	47729	47676	41175	32666	31314	30665	29219	27877
38	39698	41904	37287	35760	56016	51766	48203	49502	41425	33268	31603	31892	29640	28875
38	40871	42459	37781	35201	53852	53152	50871	47848	40018	33895	33853	32476	30525	29863
28	42667	42223	39083	37373	58823	55141	51025	53286	47084	36464	32991	32015	30946	28659
33	42732	44041	39791	37224	63295	59733	52743	50964	50560	37086	34425	33225	31638	29883
30	43494	44244	40768	39517	62881	60261	53250	53538	56932	35873	34506	34059	32301	31058
74	46090	46682	42433	40820	69741	61734	59830	55701	55311	37035	34926	33486	32691	30981
28	48244	47873	43554	41763	75820	66225	56073	62281		39466	36784	36986	33292	32242
34	51174	51240	46264	46731	77969	70052	62604	59062	60552	40159	38229	35594	34592	33738
36	52909	53671	48770	49698	85758	75458	65543	69729	66337	43743	39269	37190	36476	35839
33	58170	57144	52182	49989	83073	77509	69512	68728	65221	46729	42082	37604	37490	36832
39	59893	58760	55339	55610	87445	81811	71303	70591		47354	42719	40193	39378	37368
16	28109	30641	31460	31545	39553	37430	36789	43586	40916	23653	23510		24967	24512
32	29436	31327	32284	32317	39974	39641	37546	47681	42026	24246	24703		24975	25600
38	30885	32540	33188	31747	41993	40330	41314	46412	42729	24687	25809	25892	25409	26489
39	31285	34036	34411	32604	42783	42344	40038	47807	41130	25823	26585		26757	26239
33	31987	34741	34594	34699	43744	43795	41317	47561	44740	26522	26814		26950	27197
34	33340	35833	36844	35162	47624	45807	42489	48928	44152	26659	26644		27535	27336
34	33565	35398	35996	37327	50476	46602	48106	52760	49276	28221	26973	27017	27349	26002
32	34618	36372	37742	38851	54507	48146	47182	52672	57140	28671	28850	27294	28160	27581
38	36603	37926	38754	42679	57656	51353	46290	57346	64308	28434	30055		28944	29275
33	37970	39859	41774	42829	60671	54626	51805	63138	71422	29952	30161	29409	29838	29735
37	42648	44097	43898	45592	65202	58233	56679	64635	68016	32363	31441	31532	31165	33005
34	44915	44294	46376	47206	68113	60675	55090	65131	68442	32324	31645		32472	32993
33	47266	51185	49693	51191	72438	63718	57819	68918	76199	35400	34105		34571	36073

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ERAGE PRICES (at approval stage) 1984 -

UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
TYPE OF DWELLING (continued)

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	WALES					SCOTLAND					NORTHERN IRELAND				
	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New
ATTACHED HOUSES															
4 1	38452	39972		35814	41284	39161			39730	44003					44255
2	34462	40500		6595	43277	42792	51627		43798	47511				37271	40085
3	37171	39561		38720	45920	42602			41545	50213		41035		37007	
4	38289	44811		38869	46376	42028			43892	44968				40536	
5 1	39216			38143	46069	37802			41603	44443					
2	36355	43637		38451	41100	43186			46486	53820				38996	
3	37897	43522		38712	42793	44281			45767	47812				42960	
4	39345			40354	49317	46531			45607	50151				45670	45208
6 1	39943			40281	45161	39510			46338	54389					39737
2	38990	38304		43219	44017	47255			46614	51732				46364	48551
3	46748	45549		44702	50240	48016			46412	54487				45151	
4	43819	47424		46666	45172	42803			47491	53796				40268	49780
7 1	43331			43348	53981	47712			47973	56300				44633	
SEMI-DETACHED HOUSES															
4 1	23568	22750	25879	22508	24699	30394	32056		28742	30816		21956		23105	23380
2	22581	24624	29781	22510	23719	34117	33550	29856	29871	30751		22160	23752	23817	23444
3	24409	25650	29565	23306	24925	32741	34988	32115	29538	31265		22420	24387	24495	24088
4	23530	24245	27589	23254	24988	32368	34309	34762	29865	31005		22911	25665	24459	24838
5 1	23421	24869		23648	23077	34600	30878		30240	30489		22226	26540	25053	24405
2	23900	25474	26751	23311	25498	36066	37484	33575	30880	30724		24774	25072	25534	24973
3	24780	26595	27832	23457	23887	34579	35780	33297	30663	32078		24548	25364	25328	25297
4	23681	26588	28340	24087	26433	35415	34569	31435	31103	32434		23526	26038	24775	25672
6 1	23717	26470	27127	25111	25004	35496	34558	33480	31094	34345		24184		25434	25999
2	25891	28397	27816	25806	25295	38029	35799	33084	31600	33160		28227	26313	25932	26147
3	26861	28446	27862	26944	28277	35884	37834	34295	31437	33264		28315	25937	25891	26895
4	29810	28512	30965	26457	26841	36808	35488	32649	31970	34615				26479	27493
7 1	26978	30830	32640	27058	29058	41149	37133		33015	35596		25018		27008	27573
SEMI-DETACHED HOUSES															
4 1	16409	18324		21435	22606	29775			23864	28061		15398	14386		
2	16882	19519		20880	22098	28998	28286		25361	29196		15405	14470		
3	17427	19840		20803	23311	30624	29186		26460	28513		16374	14185		
4	17439	19250		22931	21647	29207			27563	28221		14996	14099		
5 1	18883	18859		22385	21613	26196			25514	27907		16896	15489		
2	17758	19692		21470	22329	30996	29183		26198	28397		15624	14378		
3	18025	20959		22682	22298	31270	31032		26355	28758		16232	14810		
4	18491	20830		22042	23864	32014	33057	26932	29110	16595		15791			
6 1	18103	19480		21902	22796	27672			26274	29531		16667	15267		
2	18989	21431		23433	23599	31378	30838		25881	31311		18508	17007		20614
3	19724	22694		24409		30062	29680		26550	32445		18845	16729		19517
4	19468			23309		35512			28264	29633		18387	16211		
7 1	19544	25237		23432		34968			27808			18929	16923		

	UNITED KINGDOM					NORTH				
	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New
ALOWS										
1	30466	37273	37013	31282	33260		24332		27508	35947
2	32302	37908	39314	33234	33341		26646	34314	30053	34543
3	32676	39989	41412	33966	35744		27705	34271	33065	40158
4	30041	40099	40936	34368	34571		31026		33158	35310
1	33973	39423	40653	34211	34866		29662		30406	37462
2	34031	40217	41474	35247	36747		29663	35116	32935	38869
3	30621	41550	42577	35560	36943		24603		33129	38608
4	32264	43431	42975	36861	37877		28771	36666	32094	38210
1	37261	44552	45770	36736	38229		25213		34302	39727
2	36782	45349	49197	38873	39629		24873		35696	40521
3	39349	51054	51138	40809	40459		30540		34418	40873
4	34793	50355	51179	40482	41168		29500		36125	39045
1	41866	52548	53301	41677	42238		28852		36591	39565
S AND MAISONNETTES										
1	26448	26210	26985	25049	25296	13299	12011		15464	
2	27205	26629	28405	25597	26623	14172	13052		15177	
3	27458	27168	27734	26237	27313	14248	14194		16222	
4	28670	27768	29174	27181	27580	13836			15584	
1	29869	28856	29008	26711	28061	15701			17041	
2	30644	29897	30737	26841	29133	14776	14021		15717	
3	30030	30512	27840	26765	30002	14599	14207		15736	
4	31935	31256	30825	28135	32707	14573	14597		16106	
1	33593	33362	30863	29019	33485	15080	14873		16423	
2	37231	38181	36909	30383	37732	16611	15398		16026	
3	38971	39365	37322	33063	39435	16517	15119		16467	
4	40448	40339	37347	34850	43930	17652	15745		16579	
1	45502	43464	45708	36946	46730	17746			17711	

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AVERAGE PRICES (at approval stage) 1984 -

11.5 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
TYPE OF DWELLING (continued)

YORKSHIRE & HUMBERSIDE					NORTH WEST				
Pre- 1919	1919- 1945	1946- 1960	Post- 1960	New	Pre- 1919	1919- 1945	1946- 1960	Post- 1960	New
BUNGALOWS									
1984	1	31278	29629	26595	30139	31570	32375	29800	33415
	2	30617	31928	28236	29744	32375	33936	30379	34124
	3	32113	32292	28377	30962	36493	35553	32115	36281
	4	31838	33475	30307	30592	36143	34523	31537	34390
1985	1	28368	31431	29294	30838	34353	36752	30945	35732
	2	30964	32391	30581	32047	38783	32990	31844	36176
	3	32424	31115	30668	32653	36011	36095	31979	35926
	4	32192	31129	30817	32442	35735	34347	32264	38800
1986	1	34147	34151	29745	33081	34132	36349	33895	40115
	2	33315	33504	32224	32541	35223	40226	35009	36472
	3	38233	37891	33789	35298	39658	43579	36773	39226
	4	37195	37905	31888	34378	37235	45323	36251	40027
1987	1	37361	35524	32792	36621	42511	38024	37493	42625
FLATS AND MAISONNETTES									
1984	1			17229	20593	17799	19000	20953	
	2	19811		16083	21142			18732	21372
	3			16965	18967			20934	19990
	4			18556				19931	21024
1985	1			16785				19115	21757
	2			16907		20765		19752	20055
	3	21206		17816		18867		19452	21196
	4	22079		17415		19526		19791	25086
1986	1	20604		17128		22759		21100	23410
	2	20934		18174		21108		21047	
	3	17881		18919		27759		21807	
	4	19864		19191	20499			20510	
1987	1			19358				20602	

MIDLANDS				WEST MIDLANDS					EAST ANGLIA				
1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New
30671	31114	28906	30695			36023	30536	33842		29802		30521	30735
32403	31852	30481	29735		33424	35656	33107	35520		35583	31019	29872	31335
29065	34015	31216	33716				33442	35432		33511	35126	30804	30599
		30759	31659				33716					31454	
	29841	31338	29750				34715				34450	32124	
30018	34283	31024	35415		37851		35120	36351			35243	33939	36554
30125	31206	31530	32556			42994	36365	40960		35193	37700	32676	39986
32317	34341	33788	37965			38286	33075	41281			38450	35159	
		32569	32963				33635	38668				35868	39271
31882	36778	33386	35628		37623		35432			34051	38766	37278	39924
40436	36011	35172	39651			44569	36198	42129		39088	43042	40535	41839
38621		34798	42595				39877	53998					41865
		38343	40277				40143				49352	43431	
		16161					17424	18580					
		17088					17398	20111				20471	21700
		16483					17525	19431				22683	
							17333	20367					
							19049	20816					
							18402	19967				20798	
	16859					16904	17508	17683				21946	
	17418						17508					23158	
		16319					17654					23580	
		17959		24799			18348					22586	
		19136					18408					25591	
		21827					19675					26375	
		20081					20287						

LIFAX BUILDING SOCIETY

ERAGE PRICES (at approval stage) 1984 -

5 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
TYPE OF DWELLING (continued)

	SOUTH EAST					GREATER LONDON					SOUTH WEST				
	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New
GALOWS															
4 1		43616	43542	41840	51600		50195				35530	37019	35380	41579	
2		45139	46967	47602	47984		49447				38088	40608	38869	41217	
3		48881	50030	48591	51838		54489				39601	43046	39722	38721	
4		48221	49095	48815	50868		55226				37506	39377	39741	43576	
5 1		47989	50984	49418	51583		56344				37690	42407	41411	36799	
2		46804	51535	51421	58590		63998				39953	43311	39917	44180	
3		51367	54622	54585	58075		61004				40891	44430	40661	41593	
4		53207	59791	56047	57285		63557				42180	48365	41823	44943	
6 1		54994	55261	55453	59364		61221				42381	44549	42044	42118	
2		57130	62653	58715	64718		73935				42572	48605	44636	45691	
3		62725	64036	64192	66867		78405				48782	51380	46943	45421	
4			66341	68118	64319	71785		72076			49598	56780	48188	54655	
7 1		68313	70918	66171	65681		81434				47128	55540	48207	53050	
TS AND MAISONNETTES															
4 1	23498	23512	26746	26751	27114	31772	29784	33916	32151	33683	23490			23347	24107
2	24270	24976	27513	27531	28677	32744	31468	32574	32967	35200	22228	19436		23268	22437
3	25597	26256	26701	27941	29673	33239	31625	32536	34893	35561	24135			22882	23609
4	24938	25843	28935	29682	28901	35048	32070	32781	34805	36820	23053			24169	24528
5 1	26508	27673	29122	29446	30546	36270	33535	36159	36280	36716	25523			24879	24134
2	26709	27767	31085	29862	30954	39900	36265	40592	38076	40229	27623			26324	24545
3	27144	27862	30833	30689	32800	39824	37040	36487	39396	40931	26491			24058	25398
4	28700	28846	31701	31993	34087	44814	39010	41555	42390	46662	25235			24238	27279
6 1	29224	29053	33115	32661	35747	46157	41693	41928	44020	45033	26888			23458	27070
2	30264	31635	36343	33395	37852	52071	47548	50033	46725	49621	28558			24727	36077
3	31778	33538	37525	36179	41388	54311	48617	51566	51330	52877	29074			27645	29977
4	34234	35933	38744	38685	44273	55166	48230	50900	51873	63473	31567			27851	
7 1	38996	39010	42078	41415	44204	58667	52292	55812	55185	63486	32691			28196	

IS				SCOTLAND					NORTHERN IRELAND				
1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New	Pre-1919	1919-1945	1946-1960	Post-1960	New
		26434	29846		34300		33673	33795				28744	29048
25740	28837	27526	27901	25161	37781	43747	34492	34465				31026	27537
27970	29079	28011	31279	27578	37210	42570	33241	35094				32562	30179
		28768		27886	39305	40129	34599	34171				32325	29013
		29877			39363		34388	36572				33434	28753
		28915			41770	42068	36962	37521				32196	28914
27182		29300	31736	28004	40662	41688	35851	40108				34670	31323
24807		29286	32276	25872	42394		38515	39157				31730	31019
		29723	36692	26360	41194		35166	38012				31806	31663
27712		29766	33837	28845	41139		37840	41128				32933	31792
	40565	34217	32919	31303	44810	43154	37501	41706				33537	33214
		32259	33583	24876	43651		39018	39901				33694	32830
		32886			43051		39707	41506				33587	32063
					19623	22664		22896	23716				
		20068			21056	22303		22129	23870				
					21196	22048		22796	24684				
					22105	23064		22919	25101				
					22440	23199		22655	25154				
					22351	24797		21853	24864				
		21352			22111	23849	19182	22783	26271				
		19615			21550	23786	19971	23267	27081				
					21358	23834	19522	22138	26514				
		21758			22978	24861		22939	28636				
					22945	25782		22499	28867				
		22555			23780	26292		23934	30509				
					24371	24540		25040	32533				

HALIFAX BUILDING SOCIETY

STANDARDISED INDEX (at approval stage) 1983 -

11.6 UNITED KINGDOM:

ALL, NEW AND EXISTING DWELLINGS, TYPE OF BUYER

1983 = 100

Year	All	New	Existing	TYPE OF BUYER	
				First-time Buyer	Former Owner-occupier
1983	100.0	100.0	100.0	100.0	100.0
1984	107.2	106.9	107.1	107.6	107.3
1985	117.0	115.4	117.3	117.4	116.7
1986	129.9	126.6	130.6	129.6	129.3
1983 1	95.9	96.5	96.0	96.7	95.8
2	99.9	100.3	99.8	99.6	99.9
3	102.2	101.1	102.3	101.6	102.4
4	102.4	102.4	102.3	102.6	102.2
1984 1	102.9	103.7	102.7	103.8	103.0
2	106.5	106.9	106.3	106.8	106.7
3	109.2	108.2	109.2	109.4	109.3
4	111.0	109.3	111.0	111.3	110.5
1985 1	112.2	110.9	112.3	113.4	111.3
2	115.9	113.8	116.2	116.0	115.4
3	117.6	116.4	117.9	118.0	117.5
4	120.7	119.6	121.0	120.7	120.9
1986 1	122.5	120.9	123.0	123.7	122.2
2	128.6	125.2	129.4	128.4	128.0
3	133.1	129.5	134.0	132.7	132.3
4	136.9	132.6	137.8	136.5	135.9
1987 1	140.6	136.5	141.6	140.7	139.1

1983 = 100

	All	New	Existing	TYPE OF BUYER	
				First-time Buyer	Former Owner-occupier
Jan	94.8	96.1	94.7	95.6	94.9
Feb	95.7	96.3	95.9	96.8	95.5
Mar	96.9	97.0	97.0	97.4	96.7
Apr	98.5	99.2	98.4	98.5	98.4
May	100.3	101.1	100.3	99.8	100.3
Jun	100.9	100.6	100.7	100.5	100.9
Jul	102.1	100.9	102.2	101.8	102.0
Aug	102.3	100.4	102.5	101.4	102.6
Sep	102.2	101.9	102.3	101.6	102.6
Oct	102.5	102.2	102.7	102.5	102.4
Nov	102.4	102.4	102.4	102.4	102.2
Dec	102.2	102.9	101.9	102.8	102.1
Jan	101.7	102.6	101.5	102.4	102.2
Feb	102.5	104.0	102.1	103.7	102.5
Mar	104.0	104.5	103.9	104.9	103.9
Apr	104.8	106.5	104.5	105.4	105.0
May	106.4	107.0	106.2	106.9	106.5
Jun	107.8	106.9	107.7	107.8	108.1
Jul	108.9	107.7	108.9	108.9	109.1
Aug	108.9	108.7	108.8	109.1	109.2
Sep	110.0	108.5	110.0	110.5	109.7
Oct	110.5	108.4	110.6	110.9	110.1
Nov	111.4	109.6	111.2	111.8	110.6
Dec	111.4	110.2	111.3	111.4	111.0
Jan	111.3	110.9	111.3	112.5	110.8
Feb	111.9	110.5	112.1	113.5	110.9
Mar	113.1	111.1	113.4	114.1	112.1
Apr	115.2	114.2	115.3	115.2	114.9
May	115.7	113.5	116.1	116.2	115.1
Jun	116.7	113.4	117.1	116.6	116.3
Jul	116.4	115.5	116.6	117.0	116.1
Aug	117.2	116.1	117.6	117.2	117.5
Sep	118.9	117.3	119.3	119.4	118.8
Oct	119.8	118.0	120.3	119.8	120.0
Nov	120.5	119.7	120.8	120.8	120.7
Dec	122.2	122.1	122.3	121.9	122.7
Jan	121.0	120.3	121.4	122.3	120.7
Feb	122.3	119.8	122.8	124.0	121.6
Mar	124.0	122.5	124.6	124.6	123.9
Apr	126.7	122.7	127.6	126.9	126.0
May	128.4	125.4	129.1	128.1	127.8
Jun	130.8	127.5	131.5	130.3	130.1
Jul	132.3	128.3	133.3	131.7	131.5
Aug	133.1	130.7	133.9	132.5	132.4
Sep	134.1	129.8	135.1	134.2	133.1
Oct	136.1	131.4	137.1	135.9	135.1
Nov	136.9	132.5	137.8	136.6	135.7
Dec	138.3	134.4	138.9	137.2	137.3
Jan	137.4	134.7	138.2	138.0	136.2
Feb	140.6	136.6	141.5	141.9	138.8
Mar	142.9	137.6	144.2	141.9	141.2

HALIFAX BUILDING SOCIETY

STANDARDISED INDEX (at approval stage) 1983 -

11.7 REGIONS: ALL, NEW AND EXISTING DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
ALL DWELLINGS						
1983	100.0	100.0	100.0	100.0	100.0	100.0
1984	104.8	106.1	103.9	106.9	103.9	108.4
1985	109.6	112.0	110.1	116.6	109.7	121.2
1986	114.5	119.6	118.9	126.8	119.4	138.9
1983 1	96.5	96.2	96.5	95.5	97.1	95.1
2	98.8	100.2	100.2	100.4	101.2	99.2
3	102.4	101.7	101.8	102.5	101.7	101.7
4	102.6	102.2	101.5	102.0	100.2	104.2
1984 1	101.3	102.9	100.7	102.6	100.5	104.2
2	104.3	105.7	103.3	106.8	103.6	107.0
3	105.6	107.3	105.6	108.7	105.6	110.4
4	108.5	108.7	106.7	110.4	106.6	113.3
1985 1	109.2	108.2	106.9	112.9	106.3	115.3
2	109.7	111.5	109.2	115.3	109.5	120.9
3	109.1	112.6	110.6	117.0	109.4	121.6
4	110.3	114.3	113.1	119.8	112.4	125.1
1986 1	111.1	114.8	114.7	120.7	113.3	129.7
2	113.9	119.5	119.0	124.9	118.0	137.6
3	116.7	122.3	120.8	129.1	121.5	142.1
4	116.9	122.6	121.6	133.6	126.2	149.0
1987 1	120.2	126.4	122.6	136.7	126.9	155.5
NEW DWELLINGS						
1983	100.0	100.0	100.0	100.0	100.0	100.0
1984	105.2	106.0	103.1	107.5	105.8	108.6
1985	107.4	111.6	109.4	116.3	110.8	121.8
1986	112.2	116.9	114.4	124.7	119.3	138.0
1983 1	96.2	96.3	96.2	95.6	97.2	95.7
2	99.8	100.7	101.7	99.5	98.0	99.2
3	102.4	101.0	100.3	102.4	100.6	100.5
4	100.2	102.1	101.4	102.6	104.2	103.2
1984 1	104.9	103.0	102.3	104.1	102.8	104.6
2	105.1	107.2	103.6	106.5	105.8	107.8
3	104.8	107.0	103.1	109.7	107.9	110.5
4	106.9	106.8	104.0	110.4	106.8	113.3
1985 1	107.2	108.2	106.9	112.7	107.9	114.4
2	107.8	110.9	107.4	115.3	109.8	121.3
3	108.0	112.3	109.3	115.3	110.8	123.8
4	107.0	113.8	113.2	121.0	113.7	125.6
1986 1	109.6	114.1	113.1	117.8	112.4	128.2
2	111.8	115.8	113.6	123.3	118.4	137.9
3	114.8	119.0	116.5	126.6	121.2	139.8
4	113.1	119.6	115.4	131.3	127.4	149.3
1987 1	117.4	124.1	116.7	136.1	123.7	151.6

1983 = 100

th t	Greater London	South West	Wales	Scotland	Northern Ireland
.0	100.0	100.0	100.0	100.0	100.0
.7	111.6	106.3	104.5	109.1	107.9
.9	131.2	117.7	111.1	115.9	114.1
.3	159.6	131.6	118.3	119.9	121.4
.6	95.7	96.5	96.4	94.4	96.3
.2	99.2	100.2	102.2	102.9	102.5
.8	102.6	101.8	102.2	102.9	102.5
.3	103.2	101.7	100.4	103.6	101.4
.4	105.9	102.0	100.9	103.8	103.4
.6	110.3	105.2	104.1	109.1	107.2
.5	114.0	108.4	107.3	110.1	111.4
.8	117.8	110.9	105.7	112.4	111.4
.8	121.4	112.5	108.3	111.9	112.9
.9	128.2	116.6	109.2	116.7	113.4
.6	132.7	118.9	112.6	116.3	114.8
.8	139.3	121.0	113.2	117.5	114.9
.1	145.1	123.2	112.0	115.4	115.2
.7	156.2	129.5	117.0	120.1	124.9
.5	166.6	135.2	122.2	121.1	123.2
.1	174.1	139.7	123.4	123.3	122.1
.1	182.9	143.0	125.6	124.5	121.8
.0	100.0	100.0	100.0	100.0	100.0
.2	107.8	106.7	105.5	106.8	108.9
.1	123.2	115.3	111.4	113.6	115.4
.7	151.1	127.3	117.7	120.3	121.4
.9	97.1	97.7	96.4	98.0	95.9
.2	101.9	98.9	103.8	99.2	101.5
.8	101.8	102.2	98.1	100.0	100.8
.5	99.8	102.0	101.9	103.3	101.5
.6	104.6	102.8	101.2	102.2	106.5
.0	106.9	106.3	104.7	107.6	107.8
.2	109.2	108.7	108.6	108.7	111.1
.6	112.6	109.8	107.4	109.2	112.7
.8	116.4	111.2	106.7	109.6	108.9
.7	117.2	114.3	109.2	112.8	112.9
.9	125.3	115.4	110.6	115.0	117.2
.8	135.2	119.9	115.2	117.3	120.5
.9	137.2	121.0	116.9	116.7	117.2
.3	149.6	126.3	115.8	120.6	118.7
.2	157.8	129.6	121.1	121.5	124.2
.5	164.5	135.0	119.2	123.0	127.9
.1	169.2	139.6	130.2	125.1	123.9

HALIFAX BUILDING SOCIETY

STANDARDISED INDEX (at approval stage) 1983 -

11.7 REGIONS: ALL, NEW AND EXISTING DWELLINGS (continued)

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
EXISTING DWELLINGS						
1983	100.0	100.0	100.0	100.0	100.0	100.0
1984	104.7	105.9	103.8	106.7	103.6	108.1
1985	110.1	112.0	110.4	116.6	109.9	121.2
1986	115.3	120.1	119.7	127.3	120.2	139.2
1983 1	96.6	96.3	96.8	95.6	97.1	95.2
2	98.6	100.0	100.0	100.5	101.5	99.3
3	102.4	101.8	102.0	102.3	102.1	102.0
4	102.9	102.1	101.4	102.1	99.4	104.1
1984 1	100.8	102.8	100.5	102.1	100.1	104.0
2	104.2	105.3	103.1	106.9	103.3	106.4
3	105.9	107.0	105.6	108.6	105.4	110.3
4	108.6	108.6	106.7	110.1	106.4	113.1
1985 1	109.9	108.1	107.0	112.8	106.1	115.1
2	110.0	111.5	109.6	115.3	109.6	120.9
3	109.5	112.7	111.1	117.3	109.6	121.4
4	111.0	114.5	113.3	119.7	112.8	125.0
1986 1	111.9	115.0	115.1	121.4	113.9	130.0
2	114.7	120.2	119.9	125.3	118.9	137.6
3	117.3	122.8	121.7	129.9	122.7	142.6
4	117.9	123.1	122.7	133.9	126.6	148.9
1987 1	121.3	126.7	123.7	137.4	128.5	156.2

1983 = 100

h	Greater London	South West	Wales	Scotland	Northern Ireland
0	100.0	100.0	100.0	100.0	100.0
7	111.8	106.2	104.1	109.5	107.5
3	131.5	118.2	111.1	116.3	114.0
0	160.1	132.6	118.8	120.1	122.1
5	95.7	96.4	96.6	93.9	96.1
1	99.1	100.3	100.3	99.0	99.0
0	102.6	101.6	103.0	103.4	103.3
3	103.3	101.8	100.3	103.7	102.3
3	105.8	102.0	100.5	104.3	102.6
5	110.4	105.2	103.9	109.3	107.1
8	114.3	108.3	106.6	110.5	110.3
9	117.9	110.9	105.4	112.6	110.3
2	121.5	112.9	108.5	112.3	114.2
5	128.6	117.1	109.3	117.6	113.7
7	132.9	119.7	112.8	116.6	114.6
1	139.4	121.4	112.9	117.7	113.4
5	145.6	123.8	111.8	115.3	115.2
3	156.5	130.5	117.2	120.3	127.5
2	167.2	136.5	122.8	121.3	123.6
1	174.5	140.8	124.7	123.7	121.1
2	183.6	144.3	125.2	124.3	122.6

ALIFAX BUILDING SOCIETY

MES/HALIFAX SERIES OF AVERAGE PRICES (at approval stage) 1975-1982

8 UNITED KINGDOM: ALL, NEW AND EXISTING DWELLINGS - MONTHLY

£

Year	All	New	Existing	Year	All	New	Existing
1975	Jan 11508	12057	11396	1979	Jan 18337	21115	17924
	Feb 11229	11764	11115		Feb 18724	21868	18211
	Mar 11857	12640	11697		Mar 19272	22173	18841
	Apr 12077	12632	11967		Apr 19944	22874	19521
	May 12368	12907	12265		May 20532	23169	20175
	Jun 12712	13197	12625		Jun 20971	23252	20664
	Jul 12781	13174	12719		Jul 21857	23935	21576
	Aug 12822	13294	12747		Aug 22090	24989	21721
	Sep 12626	13106	12547		Sep 21864	24087	21576
	Oct 12747	13268	12670		Oct 22394	25315	22005
	Nov 12631	13167	12546		Nov 22739	25123	22418
	Dec 12648	13488	12513		Dec 22689	26261	22215
1976	Jan 12868	13696	12723	1980	Jan 22980	26700	22440
	Feb 12740	13491	12606		Feb 22956	27232	22345
	Mar 13025	13877	12866		Mar 23496	28105	22839
	Apr 13390	13937	13285		Apr 24103	28877	23471
	May 13538	14244	13409		May 24548	29250	23919
	Jun 13664	14476	13521		Jun 25008	28615	24568
	Jul 13936	14482	13843		Jul 25243	29648	24748
	Aug 13751	14584	13608		Aug 24971	29866	24450
	Sep 13665	14485	13532		Sep 25013	29909	24481
	Oct 13499	14397	13355		Oct 24924	29694	24409
	Nov 13678	14383	13564		Nov 24982	29507	24493
	Dec 13594	14659	13421		Dec 24963	30797	24356
1977	Jan 13565	14855	13351	1981	Jan 24930	30270	24341
	Feb 13305	14566	13107		Feb 25289	30961	24631
	Mar 13407	14742	13198		Mar 25451	30012	24913
	Apr 13796	14953	13614		Apr 25848	31306	25226
	May 13823	15092	13635		May 25880	31141	25317
	Jun 14188	15367	14021		Jun 25813	30620	25310
	Jul 14309	15544	14137		Jul 25781	30318	25314
	Aug 14437	15938	14239		Aug 25171	29894	24665
	Sep 14453	15881	14264		Sep 24575	29113	24105
	Oct 14606	15958	14409		Oct 23952	28886	23436
	Nov 14799	16344	14583		Nov 24205	29398	23615
	Dec 15006	17179	14703		Dec 24725	30043	24061
1978	Jan 15189	17491	14828	1982	Jan 24179	30650	23493
	Feb 14967	17189	14607		Feb 23983	30336	23293
	Mar 15626	17843	15235		Mar 24494	30235	23878
	Apr 15743	18105	15337		Apr 25333	30590	24781
	May 15827	18095	15467		May 26037	31156	25479
	Jun 16690	18703	16390		Jun 26430	31857	25884
	Jul 17379	19320	17102		Jul 26920	31039	26528
	Aug 17572	19821	17255		Aug 27770	32340	27264
	Sep 17753	19312	17533		Sep 27634	31798	27193
	Oct 17679	20513	17306		Oct 27717	33685	27067
	Nov 18111	20439	17785		Nov 27920	32117	27439
	Dec 18243	21309	17818		Dec 27447	31786	26921

HALIFAX BUILDING SOCIETY

TIMES/HALIFAX SERIES OF AVERAGE PRICES (at approval stage) 1976-1982

11.9 UNITED KINGDOM AND REGIONS: ALL DWELLINGS - QUARTERLY

Year	United Kingdom	North	Yorks & Humberside	North West	East Midlands	West Midlands
1976 1	12892	10271	9576	10485	10542	12784
2	13532	10811	10249	11143	11173	13382
3	13780	11375	10447	11410	11774	13584
4	13592	11161	10356	11206	11474	13642
1977 1	13419	11388	9922	10952	11220	13189
2	13937	12064	10504	11593	11523	13943
3	14401	12317	10749	12105	11869	14223
4	14794	12844	11069	12529	12147	14824
1978 1	15264	13347	11549	12741	12402	14539
2	16100	13739	11999	13573	12952	15671
3	17571	14585	12731	14725	14080	16682
4	17993	15152	13040	15209	14648	17071
1979 1	18815	15312	13553	15930	14796	17740
2	20495	16483	14250	17298	16177	19266
3	21938	17495	15340	18380	17751	19777
4	22598	17568	16312	19103	18067	20561
1980 1	23164	18015	16974	19200	18769	21497
2	24560	18706	18106	20371	19463	22591
3	25083	19415	18059	21044	20207	23719
4	24955	19321	18631	20801	20407	23096
1981 1	25253	19752	18603	21264	20824	23518
2	25846	19764	19499	22013	21685	24028
3	25181	19471	19449	21781	21092	23543
4	24259	18743	18175	20843	21021	22648
1982 1	24258	18108	17461	20873	20197	22804
2	25939	19969	19376	21609	21665	23423
3	27439	21410	20520	22795	22667	24989
4	27709	21686	19998	22270	23058	25666

lia	South East	Greater London	South West	Wales	Scotland	Northern Ireland
42	16756	16243	13553	10861	12888	10701
56	17564	16688	14180	10974	13805	12661
13	17497	16704	14029	11741	14257	13747
21	17129	17073	14067	11396	13621	14296
42	17143	17037	13843	11349	13513	14230
05	17550	17141	14220	12047	14455	15101
37	18339	17432	14811	12564	14818	15679
25	18798	18258	15294	12761	14996	15576
15	19484	19376	15694	12927	15436	15420
42	20672	20237	16319	13976	16680	17212
13	22785	22433	17897	14730	17168	19470
76	23182	23071	18573	15165	17439	19749
34	24396	24422	19660	16046	17651	19575
52	26851	27294	21534	17345	19263	21775
41	29093	29483	23030	17879	20499	23110
25	30115	30697	24181	18504	20753	22260
20	30995	31512	24781	19713	20386	22350
40	32683	33155	26522	19857	22336	23499
51	33200	33345	26910	20435	23160	21893
13	32980	32952	26691	21283	22502	20054
09	33272	33582	26550	19804	22264	20706
14	34091	34021	27656	20853	23538	22342
15	33375	33161	27663	20250	24137	21271
21	32798	32707	26990	19510	23478	21129
29	33133	34511	26345	19366	23269	21151
15	35750	34978	27990	21214	24048	22319
12	37113	36650	29649	21923	26074	22004
12	37627	37384	30193	22704	25615	22429

HALIFAX BUILDING SOCIETY

TIMES/HALIFAX SERIES OF AVERAGE PRICES (at approval stage) 1976-1982

11.10 UNITED KINGDOM AND REGIONS: NEW DWELLINGS - QUARTERLY

Year	United Kingdom	North	Yorks & Humberside	North West	East Midlands	West Midlands
1976 1	13709	11836	10862	12245	11541	13647
2	14215	12294	11363	12420	11878	14624
3	14517	12673	11771	13004	12633	14776
4	14467	13213	11973	12821	12559	13884
1977 1	14719	13141	12000	12738	12357	14469
2	15137	14349	12718	13940	12722	15024
3	15787	14461	13431	14003	13269	16468
4	16451	15120	13718	14918	13741	16299
1978 1	17515	16192	14250	16341	14702	17927
2	18298	16376	15366	17773	15283	18693
3	19485	17135	15726	18603	16506	19175
4	20713	18479	16839	19040	17456	21183
1979 1	21761	18750	17854	20131	17718	22286
2	23100	19600	17954	21713	19124	23612
3	24329	20805	19229	23164	20455	25127
4	25509	21025	21286	23907	21314	25963
1980 1	27393	23239	21560	25170	24133	28314
2	28917	23529	24057	26548	24209	30118
3	29800	24585	24018	27736	25642	29287
4	29940	25739	26295	28309	26169	28787
1981 1	30398	27076	25709	29520	27577	28893
2	31026	27503	26487	30040	27336	30190
3	29777	28527	25696	28300	25965	29927
4	29421	27121	26014	27004	26133	28754
1982 1	30363	27433	25662	29578	25744	29024
2	31201	29126	27396	29849	27541	29346
3	31749	30422	26498	29724	27396	30936
4	32508	28629	26417	30034	27232	31164

ia	South East	Greater London	South West	Wales	Scotland	Northern Ireland
57	17865	21438	13756	12102	13778	13458
57	18731	21010	14415	11610	14836	15089
56	18494	19600	14076	12807	14984	16089
58	18028	20401	13710	12318	15694	17287
53	19022	21533	14122	12376	15500	17006
50	18798	20680	14327	12952	15988	18840
53	19685	22120	15151	13633	16812	18758
51	20559	22865	15694	13431	17002	19458
55	21597	23389	16492	14907	17427	19912
59	22773	25699	16992	15531	18336	20823
58	24785	29907	18435	15719	18811	21704
78	26350	27575	20534	17148	20303	21616
30	27523	30414	21431	18666	19911	23994
50	30104	32838	22523	19955	20675	27351
76	31644	32242	24263	20071	21891	27270
56	33565	37503	25192	22613	22822	26711
37	34202	39356	27861	23832	23826	30249
55	36151	36710	28851	25448	25120	30041
77	37760	40121	28903	26084	27468	27291
52	36408	46343	29641	27458	26436	26120
52	36670	37613	29486	25608	28179	26472
57	38608	42110	29267	27823	29398	27606
56	36166	35612	30309	26242	28817	24671
70	35612	35658	29282	24804	28841	24607
76	36882	38055	28759	27200	28875	25375
22	37760	36275	31294	28528	29481	24001
58	38945	37255	32126	27335	29597	25622
35	41326	37858	32244	26699	29710	26325

HALIFAX BUILDING SOCIETY

TIMES/HALIFAX SERIES OF AVERAGE PRICES (approval stage) 1976-1982

11.11 UNITED KINGDOM AND REGIONS: EXISTING DWELLINGS - QUARTERLY

Year	United Kingdom	North	Yorks & Humberside	North West	East Midlands	West Midlands
1976 1	12745	9956	9287	10190	10341	12614
2	13407	10499	9995	10911	11023	13171
3	13656	11150	10171	11151	11600	13407
4	13450	10802	10060	10971	11275	13603
1977 1	13212	11069	9550	10694	11008	12985
2	13759	11688	10134	11248	11318	13778
3	14215	11946	10361	11845	11678	13929
4	14559	12515	10667	12201	11915	14637
1978 1	14891	12848	11069	12238	12017	13976
2	15750	13304	11389	12977	12578	15235
3	17300	14173	12272	14213	13681	16369
4	17622	14678	12526	14747	14174	16539
1979 1	18363	14777	12921	15365	14259	17097
2	20136	16041	13717	16711	15710	18692
3	21625	17003	14819	17818	17329	19123
4	22209	17040	15619	18506	17542	19889
1980 1	22557	17189	16375	18408	17944	20540
2	23997	18094	17405	19677	18781	21564
3	24568	18903	17497	20394	19545	22919
4	24422	18763	17996	20026	19685	22385
1981 1	24660	19084	17893	20422	19834	22750
2	25283	19080	18823	21234	20932	23228
3	24701	18761	18873	21213	20500	22728
4	23673	18130	17494	20229	20360	21829
1982 1	23602	17458	16805	20049	19529	22040
2	25388	19231	18666	20963	20965	22749
3	26992	20634	19983	22297	22069	24314
4	27158	21016	19414	21571	22536	24955

ia	South East	Greater London	South West	Wales	Scotland	Northern Ireland
5	16575	16045	13510	10580	12654	10144
9	17370	16516	14127	10820	13532	12066
5	17340	16601	14020	11486	14080	13302
4	16981	16963	14136	11184	13190	13584
1	16835	16899	13794	11131	13122	13610
3	17377	17019	14203	11868	14138	14294
1	18160	17321	14760	12341	14483	15116
4	18531	18106	15228	12653	14575	14909
1	19121	19201	15521	12561	14885	14456
6	20321	20103	16187	13639	16319	16198
1	22467	22240	17802	14561	16817	19053
6	22732	22994	18220	14782	16878	19390
4	23907	24236	19324	15533	17052	18373
8	26398	27178	21380	16867	18941	20728
5	28770	29430	22828	17525	20205	22294
6	29690	30562	23999	17857	20306	21763
1	30483	31258	24251	19074	19687	20927
8	32180	33045	26149	19094	21831	22292
4	32658	33203	26651	19796	22541	20862
8	32592	32661	26246	20608	21907	19097
6	32839	33462	26120	19176	21425	19782
4	33583	33817	27420	20246	22665	21234
9	33061	33073	27317	19667	23432	20618
1	32425	32556	26696	18953	22584	20390
0	32654	34316	26000	18697	22366	20406
4	35499	34917	27534	20494	23276	21971
5	36885	36623	29343	21390	25525	21392
3	37138	37357	29856	22272	25010	21733

HALIFAX BUILDING SOCIETY

TIMES/HALIFAX SERIES (at approval stage) June 1975 - July 1983

11.12 GREAT BRITAIN: EXISTING DWELLINGS

Date	Index (Dec 1977 = 100)	Average Price (£)	Date	Index (Dec 1977 = 100)	Average Price (£)
Unadjusted			Seasonally adjusted		
1975 Jun	86.0	12646	1978 Mar	105.6	15579
Sep	85.4	12562	Jun	109.3	16133
Dec	85.3	12533	Sep	118.2	17450
1976 Mar	87.7	12896	Oct	117.4	17326
Jun	92.1	13544	Nov	119.9	17691
Sep	92.0	13531	Dec	121.1	17866
Dec	91.2	13413	1979 Jan	122.9	18132
1977 Jan	90.7	13340	Feb	127.8	18783
Feb	89.1	13105	Mar	130.5	19259
Mar	89.8	13197	Apr	131.7	19441
Apr	92.6	13617	May	136.2	20094
May	92.7	13630	Jun	138.4	20341
Jun	95.3	14011	Jul	142.6	21038
Jul	96.1	14122	Aug	145.2	21427
Aug	96.8	14234	Sep	145.5	21480
Sep	96.9	14249	Oct	149.5	22065
Oct	98.0	14402	Nov	151.4	22339
Nov	99.2	14580	Dec	151.0	22291
-Dec	100.0	14701	1980 Jan	154.2	22754
1978 Jan	100.8	14824	Feb	156.2	23052
Feb	99.4	14610	Mar	158.2	23352
Mar	103.7	15248	Apr	158.6	23406
Apr	104.3	15334	May	161.7	23866
May	105.2	15465	Jun	164.0	24205
Jun	111.4	16381	Jul	163.7	24165
Jul	116.2	17084	Aug	164.0	24204
Aug	117.2	17229	Sep	165.8	24473
Sep	119.2	17522	Oct	166.4	24556
Oct	117.5	17279	Nov	166.0	24499
			Dec	166.2	24523
			1981 Jan	167.7	24752
			Feb	172.6	25472
			Mar	172.9	25511
			Apr	170.5	25164
			May	171.5	25304
			Jun	169.5	25003
			Jul	167.9	24779
			Aug	165.5	24424
			Sep	163.1	24064
			Oct	159.7	23562
			Nov	159.0	23553
			Dec	164.1	24217
			1982 Jan	163.1	24072
			Feb	162.6	23999
			Mar	165.2	24382
			Apr	169.1	24949
			May	171.5	25309
			Jun	172.3	25429
			Jul	174.5	25745
			Aug	181.9	26849
			Sep	183.6	27101
			Oct	184.2	27178
			Nov	186.8	27560
			Dec	186.0	27451
			1983 Jan	182.0	26858
			Mar	185.0	27300
			Apr	188.4	27796
			May	190.5	28108
			Jun	193.3	28525
			Jul	196.6	29012

Incorporated Society of Valuers and Auctioneers

TECHNICAL DETAILS

(a) Source of data and timing

Valuations of *typical* properties made by members of the ISVA

(b) Types of data and periods covered

Average prices: April 1978 to date

Index: April 1978 to date

Available data

DATA BREAKDOWNS	DATA TYPES	
	AVERAGE PRICES	INDEX NUMBERS
HOUSE DATA		
All houses	*	*
New/Non-new		
Type	*	
Size		
Age		
LOCAL DATA		
Regions	*	
Sub-regions		
Towns		
BUYER DATA		
First-time buyer		
Former owner-occupier		

(c) Frequency

Quarterly

(d) Geographical coverage

England, subdivided into five regions - South East, West, Midlands, North West and North East

(e) Method of analysis

Both an index and an average price series are derived for England from valuations of *typical* houses by members of the ISVA (estate agents, valuers and surveyors).

12.2 LIST OF TABLES

Average prices

12.1 England: all dwellings and type of dwelling. 1978-

12.2 England - Regions: all dwellings. 1978-

Index

12.3 England: all dwellings. 1978-

12.3 CROSS-CLASSIFICATIONS OF DATA

None

12.4 PUBLICATIONS

(a) Data

The Valuer, Journal of the Incorporated Society of Valuers and Auctioneers. ISVA, London. Ten issues per year.

(b) Description of methodology

None

(c) Supplementary studies

None

CORPORATED SOCIETY OF VALUERS AND AUCTIONEERS

VERAGE PRICES (valuations of typical properties) 1978 -

1 ENGLAND: ALL DWELLINGS AND TYPE OF DWELLING

£

r	TYPE OF DWELLING (see key below)						
	All	A	B	C	D	E	F
8 Apr	17667	9855	12971	12520	15933	20778	22762
Jul	18680						
Oct	19555						
9 Jan	20897						
Apr	22534	12494	16679	15947	20423	27277	42556
Jul	24452	13652	18003	17206	22477	29777	46122
Oct	25934	14591	19072	18183	23441	31587	28881
0 Jan	26650	15224	19536	18611	24103	32291	50045
Apr	27216	15652	19918	18976	24378	32351	50885
Jul	27466	15860	19941	19105	24615	32292	51255
Oct	27631	16404	20147	19319	24644	32230	51306
1 Jan	28058	16784	20823	19798	25484	32877	52351
Jun	29578	17417	21449	21464	27420	35246	54400
Oct	29040	17560	21760	20437	26363	34000	53377
2 Jan	29376	17628	21452	19822	27063	32950	53110
Jun	30430	18728	22064	21619	27800	35839	55973
Sep	30834	19323	22607	21380	28185	35482	56305
Dec	30988	19728	22607	21598	28255	35163	56474
3 Mar	31529	20088	23686	23379	28639	36108	56475
Jun	32608	20285	23548	23401	28926	37485	60775
Oct	33740	21197	24417	23420	31066	38931	62659
Dec	34148	21740	25092	23655	32232	39734	64092
4 Mar	35014	22185	25717	24128	32554	41872	64803
Jun	36348	23210	27020	24516	33188	43172	66877
Oct	36937	24057	27476	25156	33487	43850	67255
Dec	37331	24423	27613	25361	33862	44431	67754
5 Mar	38157	25141	28398	25846	34585	45243	69004
Jun	38968	25676	28849	26234	35250	46301	70550
Oct	40159						
Dec	41013						
6 Mar	42084						
Jun	43309						

7 to dwelling types:

Pre-1914 mid-terrace house, modernised with bathroom and inside lavatory. Three bedrooms. A total of 800 sq ft of living space.

Modern mid-terrace house with garage or parking space. Three bedrooms, two reception rooms or through living room and totalling around 850 sq ft.

Post-war two-bedroom flat with garage in purpose-built block with 650 sq ft of living space.

Mid-1930s semi-detached house with three bedrooms, a garage and central heating. Around 900 sq ft in all.

Modern detached three-bedroom house with garage, cloakroom, central heating and typical sized garden for the area. Living area of 1,100 sq ft.

Modern detached four-bedroom house with two bathrooms, two garages, cloakroom, two reception rooms, central heating and typical garden for its size in the area. A total of 1,500 sq ft of living space.

INCORPORATED SOCIETY OF VALUERS AND AUCTIONEERS

AVERAGE PRICES (valuations of typical properties) 1978 -

12.2 ENGLAND - REGIONS: ALL DWELLINGS

£

Year	South East	West	Midlands	North West	North East
1978 Apr	21346	16993	15149	16501	16013
1979 Apr	27847	21358	18919	21453	19060
Jul	29911	23589	20684	23114	20718
Oct	31465	25560	21895	24244	22079
1980 Jan	31898	26499	22790	25233	22711
Apr	32666	27047	23597	25755	23356
Jul	32649	27272	23744	25875	23584
Oct	32882	27425	23793	25850	23681
1981 Jan	33680	27517	24181	26078	23802
Jun	37634	29407	24095	25490	25183
Oct	35569	29241	23764	25245	24769
1982 Jan	36645	29235	23835	25288	24975
Jun	38557	28739	23803	25853	25628
Sep	38685	30087	24654	26472	25610
Dec	39072	31136	24656	26737	25482
1983 Mar	40138	32276	26734	27380	25600
Jun	39672	32569	26649	31535	28555
Oct	41792	33217	26361	30100	26533
Dec	45160	33729	25911	29394	27306
1984 Mar	46740	34235	26108	29688	28618
Jun	48656	35248	27110	30709	29628
Oct	49852	36044	27715	30850	29683
Dec	50455	36068	27965	31404	29819
1985 Mar	51728	36946	28501	31945	30274
Jun	52924	37721	29021	32432	30697
Oct	54823	39051	29949	32997	31584
Dec	56254	39636	30614	33563	32161
1986 Mar	57821	40622	31324	34364	32765
Jun	59726	41678	32114	35233	33381

CORPORATED SOCIETY OF VALUERS AND AUCTIONEERS

INDEX (valuations of typical properties) 1978 -

ENGLAND: ALL DWELLINGS

	Index (April 1978 = 100)
Apr	100.0
Jul	105.7
Oct	110.7
Jan	118.3
Apr	127.5
Jul	138.4
Oct	146.8
Jan	150.8
Apr	154.0
Jul	155.4
Oct	156.4
Jan	158.8
Jun	167.4
Oct	164.4
Jan	166.3
Jun	172.2
Sep	174.5
Dec	175.4
Mar	178.5
Jun	184.6
Oct	191.0
Dec	193.3
Mar	198.2
Jun	205.7
Oct	209.0
Dec	211.2
Mar	215.9
Jun	220.5
Oct	227.3
Dec	232.1
Mar	238.2
Jun	245.1

13. Leeds Permanent Building Society

13.1 TECHNICAL DETAILS

(a) **Source of data and timing**

Society's own lending records at the mortgage approval stage

(b) **Types of data and periods covered**

Simple average prices: 1978 Q2 - 1983 Q3

Weighted average prices: 1983 Q4 to date

Available data

DATA BREAKDOWNS	DATA TYPES	
	SIMPLE AVERAGE	WEIGHTED AVERAGE
HOUSE DATA		
All houses	(*)	*
New/Non-new	(*)	
Type	*	
Size		
Age	(*)	
LOCAL DATA		
Regions	*	*
Sub-regions		
Towns		
BUYER DATA		
First-time buyer		
Former owner-occupier		

(*) These data no longer published

(c) **Frequency**

Quarterly

(d) **Geographical coverage**

United Kingdom and official standard regions (defined in Appendix B)

(e) **Method of analysis**

Simple average prices: simple averages produced from 1978 to 1983 Q3, and continued thereafter only for house types by region.

Weighted average prices: from 1983 Q4 the prices for all houses at both national and regional levels have been derived as a weighted average. Fixed weights are used which relate to the distribution of mortgages by region and type of dwelling obtained by the Department of the Environment in their Five Per Cent Sample Survey in 1980 (see Chapter 3). Both series of house prices exclude sales at non-market prices.

LIST OF TABLES

Simple average and weighted average prices

- 13.1 United Kingdom: all, age and type of dwelling. 1978-
- 13.2 Regions: all dwellings. 1980-

Weighted average prices

- 13.3 Regions: type of dwelling. 1983-

CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Numbers in the grid below refer to the corresponding tables compiled for this data source.

ALL									
HOUSES	NEW	NON-NEW							
			AGE						
				TYPE					
					SIZE				
13.2				13.3		REGIONS			
							SUB-REGIONS		
								TOWNS	
									FTB/FOO
HOUSE DATA						LOCAL DATA			BUYER TYPE

(b) Three-way classifications

None

PUBLICATIONS

(a) Data

Housing Finance (formerly *House Prices*). Quarterly from 1980 Q1 to date. Leeds Permanent Building Society, Leeds

(b) Description of methodology

None

(c) Supplementary studies

A regular commentary on aspects of the housing market is published in *Housing Finance*, including occasional reference to weighted average house prices in connection with first-time buyers and former owner-occupiers.

LEEDS PERMANENT BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1978 -

13.1 UNITED KINGDOM: ALL, AGE AND TYPE OF DWELLING

Year	ALL	AGE OF DWELLING				All non-new	
		New	Pre-1919	1919-1945	Post-1945		
1978	2	16459	17709	14239	16955	16770	16096
	3	16964	17517	14618	17632	17602	16795
	4	17946	18526	15382	18884	18506	17768
1979	1	18864	19925	15934	19782	19295	18557
	2	20472	21515	16734	21608	21196	20177
	3	21944	22709	19002	23292	22585	21746
	4	22943	23968	19862	24205	23609	22671
1980	1	23249	25275	19415	24183	24315	22715
	2	23974	26170	19724	25478	25070	23409
	3	24032	27081	20080	25269	25008	23407
	4	24374	26472	20675	26199	25155	23867
1981	1	23764	26583	19700	24647	25269	23277
	2	24194	26563	20409	25286	25292	23756
	3	24262	26254	20413	25168	25625	23911
	4	22774	24784	18734	23870	24574	22376
1982	1	22735	24922	18546	23718	24156	22303
	2	24208	26085	20030	25215	25971	23926
	3	25319	27419	21146	26568	27188	25017
	4	25648	28700	21028	26806	27510	25029
1983	1	26320	29183	21612	28053	27985	25887
	2	27348	30397	22523	28696	29044	26897
	3	28592	31824	23772	30075	30140	28082
	4	29106					
1984	1	29331					
	2	30317					
	3	31347					
	4	31116					
1985	1	31489					
	2	32628					
	3	33692					
	4	34955					
1986	1	35603					
	2	36235					
	3	38586					
	4	40022					
1987	1	39946					

£

TYPE OF DWELLING

ached	Semi-detached	Terraced	Bungalow	Flat
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7	24805	19561	29563	21632
16	25603	20340	29885	22004
18	26176	21005	30779	22684
16	27129	21680	32442	23691
16	27071	21904	32641	23366
15	27682	22097	33485	23841
12	28460	23195	34236	24687
10	29184	23728	35537	25389
13	29004	23729	35039	25262
11	29538	23989	35246	25733
10	30449	24641	36963	26672
12	31310	25732	37466	27446
12	32320	26949	38499	29106
11	32547	27253	39059	30881
15	33541	27707	39077	31135
16	35653	29754	42584	32826
13	36626	31372	44110	35417
12	36698	31700	42835	35641

LEEDS PERMANENT BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1980 -

13.2 REGIONS: ALL DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1980 1	18151	18365	18727	18777	21247	24943
2	18586	19286	19429	19103	21998	23594
3	18830	19216	20040	19863	21896	23203
4	18197	19479	20022	19848	22376	23730
1981 1	17879	19962	19500	19787	21175	23113
2	20240	19507	19998	19524	22511	23606
3	19911	19482	19927	20677	22430	22892
4	18200	19470	19309	19782	20406	22451
1982 1	17870	19043	19595	18863	20212	22343
2	19072	19791	20944	20187	21224	23152
3	20038	20275	21972	21777	21718	23981
4	20846	20884	22187	21126	22132	25444
1983 1	21274	20745	22361	22363	23165	26419
2	21408	22034	23663	23857	24048	27846
3	22522	23699	23760	24669	24586	29640
4	22596	22917	23856	23653	25240	29302
1984 1	22280	23058	23852	24276	24971	29227
2	22604	24034	24523	24325	25409	30434
3	22983	24503	25301	24954	25822	31396
4	23347	23871	24874	24983	25763	29939
1985 1	23013	23813	26257	24282	25451	30617
2	23542	24392	25488	24924	26297	32012
3	24435	25008	26679	26365	27128	33939
4	25010	25718	27433	26942	27791	35173
1986 1	24733	26316	27185	27180	27888	35188
2	25079	26547	27776	28011	29048	36083
3	25709	28148	29282	29186	30910	38664
4	26472	27872	29066	30545	31404	41327
1987 1	26091	27794	28870	31012	31312	40432

th t	Greater London	South West	Wales	Scotland	Northern Ireland
22	31630	24359	19779	21356	22207
42	32287	25557	19813	21492	23329
29	32440	25498	18774	21596	23054
37	32157	25263	19914	21980	24100
37	30241	25262	19339	22496	21908
31	30925	26288	19234	22785	22378
15	31181	25960	20401	24337	23120
55	29293	25041	19166	23165	22494
25	29894	23536	19592	23380	21177
50	32041	25102	20790	23915	22389
05	33017	27103	20651	24677	24146
32	33545	27140	21026	24625	24011
27	34646	28099	21764	24900	24057
55	35699	28675	22664	25448	24340
20	37347	30245	23285	26791	25212
35	36793	30665	23976	28027	26522
74	37851	31866	25272	28238	27354
57	40395	32275	24719	29307	27747
55	41674	33384	26778	30115	27529
02	42299	33145	25345	30203	27378
20	43150	33745	25471	29371	27119
24	46025	35437	26635	30577	28220
09	48048	35470	25709	31057	28420
11	51191	36567	26885	31951	28459
55	54659	37335	27224	31867	29976
09	53923	38469	27556	31832	29302
16	59019	40832	28794	32452	29194
34	62269	42130	28745	34691	31307
59	64720	42149	29189	33570	30973

LEEDS PERMANENT BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1983 -

13.3 REGIONS: TYPE OF DWELLING

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
DETACHED HOUSES						
1983 4	39784	37572	40394	35865	37847	38779
1984 1	38698	36865	39157	36214	37095	39464
2	38254	38462	39658	35521	37961	41532
3	40081	39616	40994	36664	38270	41758
4	40343	38269	41928	36851	38490	41550
1985 1	37463	37724	44102	35351	36799	41818
2	40614	38797	41200	36086	38057	44547
3	40303	39003	43174	39289	40085	45110
4	42625	41217	45286	40345	41812	46758
1986 1	42809	41734	46312	41197	42107	46950
2	41590	41567	48257	41883	43856	48465
3	42810	45713	48871	43962	46691	52761
4	43402	44369	47003	44771	47702	55460
1987 1	44369	42910	47554	45985	47117	54722
SEMI-DETACHED HOUSES						
1983 4	24469	22290	23308	20885	22345	27152
1984 1	23878	22665	23383	21659	22226	26062
2	24129	23504	24395	21722	22617	26376
3	24474	23700	24843	22553	22918	27588
4	24906	23312	24221	22130	22572	26108
1985 1	24556	23717	25581	21641	23062	26854
2	25429	23894	25080	22655	23569	27806
3	25253	25076	26295	22653	24097	31300
4	25954	25358	26892	23875	24690	30787
1986 1	27066	25938	26176	23472	24928	31637
2	26998	25862	26363	24579	25650	33317
3	27313	27319	28582	25314	26966	34913
4	28263	27357	28319	26916	27264	37464
1987 1	27672	27323	28377	27307	27903	35883
TERRACED HOUSES						
1983 4	15708	15288	15375	14924	16236	20258
1984 1	15991	15517	15520	15238	15983	20428
2	16000	16663	16053	15860	16607	21994
3	16716	16930	16653	16208	16682	22560
4	17298	16421	16115	16258	17143	21200
1985 1	16976	16384	16630	16073	17119	21807
2	16813	16768	16893	16343	17694	22701
3	18451	17462	17512	17900	18065	23618
4	18745	18086	17551	17301	17697	25642
1986 1	17451	18314	17694	17752	18162	25044
2	18553	18640	17939	18225	18991	26236
3	18963	19358	18865	18997	19540	27545
4	19760	19379	19496	20175	19339	29723
1987 1	19347	19144	19079	20568	20078	30206

th	Greater London	South West	Wales	Scotland	Northern Ireland
34	66486	43845	36215	40378	38900
38	67359	45597	38867	40665	39556
41	77149	44906	36627	42270	39077
32	80081	48417	42191	42189	36779
38	81786	47205	36825	43664	37876
39	81691	48116	38201	40494	37306
35	87350	51724	42596	43971	40329
33	93634	50905	41412	44787	38244
27	92936	52299	38804	46639	39602
39	109731	54269	43742	46923	41263
25	98822	56129	43718	45283	40739
25	109535	59497	43094	44540	38915
42	105423	57338	43485	50681	46253
38	108469	58290	45505	47533	44579
53	44014	28301	22612	28253	22601
39	46545	29609	23917	29370	22439
36	48371	30932	23813	29273	23859
35	51309	30348	25123	31083	23418
17	51841	30287	23571	31546	24170
75	52812	31792	22833	30309	24545
76	57492	32383	23351	31770	24523
37	57734	33759	22890	32020	24871
57	61646	34257	25812	32970	24428
13	63898	33577	24821	32693	25683
37	65718	34745	25602	32845	26058
15	71190	37109	27297	34025	26114
32	75733	39178	26583	34277	26298
36	75490	39547	25995	34343	26777
50	36045	23298	17373	25246	14340
15	36711	23432	17772	24040	16707
15	39597	24338	17496	25297	15840
38	40324	24855	18202	26789	16251
75	41391	24994	18076	26103	16414
35	42335	25162	18199	26735	17196
38	45010	25441	18247	26499	18030
32	46825	25919	18325	27212	17755
32	51117	26884	18959	27611	16232
38	52898	27649	19197	27149	16788
30	51748	28360	19571	27822	17226
34	57964	30459	20260	28159	17990
30	60796	32397	20996	30196	18692
38	65364	31959	21747	28983	18302

LEEDS PERMANENT BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1983 -

13.3 REGIONS: TYPE OF DWELLING (continued)

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
BUNGALOWS						
1983 4	29259	28373	28157	27110	31832	30702
1984 1	27967	28840	30078	28456	32765	30529
2	30938	28878	30275	28911	30727	30714
3	30025	30015	31975	28514	34825	33937
4	29318	29103	30275	29622	33366	29699
1985 1	31283	28374	34171	28601	31704	31309
2	30341	30101	31756	28856	34676	31776
3	34781	29269	34172	30491	34539	35617
4	33706	29503	34697	31213	35169	37490
1986 1	31768	31489	33447	31628	33283	36727
2	32225	33088	35369	32539	35310	34735
3	34733	34269	37161	34200	43313	38025
4	34626	33663	37134	36383	45870	41528
1987 1	32961	35928	34572	35572	40197	39179
FLATS						
1983 4	13806	18947	19366	14735	17388	22129
1984 1	14139	17524	19006	17194	16965	20299
2	14339	18895	18050	15372	17632	24303
3	13426	19743	20634	15306	16840	22076
4	13745	20370	18884	15205	16845	21991
1985 1	14641	17949	19589	16461	17541	21433
2	15057	19540	20175	15667	17714	21652
3	14347	19245	19359	19608	18058	22673
4	15263	19730	24427	15178	18558	26333
1986 1	15035	20229	19957	15430	17462	27109
2	15591	19618	18344	18750	19317	23643
3	15659	21612	21443	18692	19396	24569
4	16698	20174	21600	20883	19513	29674
1987 1	17200	20428	21731	21488	19226	26295

£

	Greater London	South West	Wales	Scotland	Northern Ireland
3	51227	35421	26120	33653	28303
)	55602	38305	27762	34120	29316
2	51654	38230	28071	37242	29918
i	58147	39774	29722	37030	31008
	52114	40084	31502	36044	28922
)	45436	39357	31835	35716	27713
)	51905	44199	32682	36624	28822
i	57659	41872	28730	38497	30630
)	60373	44562	32479	39356	31036
	54581	45607	29072	38454	33190
)	60454	46857	28675	37162	30786
)	68632	48873	33390	38976	31243
	73652	51423	32202	41985	32535
	75398	51265	31748	39916	32279
	29031	21547	19141	19276	14950
	29604	22965	19000	19174	28500
	31380	21125	17150	19806	23575
	32033	23506	24200	20430	22430
	32293	23045	19289	20292	18300
	33327	22921	19260	20237	23364
	34934	24354	18306	20717	19900
	37079	23050	12500	20400	21180
	39537	23492	19203	20934	17950
	43829	26247	21793	21378	30075
	43334	26403	22950	22423	25850
	46212	26660	20459	22868	23814
	50147	32523	20916	24262	26170
	51835	29706	23926	23810	25388

14. National House-Building Council

14.1 TECHNICAL DETAILS

(a) Source of data and timing

Actual sales prices: based on returns for new houses at the mortgage completion stage - for further details see (e) below

Estimated start prices: NHBC records of expected selling prices of new houses, assessed when building has just started.

(b) Types of data and periods covered

Average prices of new houses sold (actual): 1980 Q4 to date

Average prices of new houses started (estimates): 1980 Q1 to date

Available data

DATA BREAKDOWNS	DATA TYPES	
	ACTUAL PRICES	ESTIMATED PRICES
HOUSE DATA		
All houses		
New	*	*
Type		*
Size		
Age		
LOCAL DATA		
Regions	*	*
Sub-regions		
Towns		
BUYER DATA		
First-time buyer		
Former owner-occupier		

(c) Frequency

Quarterly

(d) Geographical coverage

Actual sales prices: official standard regions of England and Wales (defined in Appendix B).

Estimated selling prices of houses started: Great Britain subdivided into official standard regions - see Appendix B.

(e) Method of analysis

As stated above, two separate series are regularly published dealing with average prices of new houses:

- (i) simple average prices of new houses sold by housebuilders registered with the NHBC based on returns made by the solicitors acting for purchasers at the completion stage of the sale;
- (ii) simple averages of the *estimated* selling prices of new dwellings *started* by housebuilders registered with the NHBC. The estimates are made by builders when they apply to register a dwelling with the NHBC. The series represents, therefore, selling prices anticipated at the time of application (there are safeguards against underestimating price). Builders are requested to register dwellings at least twenty-one days before building starts; most applications are made slightly earlier. All published prices are rounded to the nearest £1000.

LIST OF TABLES**Average sales prices (actual)**

14.1 Regions: new dwellings. 1980-

Estimated start prices

14.2 Regions: new dwellings. 1980-

14.3 Great Britain, England, Wales, Scotland: new dwellings by house type. 1981-

CROSS-CLASSIFICATIONS OF DATA**(a) Two-way classifications**

Average sales prices (actual): New dwellings by region. Table 14.1

Estimated start prices: New dwellings by region. Table 14.2

(b) Three-way classifications

New dwellings by region by house type (estimated prices): Table 14.3

PUBLICATIONS**(a) Data**

Private House-Building Statistics. National House-Building Council, Amersham. Quarterly since 1981 Q4

(b) Description of methodology

None

(c) Supplementary studies

None

NATIONAL HOUSE-BUILDING COUNCIL

AVERAGE SALES PRICES (at completion stage) 1980 -

14.1 REGIONS: NEW DWELLINGS

Year	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1981	27000	25000	28000	26000	28000	27000
1982	26000	25000	27000	25000	27000	27000
1983	28000	27000	28000	27000	29000	29000
1984	30000	29000	29000	29000	31000	33000
1985	33000	32000	32000	33000	34000	38000
1986	36000	34000	37000	38000	39000	41000
1980 4	24000	24000	27000	24000	26000	27000
1981 1	25000	26000	28000	26000	27000	28000
2	27000	25000	27000	25000	27000	26000
3	27000	25000	28000	26000	28000	27000
4	27000	25000	27000	26000	28000	27000
1982 1	26000	24000	27000	25000	27000	26000
2	26000	25000	26000	25000	27000	27000
3	26000	25000	28000	26000	28000	27000
4	27000	25000	27000	26000	27000	28000
1983 1	28000	26000	27000	26000	28000	29000
2	28000	26000	28000	27000	28000	30000
3	29000	28000	29000	28000	30000	30000
4	28000	27000	29000	28000	30000	29000
1984 1	30000	28000	28000	28000	30000	31000
2	30000	28000	29000	29000	31000	32000
3	29000	29000	31000	29000	33000	34000
4	32000	29000	29000	30000	32000	34000
1985 1	33000	31000	30000	31000	32000	35000
2	30000	33000	30000	31000	33000	40000
3	33000	32000	32000	34000	35000	39000
4	35000	31000	32000	35000	35000	39000
1986 1	35000	32000	35000	35000	37000	40000
2	35000	33000	36000	37000	38000	40000
3	38000	35000	39000	39000	40000	42000
4	37000	35000	39000	38000	43000	45000
1987 1	41000	37000	39000	39000	42000	46000

£

h	Greater London	South West	England	Wales
0	41000	29000	30000	26000
0	39000	29000	30000	28000
0	42000	31000	33000	27000
0	47000	35000	36000	30000
0	54000	38000	40000	31000
0	61000	46000	48000	36000
0		28000	29000	25000
0	42000	29000	30000	26000
0	43000	29000	30000	26000
0	42000	30000	31000	26000
0	38000	29000	30000	26000
0	38000	28000	29000	27000
0	39000	29000	30000	27000
0	38000	30000	31000	29000
0	40000	30000	31000	28000
0	40000	30000	31000	26000
0	42000	32000	33000	28000
0	44000	33000	34000	29000
0	43000	32000	34000	28000
0	44000	32000	34000	28000
0	44000	34000	36000	29000
0	49000	36000	37000	31000
0	50000	37000	37000	31000
0	56000	36000	40000	31000
0	52000	39000	40000	29000
0	54000	40000	41000	32000
0	56000	40000	42000	32000
0	57000	41000	44000	33000
0	62000	44000	46000	35000
0	60000	47000	49000	38000
0	62000	47000	50000	35000
0	64000	51000	52000	38000

NATIONAL HOUSE-BUILDING COUNCIL

ESTIMATED PRICES AT BUILDING START STAGE 1980 -

14.2 REGIONS: NEW DWELLINGS

Year	Great Britain	North	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1980	29000	27000	24000	28000	25000	27000	26000
1981	30000	26000	25000	27000	26000	27000	27000
1982	30000	27000	25000	26000	26000	26000	27000
1983	33000	29000	28000	28000	28000	30000	30000
1984	37000	32000	31000	31000	32000	33000	35000
1985	42000	35000	33000	35000	36000	39000	40000
1986	50000	39000	36000	39000	40000	43000	45000
1980 1	28000	25000	23000	28000	24000	26000	25000
2	29000	28000	26000	29000	25000	27000	27000
3	29000	27000	24000	28000	25000	26000	26000
4	28000	27000	23000	26000	24000	27000	25000
1981 1	30000	27000	24000	26000	25000	27000	26000
2	30000	25000	25000	27000	26000	28000	28000
3	30000	28000	25000	28000	26000	26000	26000
4	29000	26000	24000	25000	25000	27000	26000
1982 1	29000	26000	23000	25000	25000	25000	26000
2	29000	26000	25000	27000	26000	27000	27000
3	30000	29000	25000	25000	26000	27000	27000
4	30000	26000	25000	26000	27000	27000	28000
1983 1	32000	27000	26000	27000	27000	28000	28000
2	33000	29000	27000	29000	28000	30000	31000
3	33000	29000	28000	28000	30000	30000	31000
4	34000	30000	29000	29000	30000	30000	30000
1984 1	36000	29000	30000	30000	31000	31000	34000
2	36000	30000	30000	31000	32000	33000	36000
3	38000	34000	32000	32000	34000	33000	33000
4	38000	32000	32000	33000	33000	35000	36000
1985 1	43000	34000	32000	33000	35000	39000	40000
2	41000	33000	33000	35000	34000	36000	38000
3	42000	36000	33000	36000	38000	39000	39000
4	44000	36000	34000	37000	37000	40000	41000
1986 1	46000	38000	36000	37000	37000	40000	43000
2	49000	38000	37000	39000	40000	42000	45000
3	51000	41000	36000	40000	40000	44000	46000
4	53000	40000	38000	42000	42000	48000	48000
1987 1	52000	40000	39000	42000	44000	47000	50000

th t	Greater London	South West	England	Wales
00		28000	29000	25000
00	39000	29000	30000	26000
00	36000	29000	30000	25000
00	44000	32000	33000	27000
00	45000	37000	38000	31000
00	56000	42000	44000	34000
00	73000	47000	51000	37000
00		28000	29000	25000
00		28000	30000	27000
00		28000	29000	26000
00		27000	27000	25000
00	49000	29000	30000	25000
00	38000	30000	30000	27000
00	35000	28000	30000	27000
00	36000	29000	29000	25000
00	40000	28000	29000	24000
00	35000	29000	30000	25000
00	33000	30000	30000	26000
00	37000	30000	31000	25000
00	44000	30000	32000	25000
00	43000	33000	34000	28000
00	40000	33000	34000	27000
00	48000	35000	35000	29000
00	43000	36000	37000	29000
00	44000	36000	37000	31000
00	49000	37000	38000	30000
00	47000	37000	39000	32000
00	67000	40000	44000	33000
00	52000	40000	42000	34000
00	50000	41000	43000	34000
00	56000	45000	45000	35000
00	62000	45000	48000	36000
00	76000	47000	50000	38000
00	76000	48000	52000	36000
00	74000	49000	55000	38000
00	77000	50000	55000	37000

NATIONAL HOUSE-BUILDING COUNCIL

ESTIMATED PRICES AT BUILDING START STAGE 1982 -

14.3 GREAT BRITAIN, ENGLAND, WALES, SCOTLAND:
NEW DWELLINGS BY HOUSE TYPE

£

Year	Detached Houses	Detached Bungalows	Semi-det Houses	Terraced Houses	Attached Bungalows	Flats & Maisonettes
GREAT BRITAIN						
1982	42000	35000	24000	24000	22000	24000
1983	47000	38000	26000	27000	25000	27000
1984	51000	41000	28000	30000	27000	30000
1985	57000	45000	31000	35000	31000	37000
1986	65000	49000	34000	42000	33000	45000
1981 4	41000	33000	24000	23000	22000	24000
1982 1	42000	34000	23000	24000	21000	23000
2	41000	34000	24000	24000	22000	24000
3	43000	35000	24000	24000	22000	23000
4	43000	36000	24000	25000	23000	25000
1983 1	45000	36000	25000	26000	24000	26000
2	47000	38000	26000	26000	24000	28000
3	47000	39000	26000	27000	25000	26000
4	49000	40000	27000	27000	26000	28000
1984 1	50000	41000	27000	30000	26000	28000
2	50000	40000	27000	30000	27000	29000
3	52000	41000	28000	30000	27000	31000
4	53000	42000	28000	31000	28000	31000
1985 1	57000	44000	30000	34000	30000	38000
2	55000	44000	30000	34000	30000	36000
3	57000	45000	31000	36000	30000	35000
4	58000	46000	34000	36000	33000	37000
1986 1	62000	47000	33000	38000	33000	41000
2	63000	48000	34000	40000	33000	46000
3	65000	49000	35000	45000	32000	48000
4	71000	51000	35000	45000	35000	44000
1987 1	71000	52000	36000	46000	36000	49000

r	Detached Houses	Detached Bungalows	Semi-det Houses	Terraced Houses	Attached Bungalows	Flats & Maisonettes
LAND						
2	43000	35000	24000	24000	22000	24000
3	47000	39000	26000	27000	25000	27000
4	52000	42000	28000	30000	27000	30000
5	58000	46000	31000	35000	31000	37000
6	65000	50000	35000	43000	33000	46000
1 4	41000	34000	23000	23000	21000	24000
2 1	43000	34000	23000	24000	21000	23000
2	42000	35000	23000	24000	21000	23000
3	43000	35000	24000	25000	22000	23000
4	43000	37000	24000	25000	23000	25000
3 1	45000	37000	25000	26000	24000	27000
2	47000	38000	25000	27000	24000	28000
3	48000	40000	26000	27000	25000	26000
4	49000	40000	27000	28000	25000	29000
4 1	50000	42000	27000	30000	25000	29000
2	51000	41000	27000	30000	26000	30000
3	53000	42000	28000	30000	27000	32000
4	53000	43000	28000	31000	28000	31000
5 1	58000	45000	30000	34000	30000	39000
2	56000	45000	30000	34000	30000	36000
3	58000	46000	31000	36000	29000	36000
4	59000	47000	34000	37000	33000	37000
5 1	63000	47000	33000	39000	33000	42000
2	64000	49000	35000	41000	33000	48000
3	66000	51000	35000	47000	33000	50000
4	72000	52000	36000	47000	35000	46000
7 1	72000	54000	37000	48000	37000	50000

NATIONAL HOUSE-BUILDING COUNCIL

ESTIMATED PRICES AT BUILDING START STAGE 1982 -

14.3 GREAT BRITAIN, ENGLAND, WALES, SCOTLAND:
NEW DWELLINGS BY HOUSE TYPE (continued)

£

Year	Detached Houses	Detached Bungalows	Semi-det Houses	Terraced Houses	Attached Bungalows	Flats & Maisonettes
WALES						
1982	37000	27000	22000	19000	20000	19000
1983	40000	30000	23000	20000	22000	22000
1984	43000	33000	26000	23000	25000	26000
1985	47000	36000	28000	26000	27000	30000
1986	50000	40000	26000	27000	29000	33000
1981 4	33000	28000	22000	19000	19000	21000
1982 1	37000	27000	22000	19000	20000	19000
2	36000	27000	22000	20000	19000	21000
3	39000	28000	21000	20000	22000	19000
4	37000	27000	22000	19000	20000	19000
1983 1	39000	28000	22000	19000	22000	22000
2	40000	30000	23000	21000	22000	23000
3	41000	29000	23000	20000	23000	21000
4	41000	32000	23000	22000	23000	22000
1984 1	40000	32000	26000	24000	25000	25000
2	43000	34000	24000	22000	24000	24000
3	44000	31000	25000	23000	24000	27000
4	45000	33000	27000	25000	27000	29000
1985 1	47000	36000	27000	23000	26000	30000
2	46000	36000	28000	27000	27000	27000
3	47000	36000	28000	26000	24000	32000
4	46000	37000	28000	26000	29000	29000
1986 1	49000	40000	26000	28000	27000	32000
2	50000	39000	28000	27000	27000	38000
3	50000	40000	27000	27000	29000	31000
4	53000	42000	23000	27000	33000	42000
1987 1	53000	42000	26000	27000	28000	32000

	Detached Houses	Detached Bungalows	Semi-det Houses	Terraced Houses	Attached Bungalows	Flats & Maisonettes
LAND						
	40000	37000	28000	25000	24000	25000
	44000	37000	29000	27000	27000	25000
	47000	42000	31000	30000	30000	28000
	51000	43000	33000	32000	32000	34000
	52000	44000	35000	34000	33000	34000
4	38000	36000	27000	26000	23000	25000
1	38000	36000	27000	25000	24000	23000
2	37000	35000	27000	24000	25000	27000
3	46000	39000	31000	26000	24000	24000
4	42000	37000	27000	27000	25000	24000
1	40000	36000	28000	27000	25000	25000
2	46000	36000	29000	28000	27000	26000
3	46000	38000	31000	27000	27000	25000
4	41000	40000	30000	27000	28000	26000
1	47000	42000	29000	29000	28000	26000
2	50000	42000	31000	31000	30000	28000
3	45000	41000	32000	29000	31000	29000
4	47000	44000	31000	30000	30000	29000
1	56000	44000	33000	31000	31000	33000
2	46000	43000	32000	30000	30000	33000
3	49000	43000	33000	33000	34000	34000
4	53000	43000	33000	32000	33000	36000
1	48000	45000	34000	32000	35000	33000
2	53000	44000	34000	35000	32000	35000
3	56000	43000	37000	34000	31000	35000
4	54000	47000	35000	34000	35000	33000
1	57000	47000	36000	33000	34000	35000

15. Nationwide Building Society

15.1 TECHNICAL DETAILS

(a) Source of data and timing

Society's own lending records at the mortgage approval stage

(b) Types of data and periods covered

Average prices: 1952 to date

Index of average prices: 1946 to date.

An index of price ranges was published up to 1968 Q4 and an index of average prices by class of house, based on building standards and age, was published up to 1962 Q4. These have not been reproduced here.

Some of the figures for periods before 1977 Q4 are revised figures, previously unpublished by the Society and they therefore differ from figures published in the bulletins at this time. In addition, an Appendix Table at the end of this chapter gives long-run quarterly series of average prices for all, new, modern and older dwellings (from 1952 Q4 to date) and corresponding index numbers (from 1946 to date). These data represent "final" figures as opposed to those regularly published in the Society's bulletins which are compiled and reported before the final figures become available. The Table also provides information for a longer time period than is available from the published bulletins.

Available data

DATA BREAKDOWNS	DATA TYPES	
	AVERAGE PRICES	INDEX NUMBERS
HOUSE DATA		
All houses	*	*
New/Non-new	*	*
Type	*	
Size		
Age	*	*
LOCAL DATA		
Regions	*	
Sub-regions		
Towns		
BUYER DATA		
First-time buyer	*	
Former owner-occupier	*	

(c) Frequency

Average prices: annual 1952-1959, quarterly 1960 Q1 to date previously unpublished (quarterly average prices, back to 1952, are included in an Appendix Table to this chapter). The Society published average prices six-monthly from 1959 Q4 to 1973 Q4

and quarterly thereafter. Unpublished data provided by the Society are reproduced in Tables 15.14 and 15.15 giving annual figures prior to 1960 and quarterly thereafter.

Index of average prices: annually from 1952-1976 (Q4 only for each year) and then quarterly, but previously unpublished quarterly figures from 1952 are included in the Appendix Table referred to above (see pages 301-303).

(d) **Geographical coverage**

United Kingdom subdivided into regions. The regional breakdown is currently by official standard regions (defined in Appendix B). Prior to 1977 Q4, Nationwide regions differed from these regions in that they were based on branch office territories (these were subject to occasional changes). The regional figures back to 1976 Q1 shown in this volume have been reworked according to official standard regions. In 1971 Q4 Wales was defined as a separate entity whereas before it had been subdivided between the regions defined as South West, Midlands and North West (the present counties of Gwent, Glamorgan and Dyfed were part of South West; Powys part of Midlands; Gwynedd and Clwyd part of North West).

(e) **Method of analysis**

Average prices and index of average prices: based on the Society's mortgage lending records for the purchase of dwellings for owner-occupation but excluding the following categories:

exceptionally large dwellings (those with a floor space over 2,200 sq ft, or 6 or more bedrooms);

dwellings at the extreme ends of the price range (measured both in terms of actual price and price per sq ft);

sales to sitting tenants and other sales below market price;

dwellings built before 1800.

Except for the figures analysed by buyer type (first-time buyer and former owner-occupier) the figures do *not* represent simple average prices. They represent *weighted* averages (calculated as an average price per square foot x average size) weighted by region and property type. The weights for house size and type are based on the properties on which the Nationwide has approved loans over the previous eight years within each region. The regional weights employed for deriving UK figures are based on official (DOE) estimates of the stock of owner-occupied dwellings in each region. This is done to eliminate any unrepresentativeness in the regional pattern of Nationwide lending.

The present method of calculation was introduced in 1977 Q4 and carried back to 1973 Q4. Previously no weighting pattern was employed, except that the influence of house size was allowed for by analysing average prices per square foot. The latter was introduced from 1959 Q4. Indices for the period 1946-1952 are based on surveyors' estimates.

All figures have been rounded to the nearest £10.

LIST OF TABLES

Average prices (current series; see also Appendix Table)

- 15.1 United Kingdom: all, age of dwelling, type of buyer, type of house. 1968-
- 15.2 Regions: all dwellings. 1976-
- 15.3 Regions: new dwellings. 1976-
- 15.4 Regions: modern dwellings. 1976-
- 15.5 Regions: older dwellings. 1976-
- 15.6 Regions: detached houses. 1976-
- 15.7 Regions: semi-detached houses. 1976-
- 15.8 Regions: terraced houses. 1976-
- 15.9 Regions: bungalows, flats and maisonettes. 1976-

NATIONWIDE BUILDING SOCIETY

- 15.10 United Kingdom and regions by age of house: detached houses. 1976-
- 15.11 United Kingdom and regions by age of house: semi-detached houses. 1976-
- 15.12 United Kingdom and regions by age of house: terraced houses. 1976-
- 15.13 United Kingdom and regions by age of house: bungalows, flats and maisonettes. 1976-

Average prices (historical series; see also Appendix Table)

- 15.14 Regions: new dwellings. 1954-1975
- 15.15 Regions: existing dwellings. 1952-1975
- 15.16 Regions: type of buyer. 1977-1981

Index of average prices (see also Appendix Table)

- 15.17 United Kingdom: all, new, modern and older. 1946-

15.3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

Numbers in the grid below refer to the corresponding tables compiled for this data source

ALL HOUSES	NEW	NON-NEW	AGE		TYPE		SIZE		REGIONS		SUB-REGIONS		TOWNS		FTB/FOO	
	15.10-15.13		15.10-15.13													
15.2	15.3, 15.14	15.15	15.4-15.5		15.6-15.9											
HOUSE DATA										LOCAL DATA				BUYER TYPE		

(b) Three-way classifications

House type by region by age of house: Tables 15.10 - 15.13

15.4 PUBLICATIONS

(a) Data

The following are published by the Nationwide Building Society (formerly the Co-operative Permanent Building Society), London:

Occasional Bulletin. Quarterly from Jan 1952-Oct 1977

Housing Trends. Quarterly from Jan 1978-Jan 1981

House Prices. Quarterly from April 1981 to date

(b) Description of methodology

None

(c) Supplementary studies

The Nationwide Building Society has published a large number of supplementary studies. The following is a list of titles published to date:

Who Buys Houses. Bulletin Nos: 38, 59, (supplement to 59), 87, 111, and 124 (Jul 1960 to Dec 1974)

- at Houses are People Buying. Bulletin Nos: 51, 75, 97 (Oct 1962 to Oct 1970)
- wly Built Houses. An Analysis of 2,802 New Houses and the People Who Bought em. Bulletin No: 72 (April 1966)
- Regional Comparison of Average House Prices and Incomes. Bulletin Nos: 76, 100, 101 (Dec 1966 to Oct 1972)
- Central Heating. Bulletin No: 98 (Nov 1970)
- Why do People Move? Bulletin No: 99 (Nov 1970)
- Is the House Buyer's Choice. Bulletin No: 113 (Dec 1972)
- House Prices Over the Past Thirty Years. June 1976, April 1985
- First-time Home Buyers. 1979
- Home Owners on the Move. 1979
- First-time Home Buyers in 1980
- Home First-time Buyers. 1981
- Home Buyers Moving. Sep 1982
- Home Buying in London. Press Release 1983
- Home Lending to Council House Tenants. Press Briefing 1983
- Home Lending to Women. September 1984 and February 1986
- Home Lending in the Major Conurbations. November 1984
- Home Lending to Older Borrowers (compared with all borrowers). December 1985
- Home Buying as an Investment. April 1986
- Are First-time Buyers being Prevented from Entering the Owner-occupied Housing Market?. July 1986
- House Prices in Europe. Jan 1987
- Local Area Housing Statistics. 1985:

South West England	Northern England
The Solent Area of Hampshire	London Boroughs
London and the Home Counties	Buckinghamshire
Scotland	West Midlands County
Wales	North West England
Yorkshire and Humberside	Berkshire
East Midlands	
- Local Area Housing Statistics. 1986:

South West England	South Coast Counties
Surrey	Merseyside
Greater Manchester	Kent
East Anglia	South Yorkshire
Hertfordshire	Wales
West Midlands Region	Northern Ireland
Greater Glasgow	London Boroughs
Essex	
- Local Area Housing Statistics. 1987:

Wiltshire	
Avon	
Lancashire	
Bedfordshire	
Nottinghamshire	

PENDIX TABLE

NATIONWIDE BUILDING SOCIETY

VERAGE PRICES AND INDEX NUMBERS (at approval stage) 1946-

UNITED KINGDOM: ALL, NEW, MODERN, OLDER

Year	AVERAGE PRICES				INDEX (1973 q4 = 100)			
	All	New	Modern	Older	All	New	Modern	Older
5 Q4						15	16	14
7 Q4							20	16
8 Q4							19	16
9 Q4							21	18
10 Q4							21	18
1 Q4							23	20
2 Q4	2030	2090	2260	1700	21	21	22	19
3 1	2030	2090	2240	1720	21	21	21	20
2	2030	2090	2240	1720	21	21	21	20
3	2020	2100	2240	1700	21	21	21	19
4	2010	2100	2210	1720	21	21	21	20
4 1	2000	2100	2190	1700	20	21	21	19
2	2010	2100	2220	1690	21	21	21	19
3	2000	2110	2180	1700	20	21	21	19
4	1990	2110	2170	1690	20	21	21	19
5 1	2040	2150	2220	1750	21	21	21	20
2	2080	2200	2280	1760	21	22	22	20
3	2080	2200	2280	1770	21	22	22	20
4	2080	2200	2270	1770	21	22	22	20
6 1	2120	2260	2330	1780	22	22	22	20
2	2150	2300	2360	1820	22	23	23	21
3	2150	2300	2360	1820	22	23	23	21
4	2150	2310	2350	1820	22	23	23	21
7 1	2170	2330	2360	1850	22	23	23	21
2	2170	2350	2350	1860	22	23	23	21
3	2180	2360	2360	1860	22	23	23	21
4	2180	2380	2360	1860	22	24	23	21
8 1	2200	2390	2370	1880	23	24	23	21
2	2200	2390	2360	1890	23	24	23	22
3	2210	2400	2390	1890	23	24	23	22
4	2220	2410	2400	1900	23	24	23	22
9 1	2230	2420	2400	1920	23	24	23	22
2	2260	2440	2430	1950	23	24	23	22
3	2280	2470	2450	1960	23	25	23	22
4	2330	2540	2510	1990	24	25	24	23
10 1	2350	2580	2530	2020	24	26	24	23
2	2400	2640	2570	2070	25	26	25	24
3	2470	2700	2670	2110	25	27	26	24
4	2500	2740	2690	2150	26	27	26	25
1 1	2580	2870	2780	2190	26	28	27	25
2	2620	2900	2800	2260	27	29	27	26
3	2650	2910	2820	2310	27	29	27	26
4	2730	2950	2930	2360	28	29	28	27
2 1	2740	2970	2940	2370	28	29	28	27
2	2790	3060	2980	2420	29	30	29	28
3	2840	3100	3030	2460	29	31	29	28
4	2870	3130	3050	2500	29	31	29	29
3 1	2950	3160	3170	2560	30	31	30	29
2	3030	3230	3270	2630	31	32	31	30
3	3060	3260	3310	2650	31	32	32	30
4	3160	3300	3440	2740	32	33	33	31
4 1	3220	3350	3470	2820	33	33	33	32
2	3320	3430	3600	2880	34	34	35	33
3	3370	3550	3630	2940	35	35	35	34
4	3420	3570	3730	2940	35	35	36	34

APPENDIX TABLE

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES AND INDEX NUMBERS (at approval stage) 1946-

UNITED KINGDOM: ALL, NEW, MODERN, OLDER (continued)

Year	AVERAGE PRICES				INDEX (1973 Q4 = 100)				
	All	New	Modern	Older	All	New	Modern	Older	
1965	1	3510	3670	3890	2950	36	36	37	34
	2	3590	3770	3910	3100	37	37	37	35
	3	3630	3810	3930	3140	37	38	38	36
	4	3670	3830	4020	3150	38	38	39	36
1966	1	3720	3860	4090	3160	38	38	39	36
	2	3820	3960	4170	3300	39	39	40	38
	3	3820	4030	4200	3230	39	40	40	37
	4	3850	4080	4170	3310	39	40	40	38
1967	1	3910	4150	4260	3340	40	41	41	38
	2	3970	4190	4340	3390	41	42	42	39
	3	4040	4210	4410	3490	41	42	42	40
	4	4120	4300	4480	3570	42	43	43	41
1968	1	4190	4310	4570	3650	43	43	44	42
	2	4290	4460	4680	3710	44	44	45	42
	3	4350	4570	4700	3790	45	45	45	43
	4	4390	4620	4740	3820	45	46	45	44
1969	1	4450	4620	4820	3900	46	46	46	44
	2	4510	4660	4900	3940	46	46	47	45
	3	4540	4760	4890	3990	47	47	47	45
	4	4630	4810	5010	4050	47	48	48	46
1970	1	4700	4900	5060	4140	48	49	49	47
	2	4780	4910	5170	4210	49	49	50	48
	3	4840	5040	5180	4290	50	50	50	49
	4	4920	5120	5280	4360	50	51	51	50
1971	1	5090	5310	5470	4510	52	53	52	51
	2	5270	5540	5670	4640	54	55	54	53
	3	5630	5870	6050	4990	58	58	58	57
	4	5940	6190	6430	5210	61	61	62	59
1972	1	6450	6680	6940	5730	66	66	67	65
	2	7040	7210	7650	6170	72	72	73	70
	3	7940	8330	8540	6980	81	83	82	80
	4	8460	9020	9040	7460	87	89	87	85
1973	1	8850	9400	9450	7480	91	93	91	85
	2	9310	9770	10020	8200	95	97	96	94
	3	9680	10030	10430	8550	99	100	100	97
	4	9760	10080	10430	8770	100	100	100	100
1974	1	9920	10220	10610	8920	102	101	102	102
	2	10020	10340	10650	9080	103	103	102	104
	3	10140	10410	10740	9270	104	103	103	106
	4	10200	10570	10800	9320	105	105	104	106
1975	1	10380	10710	10920	9550	106	106	105	109
	2	10720	11150	11290	9800	110	111	108	112
	3	10970	11480	11550	10010	112	114	111	114
	4	11280	11950	11900	10210	116	119	114	116
1976	1	11510	12240	12130	10420	118	121	116	119
	2	11730	12540	12310	10650	120	124	118	121
	3	11990	12850	12660	10770	123	127	121	123
	4	12200	13190	12810	10990	125	131	123	125
1977	1	12400	13470	13000	11190	127	134	125	128
	2	12680	13880	13270	11400	130	138	127	130
	3	12960	14220	13540	11670	133	141	130	133
	4	13140	14660	13710	11760	135	145	131	134

r	AVERAGE PRICES				INDEX (1973 Q4 = 100)			
	All	New	Modern	Older	All	New	Modern	Older
8 1	13810	15320	14420	12380	141	152	138	141
2	14480	15980	15140	12990	148	159	145	148
3	15900	17470	16810	14140	163	173	161	161
4	16810	18440	17780	15010	172	183	170	171
9 1	17780	19690	18720	15970	182	195	179	182
2	19060	20840	20080	17240	195	207	193	197
3	20470	22470	21440	18690	210	223	206	213
4	21950	23750	23090	20100	225	236	221	229
0 1	22660	25310	23760	20590	232	251	228	235
2	23330	26210	24420	21230	239	260	234	242
3	23610	26650	24680	21520	242	264	237	245
4	23470	26790	24510	21390	240	266	235	244
1 1	23760	27710	24950	21460	243	275	239	245
2	24080	28170	25300	21840	247	279	243	249
3	24170	28070	25540	21860	248	278	245	249
4	23780	28690	25050	21350	244	285	240	243
2 1	24140	29190	25290	21750	247	290	242	248
2	24660	29480	26010	22270	253	292	249	254
3	24950	29750	26500	22490	256	295	254	256
4	25560	30430	27130	23130	262	302	260	264
3 1	26280	30800	27980	23800	269	306	268	271
2	27410	32240	29200	24750	281	320	280	282
3	28240	33000	30030	25560	289	327	288	291
4	28690	33860	30470	25900	294	336	292	295
4 1	29900	34930	31690	27120	306	347	304	309
2	31060	35820	32790	28340	318	355	314	323
3	31550	36040	33260	28920	323	358	319	330
4	33060	37910	34940	30110	339	376	335	343
5 1	34160	39910	36150	30740	350	396	347	351
2	34970	40480	36940	31640	358	402	354	361
3	35350	41430	37380	32070	362	411	358	366
4	36190	42980	37750	32720	371	426	362	373
6 1	37060	44080	38630	33380	380	437	370	381
2	38470	45380	39960	34930	394	450	383	398
3	39830	46810	41380	36210	408	464	397	413
4	41360	48310	42910	37690	424	479	411	430
7 1	43350	50090	44780	39650	444	497	429	452

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1968 -

15.1 UNITED KINGDOM:

ALL, AGE OF DWELLING, TYPE OF BUYER, TYPE OF HOUSE

E

Year	AGE OF DWELLING			TYPE OF BUYER		TYPE OF HOUSE				
	All	New	Modern	Older	First-time Buyer	Former Owner-occupier	Detached	Semi-detached	Terraced	Other
1968		4530								
2		4680								
4										
1969		4820								
2		4800	5080	3780						
4										
1970		4980	5310	3990						
2		5110	5650	4230						
4										
1971		5540	6130	4460						
2		6170	6810	5160						
4										
1972		6920	7950	6010						
2		8730	9730	8090						
4										
1973		9650	10460	8630						
2		9780	10520	8880	8830	12490				
4	9770									
1974		9690	9870	10520						
1		9860	10200	10530						
2		9950	10670	10150						
3		10070	10780	10430	8860					
4					9600	12880				
1975		10310	11290	10730						
1		10630	11840	11300						
2		11030	12440	12040						
3		11340	12600	12800	10130	14510				
4										
1976		11410	12260	12020			15510	10730	9320	11500
1		11800	12810	12330			16040	11070	9700	11860
2		12040	13310	12870			16420	11270	9820	12230
3		12250	13620	12850	10860	15560	16770	11550	9890	12350
4										
1977		12460	13590	12870	10800	15680	17050	11730	10120	12510
1		12740	13900	13350	11010	15970	17500	11980	10270	12850
2		13020	14410	13590	11230	16400	17850	12280	10490	13120
3		13200	14630	13780	11390	16370	18260	12440	10520	13310
4										
1978		13850	15310	14490	11620	16930	18950	13160	11080	13950
1		14380	15880	15060	12020	17960	19850	13650	11450	14450
2		15740	17260	16610	14030	12760	21960	14960	12470	15780
3		16660	18250	17650	14850	13650	23420	15840	13160	16700
4										
1979		17520	19320	18430	15780	1780	24400	16740	13980	17530
1		18870	20670	19860	17070	15200	26100	17990	15200	18930
2		20250	22220	21260	18420	16430	28160	19390	16270	20210
3		21540	23420	22680	19670	17680	29910	20600	17420	21600
4										
1980		22500	24970	23600	20480	18160	31400	21530	18110	22530
1		23270	26050	24370	21200	18410	32820	22310	18690	23170
2		23600	26650	24650	21520	18870	33320	22700	18850	23570
3		23480	26790	24480	21440	19090	33080	22740	18940	23270
4										
1981		23620	27400	24840	21340	19190	33420	23110	18910	23510
1		24160	28250	25340	21890	18450	34240	23740	19290	24270
2		24170	27980	25530	21860	19120	34580	23800	19110	24420
3		23740	28360	25080	21320	18830	34580	23500	18550	23960
4										
1982		24040	29070	25200	21650	19790	34680	23700	19010	24280
1		24670	29460	26020	22290	20290	36240	24390	19370	25080
2		24910	29600	26500	22440	20470	36430	24720	19660	25220
3		25530	30230	27120	23130	21730	37190	25300	20200	25940
4										

All	AGE OF PROPERTY			TYPE OF BUYER		TYPE OF HOUSE			
	New	Modern	Older	First-time Buyer	Former Owner-occupier	Detached	Semi-detached	Terraced	Other
26110	30670	27880	23560	22070	34520	37970	25760	20670	26430
27340	32160	29140	24680	22490	36370	39880	26840	21600	27350
28200	32990	29980	25530	23060	37140	41100	27580	21960	28240
28720	33850	30520	25930	23230	37820	41900	27740	22270	28980
29690	34710	31510	26880	24760	39090	43170	28560	23060	29770
31370	36520	33250	28430	27030	42910	45540	30050	24200	31170
31460	36070	33120	28840	27440	43190	45740	30100	24280	31140
32810	37440	34680	29930	27300	41520	46890	31280	25110	32840
33850	39310	35840	30420	29540	44970	50390	33780	25990	33300
34860	40390	36880	31500	30460	46260	52450	34590	27330	33850
35450	41380	37310	32000	29590	46450	53130	35340	27610	34980
36250	43030	37810	32820	30550	46230	54410	35930	28320	35730
36820	43820	38360	33190	31400	46230	54470	36560	29040	36080
38180	45080	39830	34530	33010	50110	56860	37900	30200	37200
39640	46630	41200	36020	32310	51600	59480	39300	31380	38680
41150	48190	42770	37470	33280	53250	61800	41210	32460	39900
42910	49650	44230	39300	33860	54820	63570	42720	34700	41090

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.2 REGIONS: ALL DWELLINGS

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	9550	9310	9630	9360	10820	10940
2	9860	9630	9840	9700	11220	11200
3	10120	9940	10090	9870	11420	11400
4	10570	10180	10390	10090	11660	11640
1977 1	10810	10300	10710	10190	11840	11650
2	11170	10520	11060	10500	12180	11940
3	11410	10730	11350	10650	12510	12280
4	11520	11130	11520	10740	12540	12490
1978 1	11900	11610	12180	11230	13260	13100
2	12370	10900	12440	11430	13510	13310
3	13190	12570	13390	12490	14880	14230
4	13570	13110	14320	13030	16150	15100
1979 1	14160	13650	15210	13900	16800	16040
2	14960	14350	16290	14940	17500	17340
3	16100	15720	17360	15870	18980	18900
4	16740	16620	18270	16490	20110	20560
1980 1	17630	17220	19220	17560	21060	21820
2	18110	18130	20120	18610	21660	23190
3	18650	18770	20840	19170	21840	23290
4	18610	18750	20520	19130	21540	23620
1981 1	18200	19260	20560	19320	22030	23600
2	19120	19340	21150	19640	22430	24150
3	19190	19390	21010	20110	22500	23800
4	18890	18960	20610	19960	21780	24200
1982 1	19290	19350	20530	19680	21970	23180
2	19700	19580	21200	20370	22340	24180
3	20320	19530	21060	20290	22120	24880
4	21000	20080	21540	21150	22740	25740
1983 1	20810	20370	21740	21280	23600	25990
2	21870	21230	22490	22460	23860	27120
3	22690	21670	22930	22710	24700	28290
4	23230	21820	23380	23010	24530	28700
1984 1	23140	22480	23860	23710	25510	29650
2	24510	23490	25450	25110	26910	31290
3	24360	23560	25020	24760	26880	31200
4	25440	25020	26610	26040	28310	32700
1985 1	26080	25290	26990	26920	28910	33860
2	26290	26030	27660	27730	29410	35530
3	26750	25760	28040	27760	29910	36400
4	27050	26650	27920	28220	30330	37100
1986 1	26580	26610	28520	28970	29960	37510
2	27800	27080	29140	30410	30650	39710
3	27550	27320	29760	30880	31140	40180
4	27820	27960	29780	32500	32560	42670
1987 1	28100	29080	30730	33720	33300	44170

Year	North East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
80		14840	13930	11430	10130	12180	11620
70		15480	14330	11960	10500	12780	12360
40		15730	14470	12210	10630	13180	13030
90		15870	14660	12280	10840	13450	13430
70		15960	15040	12520	11010	13620	13850
10		16240	15180	12790	11160	13910	14570
40		16610	15350	12960	11470	14370	15160
20		16740	15710	13150	11540	14350	15240
50		17640	16590	13800	11940	14850	16340
10		18630	17500	14420	12410	15370	17200
40		20840	19490	15850	13480	16510	18680
80		22470	20620	16550	14130	17100	19280
50		23090	22050	17570	15150	17600	19710
40		25030	24560	19030	16460	18480	20700
30		26940	25950	20480	17480	19530	21930
60		28570	27640	22200	18720	21400	22460
80		30250	28430	23060	19190	21440	23590
90		30770	29400	23710	19880	22150	24080
50		31110	29300	24120	19940	22270	23700
70		30750	29270	24160	20110	22750	22890
30		31170	29330	24390	20080	22340	22750
60		31700	29720	25260	20200	23570	23020
50		31660	30070	24830	20290	23660	22030
50		31410	29430	24250	19810	23310	21780
40		31760	30020	24720	20530	24180	22170
80		32610	30990	25230	20930	25000	21930
50		33470	31120	25840	21590	24810	21970
10		34510	31980	25930	22060	25480	22180
50		35510	32490	27330	22320	25620	22390
00		37820	34500	28460	22900	27000	22970
60		39090	36160	29450	23330	27580	23050
30		40780	37160	29990	23660	28330	23700
90		42410	39060	30930	24380	28170	24140
30		45030	41360	32250	25810	29830	24830
40		45640	41740	32780	25910	29660	25180
00		46630	43650	34290	26500	30830	25680
30		48640	46310	35170	26870	31520	26170
40		50300	48360	35560	27720	31890	26450
40		51710	49840	36640	27680	32130	27070
70		53280	52100	37200	28120	32520	27080
90		54030	53890	38060	28630	32450	27130
10		56280	56210	39710	28950	33170	27930
10		59880	60100	41470	29810	33740	28350
40		63490	64160	42460	30220	33620	27510
20		68040	68310	44090	30580	34090	27390

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.3 REGIONS: NEW DWELLINGS

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	11290	10370	11120	10210	12290	11450
2	11650	10710	11500	10560	12640	11830
3	12040	11040	11800	10790	12890	12190
4	12130	11420	12220	11250	13520	12280
1977 1	12550	11660	12630	11350	13890	12330
2	13250	11960	13070	11640	14190	13170
3	13510	12250	13360	11830	14120	13600
4	13790	12570	13710	12100	14990	13570
1978 1	14000	13490	14520	12550	15440	14090
2	14770	13820	14720	13140	16000	14380
3	15680	14890	16190	14360	17340	15730
4	16090	16030	17500	15350	18650	16600
1979 1	17240	16920	18370	16290	19910	18200
2	18160	16610	20310	17750	20530	19500
3	19610	18630	21620	19060	22990	21240
4	20260	19810	22240	19710	23580	22800
1980 1	21650	20810	23660	21010	26040	25170
2	22540	22770	25470	22270	25740	25810
3	23020	23040	25610	22860	26470	26580
4	23420	23390	26120	23840	26290	26230
1981 1	23430	23460	26690	24510	27710	26770
2	24250	24610	27490	24820	28080	28310
3	24680	23860	26940	26160	27960	27160
4	24800	24920	27280	25890	28300	27570
1982 1	25650	26230	27480	25750	29170	26600
2	25770	26050	28300	26500	28840	27560
3	27280	26120	28770	25840	28310	28660
4	26970	26080	30030	26390	28630	28820
1983 1	27870	26750	30420	26660	30060	27920
2	28730	27460	30520	28250	30300	29950
3	28400	28210	31360	28740	30940	30030
4	30550	30310	31110	30100	31910	31090
1984 1	31490	30130	31610	29450	31780	31070
2	31460	32170	33820	31500	33630	34100
3	31350	31750	33080	31070	32700	34950
4	32610	34590	34200	32700	34790	34330
1985 1	32600	33270	36880	33730	36620	37400
2	32280	34610	35930	33050	36930	38810
3	33670	33680	36520	34820	37150	40610
4	34170	34100	37810	35700	39320	40550
1986 1	35000	35370	37740	36240	37570	41520
2	35680	36290	38560	37810	38660	44210
3	36560	36650	39100	38310	40400	44550
4	37260	37470	38230	40830	41600	47520
1987 1	35410	37900	42370	44220	41750	50240

Year	North East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
1990		16140	16770	11580	11270	13360	12950
1993		16900	17170	11800	11610	13530	13420
1997		17150	17500	11930	11790	13830	14040
1997		17510	18070	12050	12160	14410	14380
2007		17480	18200	12460	12480	14620	15310
2015		17830	19420	12840	12620	14810	16560
2020		18230	20350	13220	12840	15570	16720
2023		18880	20300	13550	13490	15750	17270
2010		19910	21110	14170	14180	16240	18760
2012		21150	22370	14700	14560	16710	19500
2018		22860	24280	16180	15060	18140	20330
2020		23660	26220	17070	16070	18760	20970
2023		24950	28100	18140	17720	19280	21990
2020		27480	31300	19640	19300	20160	22890
2020		29600	32190	21080	20110	20620	23380
2020		30720	33000	22900	21530	22840	23900
2020		33080	34020	24710	22590	22850	26500
2020		33900	34760	25420	24160	24220	27540
2020		35020	35830	26310	24430	94910	27270
2020		35070	37410	25740	24530	25970	26100
2020		36460	36950	26900	25140	25520	26010
2020		37920	39020	27470	25840	26310	26540
2020		36700	40100	27890	25920	26270	24740
2020		37280	41900	27490	25620	27580	24820
2020		37730	41480	28470	26900	28670	25360
2020		39320	40960	27980	27650	30330	26060
2020		40090	40630	28360	26520	30560	24470
2020		39750	39950	28970	26870	31660	26100
2020		40060	38690	29990	27630	30600	25020
2020		42180	40490	32010	28270	31660	26140
2020		43760	40910	33260	28950	32930	26310
2020		45260	40020	33510	28310	33760	27310
2020		47860	41350	34640	31320	33440	27530
2020		50450	46260	35760	32240	34480	28410
2020		49290	43160	36400	31670	32770	27800
2020		50760	46460	38480	31690	34560	28530
2020		53460	46140	38760	31530	34950	29040
2020		54070	52040	39410	32790	35540	29110
2020		56430	52870	40830	34000	36320	30760
2020		59330	57210	41570	34050	37460	30770
2020		58830	61380	41620	36010	38420	30190
2020		63090	60380	44700	35790	38220	31560
2020		66910	61580	45860	38730	38790	31440
2020		70460	66500	47910	36840	38680	32030
2020		73950	66880	48800	37350	37620	31860

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.4 REGIONS: MODERN DWELLINGS

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	10720	10370	10410	10350	11000	11520
2	10790	10430	10570	10830	11430	11660
3	11170	10860	10890	10830	11710	12040
4	11880	11080	11220	10950	11820	12190
1977 1	12140	11180	11540	11110	11990	12170
2	12340	11430	11950	11310	12400	12380
3	12640	11650	12090	11620	12650	12660
4	12680	12190	12410	11620	12580	13080
1978 1	13300	12660	13140	12240	13500	13720
2	13750	13030	13520	12350	13700	13920
3	14740	13900	14650	13690	15220	15020
4	15450	14350	15810	14090	16690	16170
1979 1	15820	14850	16710	15310	17300	17120
2	16530	16120	18280	16490	18170	18010
3	18140	17750	19270	17210	19400	19660
4	18900	18600	20510	18010	20930	21440
1980 1	19790	19600	21430	19030	21640	22550
2	20200	20040	22120	20350	22470	24470
3	21090	21040	22850	20930	22430	24310
4	20650	20700	22410	20770	21970	25000
1981 1	21100	21910	22650	20990	22510	24620
2	21680	21940	23630	21070	22990	24470
3	21480	22580	23420	21690	23430	24500
4	21300	21470	23570	21300	22310	25570
1982 1	21560	21880	22960	21180	22220	24300
2	21640	22410	24260	21940	23220	25120
3	23250	22350	23930	21970	23160	25620
4	23870	23030	24630	23220	23950	26650
1983 1	23310	23930	24730	23590	24580	27370
2	24750	24300	25830	24380	25110	28840
3	25730	24800	26320	24890	25920	29360
4	26180	25440	27130	25090	25500	30300
1984 1	26350	26280	27410	26200	26770	31120
2	28080	26970	29510	27170	27540	32000
3	27340	27200	28580	26750	27690	31710
4	28230	28550	30160	28550	29240	34440
1985 1	29080	28940	30100	29430	29730	34790
2	29530	29990	31520	30190	30500	35600
3	29990	29070	31900	30610	30790	38100
4	29630	30120	31040	30580	31330	38050
1986 1	28880	29870	31760	30820	30660	39730
2	30830	29750	32760	32580	31360	40660
3	30230	30420	33400	32760	31780	41260
4	30100	31680	33280	34840	33250	44280
1987 1	29790	32040	33240	35000	35050	44760

Year	East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
1970		15030	15090	11940	11110	13340	11110
1980		15700	15410	12380	11490	14170	11890
1990		15950	15710	12830	11680	14630	12630
2000		16060	15700	12880	11890	14600	13220
1960		16150	16070	13110	11970	14820	13400
1950		16390	16350	13230	12330	15150	13770
1960		16710	16550	13430	12600	15470	14500
1940		16840	16800	13650	12620	15320	14330
1900		17650	17740	14300	12990	15890	15300
1880		18840	18600	14990	13610	16650	16230
1860		21350	21030	16760	14990	17700	18200
1800		23270	22290	17440	15550	18420	18670
1850		23710	24050	18200	16480	18780	18880
1820		25660	25990	19990	18090	19610	19900
1800		27500	27450	21480	18710	21190	21770
1700		29420	29280	23270	20480	22640	22520
1600		30950	30100	23960	20580	22400	23310
1570		31540	30720	24940	21710	22920	23770
1530		31430	31010	24980	21820	22780	23510
1510		31000	30270	25340	21880	23680	23530
1500		31820	30740	25110	22530	23940	23390
1400		31710	30820	26220	22090	25070	24010
1380		32100	31470	25470	22900	25070	23910
1300		31650	30430	25490	21900	24400	23740
1280		31980	31760	25270	22460	25610	24150
1230		33020	31990	26250	23040	26480	23580
1200		34110	33200	26900	24050	26360	25210
1120		34800	33140	26810	24480	27290	25040
1090		36140	34080	28090	25050	27840	25800
1070		38360	36040	29270	26190	28970	26510
1000		39890	37430	29870	26310	29560	26140
950		41600	38420	30410	26850	29790	27370
940		43130	40230	31870	26940	29710	27560
900		45670	43070	33320	29070	32410	28090
810		45700	42530	33900	29440	32080	29290
730		47970	44090	35250	29580	33780	29390
700		49420	47240	36240	30140	34330	29300
670		51240	49060	36300	31010	33990	30210
600		51980	49810	37200	30790	34690	30140
500		53120	51570	37970	31720	34570	29630
470		55030	52560	39300	31060	34390	29710
400		56640	56220	40130	31670	35300	30730
300		60180	59970	42100	32510	35100	31130
250		63260	64760	42920	32850	35480	29560
200		67910	66710	44930	33770	35830	29170

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.5 REGIONS: OLDER DWELLINGS

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	7330	7160	8170	7380	9560	9500
2	7890	7830	8370	7520	9910	9880
3	7930	7960	8500	7900	9920	9660
4	8310	8140	8720	8120	10220	10160
1977 1	8410	8240	9010	8130	10300	10210
2	8770	8350	9250	8620	10520	10210
3	8930	8490	9730	8520	11240	10610
4	9010	8760	9650	8630	11010	10610
1978 1	9250	8970	10170	8950	11450	11250
2	9590	9190	10400	9100	11800	11430
3	10180	9580	11080	9630	12980	11810
4	10350	10040	11720	10170	13890	12240
1979 1	11020	10610	12660	10540	14410	12710
2	11870	11240	13050	11150	14950	14720
3	12530	12060	14220	12360	16520	16100
4	13120	13040	14960	12860	17260	17640
1980 1	13990	13220	15820	13850	17980	18330
2	14490	14320	16770	14640	18710	19440
3	14850	14860	17690	15320	19070	19610
4	15070	15210	17340	15090	19020	19890
1981 1	14030	15440	17270	15250	19220	20230
2	15490	15400	17660	16020	19590	21150
3	15750	15360	17820	16060	19340	20810
4	15400	15180	17010	16290	18870	20410
1982 1	15830	15280	17230	15790	19180	19710
2	16680	15640	17730	16690	19070	21170
3	16400	15770	17800	16830	18820	22020
4	17480	16560	18030	17490	19360	23060
1983 1	17390	16360	18340	17330	20290	23140
2	18090	17630	19100	18840	20250	23290
3	18830	17900	19400	18690	21130	25910
4	19130	17420	19640	18710	20890	25090
1984 1	18580	18110	20240	19250	21810	26600
2	19920	19030	21240	20890	23870	28730
3	20320	19060	21220	20610	23920	28500
4	21470	20250	22720	20920	24930	28870
1985 1	21910	20790	23220	21880	25190	30550
2	22080	21110	23580	23250	25490	33770
3	22410	21410	23800	22200	26300	31450
4	23110	22070	23820	23050	25880	33690
1986 1	22470	21710	24280	24360	26330	31780
2	23210	22620	24590	25420	26870	35680
3	23020	22600	25250	26160	27040	36020
4	23470	22540	25430	26810	28450	37390
1987 1	24850	24540	26580	28580	27960	39930

ter uth	East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
170		13660	13360	10480	8630	10180	10880
320		14130	13790	11370	9000	10850	12130
330		14370	13860	11380	9050	11260	12540
550		14480	14120	11420	9210	11610	12110
700		14650	14520	11580	9410	11700	12570
940		14950	14560	12020	9340	12030	13640
210		15400	14700	11990	9720	12410	14580
360		15200	15110	12030	9610	12380	14770
370		16220	15970	12720	9910	12820	15540
250		16720	16940	13310	10240	13100	16670
550		18670	18830	14220	11200	14130	17140
400		20350	19950	14910	11780	14630	18230
520		20990	21320	16340	12650	15290	18360
700		22700	24000	17380	13610	16230	19110
570		24720	25420	18830	15150	17170	19210
410		26200	27110	20480	15840	19280	19230
740		27860	27920	21070	16480	19610	19160
560		28220	29000	21390	16530	20130	19480
020		28970	28760	22020	16640	20120	19280
710		28630	28870	22050	17230	19950	17630
530		28240	28870	22420	16700	19050	17890
160		29390	29320	23180	17160	20690	17830
120		29310	29610	22730	16790	21040	16630
280		29140	29010	21500	16760	20340	16300
560		29480	29450	22520	17470	20760	16510
300		29910	30310	22950	17770	21400	16340
530		30560	30520	23670	18660	21190	16060
530		32600	31590	23830	19230	21690	16230
360		33240	31980	25490	19080	21840	16900
140		35690	33980	26230	19190	23550	17020
360		36430	35710	27580	19860	23990	17420
170		38150	36770	28200	20190	25190	16990
080		39580	38700	28460	21030	24950	17760
550		42270	40770	29710	21960	25680	18150
50		44380	41510	30150	21990	26190	18270
90		43160	43430	31630	22940	26590	18620
160		45850	46110	32540	23160	27540	19910
140		47660	48040	33230	23850	28570	19850
160		49760	49730	34380	23750	28140	20300
110		51500	52040	34550	23760	28630	20650
00		50850	53940	35120	24820	28170	21010
50		53420	56060	37200	25050	29160	21190
80		57080	60070	38970	25430	30520	22170
30		61540	63920	39720	26320	29860	20770
50		66320	68760	41180	26180	31070	21120

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.6 REGIONS: DETACHED HOUSES

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	14700	13850	14390	12350	14450	14120
2	15000	14120	14590	12800	14990	14290
3	16050	14720	15000	12980	15650	14540
4	16660	14990	15650	13420	15980	14790
1977 1	16360	15130	16410	13530	16390	14800
2	17420	15570	16790	13920	16680	15420
3	17560	15820	17160	14060	16970	15850
4	17790	16350	17590	14510	17180	16200
1978 1	17880	17290	18380	14730	18010	16660
2	18800	17660	18760	15130	18450	16930
3	20180	18940	21010	17020	20270	19140
4	21120	20110	22850	17750	22830	20180
1979 1	22080	20830	23670	19240	23640	21800
2	22570	21360	25320	20740	24610	22740
3	24700	23620	27760	21950	26500	25140
4	26400	25210	28700	23580	28070	27100
1980 1	27740	26020	29930	24810	29910	29360
2	28680	27310	31440	26280	31170	31800
3	30150	28000	31740	27100	31050	31590
4	29140	28510	31040	26950	30550	31650
1981 1	30170	28190	31770	27740	31070	32070
2	29320	29420	32910	28100	31700	33730
3	30050	29480	32260	29390	32600	31880
4	29750	29750	32610	29200	32040	32420
1982 1	30290	30010	32270	28700	32390	31820
2	31250	31670	34260	29840	33390	33600
3	33700	31040	34440	29640	32390	33840
4	32550	31220	34550	31370	33770	35330
1983 1	32580	32770	35000	31000	34570	34770
2	34530	33420	37150	31510	35270	36450
3	34090	34480	37780	32850	36330	37420
4	36520	34290	37660	33730	36280	38060
1984 1	35720	35550	38860	33950	37570	40630
2	37280	38370	42030	37100	39110	41530
3	38330	37680	41920	36130	39370	40200
4	39040	39710	42440	37350	40740	42380
1985 1	40490	39450	42060	38750	41850	43740
2	39560	40890	44970	40100	42860	46370
3	42000	40280	44500	39850	42760	48550
4	40850	40710	44750	40850	44110	47530
1986 1	39640	40850	46510	40120	43280	49920
2	42540	42610	47780	42980	44310	52210
3	44260	42510	47990	43450	45430	52860
4	43450	42190	47810	44930	48050	55920
1987 1	41960	43830	49670	47840	48270	57470

er th East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
60	20760	22460	14800	13660	16140	14530
30	22270	22160	15520	14150	16900	15860
60	22000	23070	15730	14550	17310	15970
90	22390	23740	16080	14650	17400	16970
10	22530	23560	16440	15070	17640	17170
50	22900	25030	16890	15540	18020	18090
90	23310	25160	17390	15760	18410	19250
70	23730	25840	17540	16120	18810	19990
40	24890	26930	18420	16360	19180	19680
20	27490	29920	19330	16980	19790	21630
20	30410	33120	21920	18630	21700	24050
20	32800	33900	22850	19880	22590	24010
40	33350	36460	24250	21310	22670	25660
30	36670	39910	26560	22400	23770	27090
70	39470	44410	28370	24080	25090	28020
00	41360	45760	30520	27110	27820	28590
40	44060	45920	31750	26870	28460	29920
50	45200	49460	32700	28420	29310	31230
90	45660	50480	33470	28460	31020	31780
00	44800	50910	32860	28390	30640	32450
40	46150	48840	33140	28650	30200	31240
00	46350	50080	34680	28370	31280	30980
40	45740	50870	33460	29980	33870	30210
00	47160	53890	34530	28610	32800	30000
30	47720	50760	34230	30190	33360	31580
40	49370	53520	35510	31660	35080	31250
30	50310	55890	36660	32230	35510	32040
30	51240	55250	36720	33500	35620	31580
00	52510	55640	38330	33680	34640	32310
20	55730	61590	40100	34250	37840	34270
0	58690	59870	41490	35030	38720	32580
40	61510	66640	42100	34520	38840	33560
40	62500	66680	43550	36130	37170	33780
00	65380	70030	44170	39380	41830	37150
90	67170	71730	45450	38540	40710	38180
40	68150	73200	46070	38650	41830	38530
40	71260	79080	47540	40080	43590	39020
00	73140	82830	49570	42170	45060	39490
00	75890	85110	50630	41790	45080	37110
0	79590	89610	51840	40560	46280	39300
0	78170	88820	53190	40860	44080	37600
0	81760	92910	55630	41040	46690	40250
0	88160	100820	57530	44640	47490	41320
0	93080	112230	59000	40750	47020	40450
0	100700	110600	61570	45080	47770	39190

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.7 REGIONS: SEMI-DETACHED HOUSES

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	9890	8770	9210	8560	9920	9800
2	10290	9060	9330	8810	10250	10290
3	10460	9320	9540	9050	10300	10500
4	10960	9620	9930	9130	10600	10700
1977 1	11260	9790	10210	9110	10700	10590
2	11530	9820	10540	9400	11070	10750
3	11850	10100	10800	9520	11370	10840
4	11900	10580	10990	9580	11380	11180
1978 1	12830	11010	11770	10200	12160	11970
2	12940	11300	11940	10380	12340	12060
3	14010	11890	12790	11270	14040	12290
4	14420	12520	13710	11690	14750	13890
1979 1	14830	12930	14790	12400	15590	14290
2	15880	13890	15640	13320	16030	15530
3	17040	15200	16790	14380	17520	16980
4	17700	15760	17750	14520	18730	18840
1980 1	18480	16810	18740	15550	19580	19700
2	19410	17800	19660	16950	20020	20430
3	19700	18080	20520	17110	20360	20480
4	19890	18390	20240	17530	20250	21150
1981 1	19450	19430	20490	18020	21080	21240
2	21270	19310	21110	18280	21480	21630
3	20480	19960	21030	18540	21030	21960
4	20530	18880	20670	18990	20520	22290
1982 1	21350	19040	20820	18120	20990	21450
2	21290	19610	21660	19070	21360	21640
3	21880	20170	21470	18720	21530	22740
4	22820	20560	22370	20000	21610	23670
1983 1	22700	20520	22660	19950	22070	24170
2	23410	21780	22780	21350	22480	24030
3	24210	21780	23060	21220	22850	25630
4	24390	21850	23380	20640	22680	24850
1984 1	24080	22290	23750	21640	23190	25560
2	25610	22970	24970	22200	24230	27700
3	24920	23540	24470	22070	24050	28020
4	26050	24040	26050	22980	24850	29960
1985 1	26810	25300	26630	24340	25690	30950
2	27700	25790	27160	24660	26250	29940
3	28200	25100	27230	24790	27060	31290
4	27550	25880	27480	25790	27600	32340
1986 1	27850	25900	27560	26900	27300	32410
2	28700	26090	28250	27360	27890	35260
3	27310	26420	29020	27630	28130	35520
4	28660	28130	29590	29720	29360	38220
1987 1	28750	29130	29640	29340	30190	40980

Year	East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
1990		13560	15440	10880	9820	12130	9090
1975		14050	15920	11380	10140	12780	9570
1980		14440	16070	11550	10240	13090	9960
1981		14580	16630	11520	10590	13600	10390
1984		14580	17100	11710	10610	13910	11030
1985		14940	17150	11990	10870	14050	11370
1982		15360	17370	12250	11230	14470	11910
1987		15420	17990	12430	11110	14380	11360
1988		16330	19040	12960	11560	14740	12450
1989		17340	20450	13690	12090	15040	13480
1994		19520	23180	14820	13110	16290	14450
1996		21050	24350	15710	13510	17150	15260
1995		22060	25880	16830	14510	17710	15740
1994		24170	28950	18000	15960	18380	16380
2000		25940	30320	19480	17230	19780	17850
2000		27650	32250	21510	17720	21480	18980
1993		29040	33360	22550	18320	21450	19160
1991		29600	34190	22860	19430	22400	20320
1990		30260	33970	23470	19630	22240	20060
1992		29610	33980	23770	19630	22820	19920
1980		30220	34530	23950	19600	22920	19880
1984		31120	35640	24820	20080	23420	20340
1990		31590	36340	24330	19950	23050	20350
1992		31110	35780	24380	20020	23670	19810
1997		30990	36400	24250	20540	24870	20340
1998		32420	37090	25100	21440	25870	19820
1999		32980	37810	25350	21700	25430	21070
2000		34220	37970	25290	21790	25900	20820
1990		34770	39400	26240	22180	26620	21370
1992		36740	41790	27080	23560	27850	21480
1980		37710	44740	28530	23490	28510	21870
1997		38760	45370	28640	23410	29230	21980
1990		40720	47280	29050	24800	29080	22550
1980		42600	50950	30250	25590	31180	22980
1992		43400	50420	30570	26810	30800	23530
1995		44320	52890	31910	25890	32560	24240
1980		46890	56020	33620	26280	32900	24590
1990		49010	57780	33130	27060	33340	25260
1980		49890	60490	35030	26400	33400	25590
2000		51430	61550	34990	27040	33650	25090
1993		52020	63520	35850	28000	33790	25410
1990		55240	66810	36970	28340	34000	25420
1990		58210	71630	38560	28120	34540	25550
1995		62500	74980	40730	30490	34970	25340
1990		65870	80940	41190	29420	34810	25580

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.8 REGIONS: TERRACED HOUSES

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	6880	6450	6690	6230	7950	8640
2	7120	6990	7010	6560	8250	8560
3	7230	6990	7230	6560	8260	8370
4	7630	7120	7140	6530	8190	8880
1977 1	7870	7110	7280	6910	8280	8880
2	8110	7310	7450	7260	8610	8970
3	8370	7420	7930	7250	8960	9420
4	8330	7560	7730	7100	8900	9220
1978 1	8260	7750	8130	7570	9390	9750
2	9000	8160	8390	7510	9330	10100
3	9420	8320	8900	7780	9830	10100
4	9420	8640	9070	8220	10570	10340
1979 1	10200	8880	9740	8380	11110	11540
2	10730	9400	10530	8880	12050	12980
3	11340	10280	11340	9900	13110	13720
4	11520	11260	11930	10380	13690	14930
1980 1	12370	11380	12580	11200	14530	15350
2	12850	12000	13400	11670	14940	16300
3	12970	12690	13990	12750	15310	16930
4	13400	12930	13960	12440	15590	17820
1981 1	12890	12880	14120	12380	15750	17600
2	13470	13180	14280	13320	16280	18060
3	14430	13100	14690	13410	16020	17700
4	14050	13050	14050	13300	15560	17900
1982 1	14150	13320	14140	13310	15280	16890
2	15150	13310	14360	13750	15490	18380
3	14830	13230	14780	13920	15120	18840
4	16010	14300	14730	14170	15640	19230
1983 1	15300	14030	15150	14320	16930	19780
2	16260	14890	15630	15660	16100	20950
3	16760	15170	15830	15190	17070	21750
4	16590	14890	16060	15740	16710	21210
1984 1	16770	15290	16180	15610	17650	21760
2	17310	15350	17000	16850	18810	23300
3	17740	15410	16560	16150	18120	23620
4	18600	16700	17250	16740	19500	23440
1985 1	19030	16320	17990	17240	19530	24660
2	19550	17710	18120	18970	19600	29770
3	18980	17860	19110	18500	20290	26830
4	20590	18210	18590	18250	19830	28800
1986 1	19290	18310	18970	19760	20250	27470
2	20510	18520	18900	21010	20870	30390
3	20290	18550	19730	22270	21070	30860
4	20400	19280	18950	22330	21870	31340
1987 1	21490	20060	20650	24100	22580	33770

Year	East	Outer Metrop	Greater London	South West	Wales	Scotland	Northern Ireland
40		12250	12910	9280	7790	10570	7790
40		12410	13510	9690	8080	11780	8420
40		12780	13470	10010	8080	12000	8510
50		12890	13560	9940	8190	12140	9100
10		13050	14120	10050	8450	12550	9130
50		12980	14150	10380	8230	12730	9810
50		13370	14330	10260	8600	13130	10260
30		13370	14650	10160	8490	13060	10930
00		14180	15560	10940	8900	13200	11560
70		14630	16060	11480	9130	13490	12000
70		16440	18170	12300	10120	14310	12620
30		18000	19500	12580	10550	15920	13140
20		18550	20840	13790	11360	16000	13110
20		19700	23600	14960	12080	16850	14020
20		21640	24880	15970	12620	17730	13800
00		23140	26550	17640	13590	19270	14010
30		24230	27200	18100	14310	19950	14330
60		24550	28410	19000	14180	21080	14070
90		24450	28360	19250	14270	20010	14550
00		24750	28640	19340	15260	21090	13520
30		25060	28540	19870	15170	21180	13150
10		25790	28630	20400	15520	21090	13080
80		25450	29230	20550	15360	21710	12840
50		24450	27680	19170	14920	21730	12900
20		25220	29050	20110	15580	22670	12550
80		25990	29800	20100	15650	21900	13270
20		26830	30440	20470	16550	21690	11860
70		27720	31480	20500	17070	24050	12700
70		28990	31590	21820	16780	24050	13330
90		30440	34010	23190	16990	24810	14380
90		30360	35090	22760	17380	25320	15160
10		31730	36300	23150	18060	25580	15130
50		32660	38820	23890	18000	26010	14870
10		35160	40210	24670	18780	27710	15360
40		35320	41200	25380	18520	28560	15490
70		35280	42100	26180	19570	28870	15370
30		37500	45020	26740	19510	28150	16350
30		39290	47650	27460	20120	29720	16570
00		40350	49020	28420	20580	29000	16930
70		40980	50630	29070	21420	29810	17660
30		43070	53410	29810	21650	28830	17390
30		44810	55230	31340	22220	30140	17890
90		47290	58800	32870	22310	31490	18100
30		50580	63610	32600	22710	30460	17010
00		55860	69100	34690	22990	32040	17620

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.9 REGIONS: BUNGALOWS, FLATS AND MAISONNETTES

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
1976 1	10060	10120	10480	9910	10720	10470
2	10310	10240	10800	10310	11240	10850
3	10420	10840	10970	10500	11310	11350
4	10730	11100	11270	10980	11660	11380
1977 1	11240	11310	11510	11010	11690	11550
2	11520	11760	12200	11180	12130	11750
3	11550	11940	12200	11640	12560	12190
4	12100	12420	12610	11430	12410	12440
1978 1	12230	12970	13190	12100	13030	13090
2	12580	12850	13750	12390	13420	13450
3	13280	14110	14700	13300	14500	14560
4	14370	14240	16100	14290	16050	15010
1979 1	14710	15620	17020	15300	16060	15560
2	15740	16130	18920	16230	17020	17290
3	17570	17550	18800	16670	18720	18840
4	18210	18660	20340	17590	19520	20210
1980 1	19590	19140	21760	19060	19740	21380
2	19040	20320	22380	20440	20920	22850
3	21010	21950	23410	21310	21400	23360
4	19850	20890	23540	21610	20340	23100
1981 1	19360	23070	22420	21460	21390	23190
2	21210	22850	24480	21940	21810	22730
3	20730	22130	24180	22870	23260	24310
4	20530	23370	24610	21620	22020	25270
1982 1	20720	23810	23410	22780	22040	23210
2	20800	23600	25220	23690	22630	24210
3	22490	23800	24300	23930	23030	25020
4	22180	24260	25920	23810	24100	25520
1983 1	21650	25350	25470	24470	23950	26100
2	23550	25140	26820	25220	24850	27590
3	23540	25100	26800	25400	25160	28080
4	25970	26920	28610	25470	24320	30200
1984 1	25370	27650	29280	27120	25160	29130
2	27010	28170	29970	26700	25670	30680
3	25350	27900	29370	27450	27090	31410
4	26280	29570	31960	29560	28420	32790
1985 1	26290	30470	32540	29180	28340	33900
2	26760	29710	32720	29600	29590	33980
3	28570	29860	33080	31030	30720	37300
4	29340	32410	31560	30750	30520	38840
1986 1	29620	30970	32250	31440	29130	38910
2	30180	31370	33640	33550	29390	38720
3	30270	32820	34030	32640	29930	39510
4	29240	31640	34530	35710	30730	43720
1987 1	29660	33430	35290	36590	32300	41910

Year	Outer Metrop East	Greater London	South West	Wales	Scotland	Northern Ireland
1980	13730	12430	11970	10790	11160	12680
1987	14260	12540	12520	11230	11530	13410
1988	14740	12830	12870	11360	12020	14540
1992	14600	12710	12990	11600	12250	14660
1993	14700	12800	13410	11670	12260	15060
1994	15300	12960	13330	11850	12630	15980
1995	15460	13100	13450	12030	13150	16380
1997	15510	13180	14160	12470	13030	16620
1998	16170	13800	14570	12900	13730	18320
1999	16340	14690	15010	13640	14370	18810
2000	19010	15950	16780	14410	15280	20200
2002	20500	17030	17830	15080	15410	20780
2004	20680	18630	18240	16000	16110	20830
2006	22300	20430	20100	18220	17060	22120
2007	23670	21790	22290	18660	17880	23650
2008	25530	23570	23400	20210	19600	23960
2009	27400	24520	24330	20730	19300	26070
2010	27570	25170	25080	21520	19970	26160
2011	27760	24850	24900	22050	20040	25630
2012	27780	24310	25300	22310	20390	24410
2013	27650	24620	25280	23240	19700	25370
2014	27710	24960	26280	23050	21740	26530
2015	28190	24900	25560	23190	21240	24940
2016	28540	25030	24020	22940	20600	25450
2017	28750	25050	25410	23340	21370	25650
2018	28710	26630	26290	22890	22450	25770
2019	29970	25750	26960	23940	22420	26140
2020	30800	26930	27250	24140	23050	27210
2021	31060	27280	28840	25030	23310	26970
2022	33231	28170	28440	24860	24420	27260
2023	34000	29820	29740	25490	24960	27050
2024	35160	30250	30350	26240	26020	28290
2025	36890	31550	31210	26230	26150	29170
2026	39070	33550	33310	28030	26800	29190
2027	38550	33770	32990	27930	26700	29360
2028	40120	36050	36280	29610	27750	29850
2029	40860	38170	36160	29260	28780	29990
2030	42680	39930	36350	29420	28600	30420
2031	44820	40730	37070	30320	29080	32280
2032	45610	44010	38020	31640	29040	30900
2033	47220	44890	38890	31480	29570	31170
2034	47680	47240	40330	31450	29970	32470
2035	51500	50720	42570	33180	30390	33410
2036	53350	53670	43890	34380	30280	31920
2037	55240	56170	45370	32930	30740	31580

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.10 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
DETACHED HOUSES

Year	UNITED KINGDOM			NORTHERN			YORKS & HUMBERSIDE			NORTH WEST			
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older	
1976	1	15700	15650	14910	15000	14880	12950	13110	14520	13010	14440	14430	14130
	2	16080	16230	15510	15160	15220	13540	13890	14220	14360	14530	14590	14750
	3	16350	16660	15890	15820	16360	15740	14420	15070	14060	14900	15210	14520
	4	16910	16930	16160	15910	17640	15730	14550	15500	13990	15640	15800	15130
1977	1	17200	17130	16630	15740	17350	14910	14570	15560	14880	16190	16310	17220
	2	17870	17520	16960	17580	17790	15440	15390	15860	14830	16700	16880	16650
	3	18300	17800	17370	17840	18020	14820	15780	16240	14050	17190	16940	17830
	4	18890	18150	17670	18430	17860		16340	16640	15080	17520	17760	17130
1978	1	19520	18950	18150	17970	18390		17550	17530	15490	18130	18830	17400
	2	20400	19790	19270	19260	19180		17750	17800	16780	18390	19120	18250
	3	22220	21940	21630	19980	20730		19400	19140	16850	20450	21450	20710
	4	23580	23490	23000	21030	21710		20350	20470	17790	22290	23190	22880
1979	1	24660	24430	23970	22010	22490	20020	20720	20920	20740	23150	24190	23030
	2	26170	26360	25370	23500	22280	19800	19550	22840	21100	26070	25850	21970
	3	28120	28340	27770	25080	24820	22370	23320	24570	20670	27430	28510	25970
	4	29440	30330	29620	26460	26820	23660	24960	26110	22630	28360	29540	26500
1980	1	31430	31840	30310	28550	27510	25260	25640	27220	23030	29550	30460	28960
	2	32500	33240	32390	30090	27800	26740	28310	27880	22560	31480	31690	30470
	3	32990	33630	33170	31140	29720	28050	27620	28700	26920	30720	32100	33420
	4	32760	33410	32860	29800	28800	27960	28480	28830	27590	31170	30600	32160
1981	1	33930	33420	32720	30520	30360		28370	28460	26900	32580	31320	30880
	2	34420	34310	33770	30220	29470	24680	30390	29350	27210	32490	33420	32440
	3	34330	34550	34000	31190	29540		29050	30960	25960	32490	32270	31530
	4	34850	34310	34790	31500	28960	26710	30280	29770	28410	32940	32310	32710
1982	1	35490	34180	34500	32600	29190		30500	30490	27170	32090	31920	34010
	2	36690	36020	36060	33310	30490		32440	31360	30930	34350	34470	33370
	3	36810	36190	36460	36040	33530		31450	30660	31680	34330	34450	34650
	4	38040	36410	38000	34330	32330	27550	31930	30420	32980	36100	33330	35280
1983	1	38700	37270	38830	35600	31770	27630	32200	33260	31870	37430	33280	36090
	2	40820	39500	39780	37260	33970	29890	32110	33420	35510	38800	36450	36830
	3	41970	40490	41730	35120	33800	32830	35060	34050	35170	41490	36780	35900
	4	43520	40910	42780		36060		37480	33020	34310	40940	37120	35310
1984	1	44590	42000	44760	37490	35340		36180	34980	36710	41920	37340	40250
	2	46970	44410	47070	38900	36500	37980	41720	36740	39860	45280	40480	43440
	3	46630	44540	48090	36980	39300		40950	36970	35940	44210	40060	45490
	4	47430	46250	48100	38110	39340		43880	38480	38600	44830	40640	46030
1985	1	51770	49710	50590	40110	41260	36950	41900	38020	41630	48230	38820	46160
	2	54850	52190	52110	39180	40520	35210	45240	39900	38500	45710	43390	49350
	3	54220	52140	54210	42120	41490	44310	41520	39740	40460	45690	43520	46210
	4	56180	53820	54450	41160	39800		41470	40000	42020	47840	43180	45420
1986	1	56660	53940	54340	43160	37600		43170	40260		46800	44420	53100
	2	59820	56070	57000	44790	41510		44290	41060	45260	49250	46290	50530
	3	61510	58270	60790	44590	43860		42630	41680	45290	48730	46560	51710
	4	63910	62130	61920	49590	41560		46960	40980	38230	46840	46430	54140
1987	1	66280	62140	63700		41950			42640		51160	48410	51580

ST MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
W	Modern	Older	New	Modern	Older	New	Modern	Older
320	12650	11310	14530	14310	14780	14220	14300	13400
650	13360	11060	15060	14900	15190	14410	14270	14150
930	13320	11880	15600	15570	15980	15220	14300	14110
990	13360	12770	16530	15680	16090	14890	15030	13860
850	13690	12480	17100	16200	15900	14570	14990	14580
630	13860	13070	17380	16350	16630	16310	15280	14370
740	14020	13200	17340	16690	17310	16990	15470	15120
290	14350	13920	18550	16470	17310	16540	15960	16360
930	15030	13410	19020	17720	17360	16860	16530	16750
480	14900	14040	19470	17900	18680	17420	16870	16350
690	17400	14760	21320	19560	20870	20030	18680	19080
900	17590	16600	23300	22650	22640	20980	20210	18820
200	19390	17380	24270	23460	23130	22290	22180	19920
880	20940	18490	25030	24570	24020	23300	22400	22710
280	22130	19500	27980	25740	26280	26530	24860	23550
410	24050	21110	28190	28050	27930	27880	26730	26730
770	25040	22660	31660	29400	28190	30730	29320	27060
200	26560	24150	30730	31360	31450	30990	32800	30710
590	26970	26640	31570	30570	31440	32270	32110	28970
360	27240	24790	30210	30120	32390	32020	33210	26770
430	27430	25770	32660	30390	29870	32650	32130	29180
590	27590	26820	32690	31530	30170	35180	33190	32260
000	28550	27410	31900	32600	34030	31760	32220	31210
750	27420	29650	33080	30470	34080	32400	32120	33280
470	27810	26660	34280	29810	35420	31120	32600	31110
470	28540	29220	33650	33360	32890	33680	33710	33150
550	28930	29010	33230	31570	33120	35300	32840	34020
110	30210	31130	34010	32600	37090	35720	34960	35720
190	30010	29760	36250	32650	37920	33840	34980	35610
120	31040	28750	37300	34350	34700	37720	36820	33480
000	32280	31600	38430	34800	38190	37310	37660	36870
50	32890	32130	40100	34360	36620	39190	38120	36400
90	33750	30970	39260	36250	39290	40220	39720	44050
30	35560	39210	41320	37250	41800	42540	40460	43520
120	34980	37530	39660	37560	44870	44110	38470	40140
80	36690	36270	41830	39530	42870	42220	41990	43980
110	37780	37290	44190	40170	43830	46320	42010	45770
60	39890	38970	45420	41210	44220	47550	44890	49570
80	38750	38190	43960	41050	46300	49420	48350	47770
20	39750	38510	45730	42730	45730	49630	45800	49590
50	38860	38300	43790	42450	45040	49380	50640	48520
60	42420	40630	46390	42650	46080	52590	50960	55600
00	43010	40570	48360	42970	48300	53470	52200	54030
20	43970	40940	50400	45850	51100	57180	55680	54500
50	44590	47260	49410	47960	47270	60660	57480	

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.10 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
DETACHED HOUSES (continued)

Year	OUTER SOUTH EAST			OUTER METROPOLITAN			GREATER LONDON			SOUTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976 1	17770	16830	15860	21370	20800	19840	24840	24320	20540	16160	15030	13440
2	17410	17140	15820	22740	22670	20620	25190	24170	20010	16000	15830	14650
3	18120	17700	16540	22190	22380	20770	26040	25530	20530	15880	16210	14830
4	18070	17600	17010	22950	22450	21530	25700	25890	21620	16440	16660	14830
1977 1	18730	17880	17050	22980	22530	21940	26800	25200	21690	17070	16660	15600
2	19030	18360	17090	23550	22840	22180	30870	26900	22620	17770	16880	16270
3	19790	18590	17660	24300	23180	22350	30900	26960	22680	18600	17500	16310
4	20600	19460	17710	24780	23590	22700		27250	23850	18990	17440	16650
1978 1	21560	19990	18370	26000	24590	24230		30030	23440	20120	18410	17200
2	22520	21130	20430	29050	27520	25460		32470	26830	20230	19500	18390
3	24550	23840	22420	31240	30150	30000		33970	31430	22570	22350	20760
4	26040	25690	23510	32420	32760	33340		35420	31400	24400	23270	21030
1979 1	27570	25950	25730	34140	32990	33300		40040	32430	25940	24160	23010
2	30060	29650	27000	37420	36700	35650		41110	37530	26790	27090	25600
3	32430	31650	29790	39170	39530	39720		45010	42960	28180	29750	26610
4	33540	33570	32380	40200	41640	42200		47760	42890	30210	31720	29130
1980 1	36520	36190	32380	43950	44070	44200		47500	43720	32450	32930	29210
2	36690	36630	36690	43730	45470	46710		50500	47560	32350	34200	30920
3	37830	37220	36190	44310	46180	46390		53240	47950	33610	34900	31200
4	37740	36940	36490	44220	44490	46480		54490	47710	31960	35540	29940
1981 1	37360	36230	37000	46110	46380	45610		52740	45500	34120	34530	29960
2	37900	38480	36650	46020	45310	49480		52160	47930	34870	35910	32650
3	37950	37820	37780	43750	46340	47180		54370	47730	36050	33570	30310
4	37510	38730	35700	45660	46880	50070		57090	51040	35480	36760	30270
1982 1	40300	36740	36030	47180	47760	48420	57750	54950	47200	36320	34430	31660
2	39660	39690	40990	49140	48690	51450	60790	58630	49320	37420	36520	32070
3	39950	38830	38540	50230	50880	48970	62760	60910	51980	37570	37750	34250
4	42430	39480	38160	50500	50870	53060	61860	56360	53630	38390	36760	35280
1983 1	42850	41750	42490	49920	52820	54660	61590	59620	52520	40030	38190	37120
2	46030	43500	46010	53770	56020	57070	69010	63380	59410	42080	40700	37560
3	46500	45690	46310	55350	58690	62180	66100	62250	57540	44830	41070	39350
4	47290	46200	47130	60990	60660	64290		66350	66200	43590	41170	42260
1984 1	51620	48130	52630	62480	61820	64370		68810	65510	45130	42720	43520
2	52680	51260	53040	65450	64870	66740	77080	71580	68050	46350	44420	41890
3	53860	50820	54250	66500	66430	69900	69240	75280	70080	47070	45070	44690
4	54750	54220	54270	65180	69440	67440		75570	72490	47650	45800	45130
1985 1	56210	54770	52270	71030	70280	74190	71520	80160	79730	49450	47880	45330
2	59040	58510	55460	71900	72360	76530	91810	85950	79390	51440	48950	48930
3	59720	58270	58190	74740	73620	83370	81330	84750	85980	52920	49160	50930
4	62660	58160	57620	78590	78280	84270	88730	91640	88530	54320	50920	50920
1986 1	64830	59530	60820	74600	78570	81090		89800	87030	54430	53540	51380
2	65200	63240	64640	82160	80320	85320	10830	95470	89770	58960	53370	56020
3	70950	65620	69730	86840	87400	91760	103210	101650	99900	60020	54990	59300
4	73580	67760	75510	89090	91020	103540	114790	127850	102200	61640	56750	60110
1987 1	76020	70670	67310	98320	98140	110770		107100	111640	63940	60000	61850

ES	SCOTLAND					NORTHERN IRELAND		
	Modern	Older	New	Modern	Older	New	Modern	Older
90	14290	11500	17120	16430	13790	15670	14240	14090
20	14650	12340	17450	17380	14840	16250	15270	17170
40	15400	12580	17230	18170	15510	16690	15270	17270
40	15360	12470	18090	18130	14570	18750	16570	16140
00	15570	13120	18220	18130	15510	19560	16710	15870
40	16540	13060	18510	18740	15530	20520	16950	18750
80	16460	14200	19220	18860	15980	20040	18460	20720
30	16940	14220	20340	18980	15750	21120	19090	21430
80	16700	14430	20170	19040	17740		18090	
20	17540	14600	20500	19830	18510	22940	20350	23800
40	19680	16190	22500	21530	20710	24910	23870	23550
70	20750	17850	24130	22180	21020	24440	23570	24710
60	22510	18000	24260	21670	22250	25760	25500	26000
40	23470	18380	25140	23310	22540	29710	25360	28110
70	23330	23990	25730	25780	22760	27710	27540	30330
30	27430	25200	27880	28040	27300	29150	27520	30530
60	27930	23150	28130	29120	27720	30910	28970	30500
30	29150	23980	29540	29630	28300		30130	
20	28810	24160	31120	30010	28450	34570	29610	31680
90	29960	23740	31210	30210	30480	36330	30330	31050
40	30080	22560	31200	30500	27590			
40	29160	24480	32060	32260	27220	32400	30020	
30	31900		36750	32260	32490		29630	
	28900	25160	36530	30840	31020	29780	29660	31030
70	30320	27220	36020	32640	30320	33050	30500	32130
90	32320	28720	37540	34500	32320	34990	29310	
60	33090	30260	39140	34100	33940	33660	30660	33490
60	33730	33120	41840	34180	31770	34870	30660	30600
30	33300	31920	38840	33850	31840	33080	31260	33970
60	36050	28860	43010	36720	34910	35610	35890	28790
60	34900	33540	42290	38860	34530	32510	33230	
70	36550	29640	43150	37530	38290		33890	30100
30	36280	32150	42930	36310	34300	38690	33620	
20	41170	34380	47110	41460	38220	38910	36680	36180
90	39680	35420	46110	40570	36330	38490	38920	
60	39010	35190	42300	43490	36560	41520	37390	
10	40140	38700	47160	44280	38190			
60	42590	40640	50850	43960	42810	41930	39040	
60	41630	38860	49730	44130	42980	41570	35170	
60	43880	31950	50070	44660	46320	42110	39630	34830
10	41240	36590	50850	43230	37890	37820	39070	
90	42280	35260	53880	44930	42630	41640	40740	37370
60	43820	40880	54990	44210	47550	38630	41960	43460
60	42940	33780	51750	45060	46400	42560	39300	
10	45860	43510	49920	46570	48430		39140	

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.11 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
SEMI-DETACHED HOUSES

Year	UNITED KINGDOM			NORTHERN			YORKS & HUMBERSIDE			NORTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976 1	10070	10800	10900	9700	10360	9040	9090	9020	8150	8870	9280	9240
2	10430	11070	11330	9950	10500	10140	8780	9260	8830	9270	9360	9310
3	10650	11330	11430	10370	10660	10120	9400	9390	9160	9460	9660	9420
4	10930	11510	11890	10570	11400	10370	9290	9680	9660	9760	9980	9930
1977 1	11280	11660	12050	11080	11780	10310	9960	9790	9720	10260	10220	10170
2	11490	11920	12270	11320	11870	10990	9670	9990	9580	10580	10580	10490
3	11770	12210	12590	11410	12240	11420	10120	10100	10080	10890	10770	10790
4	12130	12320	12760	11800	12290	11120	10670	10580	10510	11130	10940	11010
1978 1	12710	13010	13590	12340	13130	12620	10700	11110	10980	12320	11560	11860
2	13120	13520	14070	12890	13360	12050	11140	11680	10650	12200	11720	12130
3	14160	14820	15480	13410	14540	13340	11320	12100	11750	13260	12740	12720
4	14890	15730	16360	13650	14980	13830	12670	12470	12560	13870	13820	13530
1979 1	15820	16480	17420	14550	15410	13900	13870	12620	13100	14630	14640	15000
2	16810	17660	18860	15470	15740	16420	13610	13780	14180	15300	15930	15420
3	18140	18850	20530	17100	17070	16940	14450	15400	15160	16130	16820	16920
4	19020	20150	21680	17020	17610	18260	15160	15950	15650	16620	17950	17810
1980 1	20180	20860	22820	17960	18390	18930	16960	17130	16270	17790	18870	18840
2	21000	21610	23580	18720	19700	19320	18500	17530	17960	19140	19450	19990
3	21330	21930	24070	18680	20050	19730	17820	18180	18030	19920	20230	20940
4	21640	21880	24080	20310	20110	19270	17910	18430	18480	19350	20120	20550
1981 1	21940	22550	24230	19870	20380	17740	19110	19640	19240	20080	20450	20600
2	22830	22820	25060	21070	21300	21320	19480	19500	19020	21500	20580	21510
3	22610	23000	25020	20840	20700	19970	18420	20480	19650	20990	20730	21300
4	23090	22730	24480	22020	20560	19880	19320	18920	18720	20560	20920	20480
1982 1	23930	22680	24790	22800	21250	20910	21320	19010	18530	22270	20540	20790
2	23880	23300	25760	21560	21100	21480	19830	19510	19700	21560	21200	22070
3	24570	23750	25860	22790	21770	21780	22140	19820	20230	23430	21010	21570
4	24980	24280	26530	23280	23130	22250	21390	20580	20380	24290	22170	22280
1983 1	25550	24920	26770	23830	22370	22950	22130	20770	19920	25170	22320	22630
2	26150	25630	28380	24740	22790	24110	22250	21360	22240	23540	22230	23150
3	27280	26130	29310	24910	24130	24210	23050	21280	22190	24100	22390	23530
4	27450	26440	29290	27070	23820	24770	23960	22260	21060	23410	23010	23690
1984 1	27830	27190	30270		24470	22690		22610	21880	23340	23230	24250
2	28220	28600	32030		25830	25360	23350	22650	23310	24700	24940	25020
3	28000	28360	32460		24090	25830		23150	24150		23850	25030
4	29530	29450	33670	27180	25530	26670	22920	24140	24060		24920	27120
1985 1	32640	33030	34530	24450	26260	28130	25850	24690	25950	26480	25830	27340
2	33750	33760	35580	26610	27330	28500	25150	25660	26020	26810	26110	28110
3	34510	34520	36110		27190	30020		24780	25340	26560	26620	27850
4	35360	34630	37070		27100	27520		24990	26760	27910	26170	28580
1986 1	37090	35550	37310		26790	28780	27310	25890	25650	28010	26490	28440
2	37500	36940	38840		28290	29150		25030	26870	27400	27340	29180
3	38160	38280	40110		26760	27220	27080	25500	27470	28520	28050	29950
4	40100	39960	42360		28440	29750		27820	27970	27210	28020	31340
1987 1	39830	41220	44250		27070	32210		27630	30680		27680	31140

Year	ST MIDLANDS		WEST MIDLANDS			EAST ANGLIA		
	Modern	Older	New	Modern	Older	New	Modern	Older
'60	8950	7810	9760	9940	9940	9380	10160	9500
'60	9330	7920	10110	10270	10240	10260	10300	10290
'60	9400	8490	10060	10430	10050	10420	10760	10150
'80	9280	8900	10250	10600	10740	10130	10750	10940
'70	9430	8500	10360	10700	10840	10400	10500	10830
'20	9720	9000	10720	11210	10840	10820	10910	10490
'70	9910	8980	10670	11370	11660	10650	10970	10750
'10	9840	9040	11360	11490	11110	11010	11590	10660
'70	10460	9590	11760	12230	12160	12240	12060	11690
'60	10670	9920	12330	12340	12360	12270	12440	11320
'10	11520	10630	12940	13990	14540	12710	12420	11860
'40	11890	10920	13710	14750	15120	13490	14390	13360
'80	12950	11360	14840	15570	15900	14980	15080	12670
'30	14010	12020	14870	16260	15930	15670	16010	14720
'50	14620	13660	17060	17340	17990	16410	17500	16500
'40	15090	13470	17760	18870	18740	18300	19660	17840
'80	15940	14840	18720	19620	19770	20430	19720	19310
'50	17510	16010	19290	19840	20570	21170	20500	19960
'40	18180	15400	19620	20170	20910	21050	20480	20200
'80	18130	16260	20410	19870	20830	21130	21080	21250
'60	18350	17300	20980	20860	21480	20760	21560	20980
'40	18640	17430	21110	21080	22220	21550	21580	21730
'30	19010	17470	22120	20840	21020	21750	21140	23360
'30	19210	18120	21350	20630	20120	22090	22750	21700
'90	18490	16930	21870	20590	21380	21450	21460	21440
'30	19470	18220	22450	20570	22260	21060	21390	22270
'20	18960	18080	22490	21050	21990	22630	22030	23820
'20	20180	19650	22030	21450	21750	22880	22700	25390
'40	20710	19100	23070	21920	22060	22920	24390	24320
'00	21390	21260	22010	22010	23320	23220	24060	24310
'80	21150	21090	22720	22470	23480	23970	24730	27520
'20	20870	19990	22250	22420	23190	23790	24460	25830
'60	22150	21070	24720	22940	23220	24240	25960	25440
'90	22500	21830	23730	23570	25380		26710	30210
'90	21740	22420	23250	23490	25090		27300	29340
'70	23440	22390	24570	24270	25790	27080	30000	30830
'50	24630	24140	26140	25290	26200	29480	30040	32820
'90	24790	24520	24550	25600	27570	28040	29970	30550
'20	25540	23800	26420	26430	28150	31390	32310	29770
'60	25720	25730	30310	27080	27790	27590	33040	33150
'00	27000	26730	27490	26530	28450	32390	32890	31700
'70	27400	27220	27450	27250	28950	33860	35010	36190
'70	27900	27270	26660	27790	28970	34450	35690	35670
'50	30630	28500	28040	29120	30000	34880	38180	39560
'50	29330	29410	28040	30140	30720	38150	39610	44170

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.11 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
SEMI-DETACHED HOUSES (continued)

Year	OUTER SOUTH EAST			OUTER METROPOLITAN			GREATER LONDON			SOUTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976												
1	11460	11760	11350	13280	13840	13120	16320	16250	15080	10210	11190	10710
2	11870	11940	11350	13950	14230	13730	13280	16760	15560	10780	11390	11800
3	11900	12160	11370	14640	14700	13880	13170	16900	15710	10910	11790	11490
4	12290	12170	11600	15000	14920	13800	18130	17060	16420	10900	11630	11730
1977												
1	12220	12430	11600	14820	14830	14030	17470	17470	16940	11400	11760	11830
2	13080	12400	11780	15430	15030	14620	19890	17630	16890	11880	12020	12010
3	13270	12740	12430	15360	15450	15190	20310	18230	16940	12160	12280	12230
4	13580	12740	12780	16050	15610	14860	19670	18610	17690	12470	12270	12730
1978												
1	14120	13640	13230	16650	16420	16080	19400	18840		12830	12930	13120
2	14630	14510	13270	17700	17620	16720	20300	20470		13180	13810	13760
3	16100	15990	14850	19620	20080	18540	23460	23040		14350	15070	14580
4	17050	17300	16060	19660	21950	20000	25430	23980		15280	15830	15700
1979												
1	17930	18560	16980	21020	22790	21210	26580	25640		16030	16960	17040
2	20000	20020	18870	23320	24580	23770	29650	28730		17320	18210	18000
3	22360	22070	20870	25200	26070	25930	30310	30290		18450	19250	20480
4	22820	23830	22980	26900	27970	27380	31940	32320		20470	21710	21750
1980												
1	24050	24760	24660	28340	29050	29190	33860	33260		22550	22080	23320
2	24390	25560	24520	28590	30120	29160	34680	34120		22490	22760	23230
3	25230	25170	25810	28930	29890	31060	33900	33990		22970	23410	23850
4	23930	25300	26390	30360	29360	29750	33560	34040		23200	23380	24650
1981												
1	25960	26220	25940	29460	30690	29820	36990	35300	34400	23020	23590	24990
2	25900	26030	26100	31960	31180	30870	36760	34980	35720	23480	24440	26090
3	25160	26690	25700	31670	31470	31710	37380	36230	36340	24250	24010	24860
4	26590	25630	25020	31930	30860	31260	36330	34390	35970	24360	24360	24420
1982												
1	27050	25910	25170	31340	30640	31340	34170	37520	36270	23760	23760	24630
2	25580	25990	26650	34010	32370	32180	34580	36650	37180	25210	24880	25370
3	26730	26830	27350	36150	32770	32740	35830	38990	37670	24350	25590	25430
4	27830	27330	28100	34690	33720	34770	38390	36920	38110	25290	24860	25980
1983												
1	28250	27770	28280	35810	34790	34590	41990	39530	39330	27210	25790	26590
2	30730	29960	29640	37670	36340	37110	43390	40920	41910	27120	26510	27990
3	32730	30660	29630	40310	36810	38500	45010	43660	44920	28010	27150	31000
4	33530	30750	30960	41520	38470	38780	44710	42980	45780	28560	27300	30880
1984												
1	33300	31600	32600	43000	39830	41530		45120	47650	28480	28810	29660
2	33450	34140	33860	42650	41870	43490	46230	51100	51020	28330	29680	31790
3	32570	33870	34590	41750	42040	45280		47670	50950	27990	30200	31970
4	35400	34800	36440	45360	43690	44960		49840	53530	31160	31160	33350
1985												
1	36740	37300	36560	47550	46370	47460	49390	52830	56680	30260	33240	35280
2	37620	38080	40050	47300	48350	50070	57200	54840	58280	32140	32410	34590
3	39300	39330	40680	47690	49110	51160		56650	61210	33160	34270	36880
4	39280	39180	42170	49500	49660	53900		56560	62490	33240	34410	36560
1986												
1	41950	41260	41800	52760	50860	53340		59420	64190	34360	35570	36860
2	42470	43880	42390	55930	53790	56950		63100	67470	35050	36170	38980
3	46590	46040	46100	61310	56530	59870		67100	72640	36620	38500	39370
4	46080	46990	47130	60690	61340	64260		69120	76050	39280	39690	42970
1987												
1	49210	49600	49990	62220	64710	67910		74510	82400	40380	40890	41980

WALES			SCOTLAND			NORTHERN IRELAND		
New	Modern	Older	New	Modern	Older	New	Modern	Older
230	10100	9650	11480	12360	12650	8960	9030	9500
530	10430	9960	12130	12980	13370	9700	9370	10270
660	10560	9990	12200	13500	13640	10140	9800	10460
1160	10840	10390	13160	13350	14810	10450	10400	10310
1490	10780	10360	13640	13700	14790	11520	10810	11440
1350	11070	10810	13240	14010	15420	11710	11180	11830
1910	11690	10590	13750	14410	15700	13220	11540	12120
480	11220	10710	13970	14360	15040	11860	11180	11590
700	11940	10790	14160	14750	15640	13480	12070	13020
1400	12280	11590	14950	15110	15030	13420	13300	14320
1850	13560	12450	16230	16270	16420	13340	14530	15230
500	14070	12530	16600	17250	17750	14780	15180	16330
910	14730	13920	17020	17690	18760	15820	15460	16440
410	16170	15400	17900	18310	19280	16130	16210	17640
910	17270	17320	19010	19610	21280	16860	17930	18930
820	18030	17160	20080	21230	24190	18980	18970	19040
620	18390	18500	20540	20560	25150	19560	19130	18720
700	19570	19090	20770	21430	27290	22060	19940	19470
130	19850	19080	20990	21520	26030	21480	19490	20410
600	19460	19890	22280	22090	25530	20000	20170	18950
500	20080	19230	22520	22130	25700	19770	19900	19900
770	20340	19480	23130	22670	25970	20860	20240	19990
830	20040	18920	20430	22650	28080	19730	20870	19570
080	20030	19680	22600	22990	27030	20930	20330	17070
740	20240	20330	24930	23360	29030	21550	20310	19070
310	20910	21470	25910	24760	28970	20520	20350	17770
650	21860	21240	26530	24300	27650	21210	22060	18820
770	21540	21700	27460	25100	26840	22810	20740	19050
920	22150	22070	27250	26170	27360	22080	21930	19710
620	23230	24270	29530	26940	29090	22000	21520	20990
270	23260	23680	30410	27780	29140	24220	22030	19650
340	23440	23380	31530	28400	29990	23600	22780	19310
490	23560	26340	30430	28140	30710	23190	22080	22800
530	25480	25340	31920	31320	32940	24160	23260	21350
	26080	27660	31110	30190	32180	24550	24240	21230
070	25040	27080	33320	30780	36580	25730	24420	22170
560	25720	27230	33400	31700	35690	25650	24350	23890
420	26550	27750	32960	31900	37310	24970	25820	24480
790	26470	26010	34180	32020	36500	26350	25480	24960
	26390	27460	34000	32350	36770	25640	25010	24660
	26840	29250	35160	32280	36480	26170	25100	25260
170	27990	29140	34250	32360	38010	25250	25790	24820
990	27740	28210	34860	32970	38370	25910	26100	23980
370	28700	33130	36460	33000	38850	25810	25480	24520
780	29550	29380	33870	32310	42080	25990	25930	

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1976 -

15.12 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
TERRACED HOUSES

Year	UNITED KINGDOM			NORTHERN			YORKS & HUMBERSIDE			NORTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976 1	10200	10890	8540	8980	8730	6270	8190	7860	5800	8120	8260	6200
2	10500	11140	8970	9530	8180	6590	8630	8030	6430	9110	8660	6440
3	10950	11380	8980	9900	9170	6530	8420	8010	6480	9480	8700	6670
4	11130	11460	9040	9740	10050	6930	9280	8060	6480	9730	8910	6490
1977 1	11230	11770	9260	10090	9930	7210	8800	8460	6470	9920	9330	6560
2	11400	11810	9440	10350	10530	7390	9050	8330	6730	10090	9080	6820
3	11710	12040	9650	11130	11190	7520	8930	9030	6770	10580	9340	7350
4	12080	12060	9620	10580	10350	7680	9760	8900	6830	10550	9540	7050
1978 1	12580	12870	10080	11360	10970	7360		9090	6850	11720	10060	7330
2	13070	13320	10410	12170	11300	8140		10160	7280	12010	10980	7510
3	14240	14780	11290	13060	11420	8480		10570	7380	12210	11170	8210
4	14810	15590	11980	12600	12040	8470	12070	10690	7840	12990	10910	8450
1979 1	15850	16410	12810	14110	12000	9310	12730	10560	8190	13800	11840	9100
2	17090	17870	13960	14600	13930	9580	12980	12280	8600	15360	13880	9640
3	18270	19070	15010	15140	14960	10130	13060	13680	9490	15640	15530	10420
4	19360	20240	16200	15350	14380	10540	13250	13810	10710	16690	15470	11080
1980 1	20670	21040	16790	16560	15840	11310	14610	15340	10550	18280	16220	11670
2	21370	21500	17430	16810	16100	11900	15070	14430	11390	19340	17700	12410
3	21870	21460	17640	17430	15870	12110	15760	16840	11870	20670	17560	13120
4	22050	21700	17700	17950	16070	12630	16240	16800	12110	21340	18030	13040
1981 1	22550	21940	17620		17220	11950	15720	16100	12210	21540	18450	13210
2	23140	22280	17930		15990	12820		17100	12480	19700	18540	13500
3	23070	22250	18070		17690	13640	16550	16830	12380	19650	17600	14120
4	23400	21380	17250		17540	13240	17740	15800	12400	20980	18220	13280
1982 1	23530	21900	17710		16520	13540	18930	15740	12670	20530	18170	13400
2	23320	22450	18090	19250	17030	14590	17570	16690	12640	21480	18370	13650
3	23510	22940	18340	18810	18990	13840		15440	12690		18310	14200
4	23530	23920	18810	20000	19200	15230	17970	17750	13680		18910	14070
1983 1	23880	24460	19250	20110	19300	14310	18300	17310	13430	20900	18720	14580
2	26110	25630	19980	20080	20410	15260	21370	18240	14250	20620	19160	15080
3	26260	25750	20430		19550	16040	20270	19780	14380	19540	19500	15280
4	26510	26260	20670		19700	15730		19500	14110	18700	21060	15350
1984 1	27090	27520	21320		20160	15920		20300	14540		19810	15570
2	28830	28420	22450		20800	16500		18450	14790		21380	16280
3	28050	28290	22680		20970	16960		19450	14740		19150	16020
4	28560	29120	23510		19860	18210		20070	16150		22210	16350
1985 1	27820	28410	25080		22680	18190		18250	15920		22190	17270
2	29760	29770	26510		22740	18930		21490	17020	22980	23310	17320
3	30530	30100	26550		22630	18200		19660	17470		23580	18390
4	32110	30330	27440		22040	20230		21850	17570		22210	17940
1986 1	33680	31330	27820		21990	18610		21100	17680		23830	18080
2	34170	32180	29120		23540	19800		19940	18070	26900	22360	18160
3	35540	33730	30340		22120	19780		21890	17870		24700	18740
4	38120	34730	31280		21840	19780		24560	18410		23370	17980
1987 1	38180	36180	33880		21580	21110		21430	19750		21640	20230

ST MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
	Modern	Older	New	Modern	Older	New	Modern	Older
280	7970	5730	9430	9110	7020	9430	9830	7940
410	8550	6000	9390	9340	7420	9330	9900	7810
280	8330	6060	9710	9430	7330	9300	10080	7420
370	8440	5990	9440	9470	7230	10010	9970	8140
710	8580	6400	9920	9370	7390	10110	10410	7930
080	8550	6810	10340	9860	7600	10120	10000	8250
330	9200	6600	9790	9930	8240	11160	10410	8580
220	8890	6530	10630	9750	8140	11170	10460	8220
390	9450	6960	11070	10900	8220	10550	11980	8610
130	9630	6780	11410	10900	8130	11300	11240	9310
720	10070	6960	12540	11940	8350	12050	12090	8780
430	10210	7350	12590	12390	9360	12370	12790	8830
360	10600	7360	13710	13350	9680	13450	14220	9940
000	11770	7620	13880	14300	10770	15280	14780	11680
130	13250	8540	15360	15580	11760	15660	14820	12840
510	12740	9210	16710	16120	12390	17550	16330	13730
550	13480	10050	18200	16890	13230	18780	16480	14080
220	14430	10380	19370	17730	13450	19770	18270	14710
510	15540	11580	19100	17900	13960	19720	18060	15950
510	14910	11230	19770	18770	14060	19350	19920	16600
510	16000	10920	21340	17620	17730	19760	20060	16190
060	15840	12230	22880	18550	15100	20920	18230	17520
380	15630	12300		19090	14640	21270	19640	16270
040	16350	12000	22000	17490	14650	21820	20810	16040
000	14810	12510	22960	17650	14160	21360	18370	15550
720	16320	12650	21050	18860	14140	21220	20290	17200
580	16210	13040	19680	17980	13980	21130	21670	17360
030	18290	12920		18810	14490	22100	21990	17570
020	17790	13240	19670	19970	15790	21380	21940	18550
070	18450	14730	19820	18620	15050	21800	25240	18950
030	19180	13730		20400	15700		22770	21210
040	18690	14570		19180	15540	22240	23140	20190
000	18200	14720	19840	20490	16500		24800	20500
000	20650	15440	22560	21170	17740		24640	22610
110	19240	14970		19220	17430		24930	23490
110	19330	15640		21100	18780	21780	27500	21680
090	20170	16100	22170	21110	18760		27560	23660
090	21480	17950	21710	21840	18700		30380	29690
090	22580	16950		22800	19300		27950	26130
090	21560	17110	23590	22330	18720	29760	30130	28020
090	21560	18890	26380	22800	18960		31020	25370
090	23400	20040	25090	23590	19610	32970	32930	28720
020	23680	21270	26330	24120	19610	32080	31100	30540
020	25230	20910		23970	20790	33140	33480	29970
	27150	22760		28200	20150		35690	32890

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AVERAGE PRICES (at approval stage) 1976 -

15.12 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
TERRACED HOUSES (continued)

Year	OUTER SOUTH EAST			OUTER METROPOLITAN			GREATER LONDON			SOUTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976 1	10640	10920	9340	13030	12850	10840	16830	14530	12450	9700	9610	8850
2	10870	11050	9580	13120	12910	11180	17540	15090	13070	9760	9980	9470
3	11740	11410	9370	14080	13230	11300	17780	15080	13020	10190	10500	9590
4	11710	11500	9540	14300	13350	11330	18240	15170	13090	10180	10300	9580
1977 1	11710	11590	9840	14260	13650	11370	18620	15890	13620	10380	10710	9440
2	11930	11640	10230	14110	13580	11350	18800	15920	13650	10560	10890	9950
3	12190	12090	9990	14410	13950	11830	20090	15890	13860	10790	10630	9750
4	12760	12180	10070	15280	13780	11580	20950	16360	14120	10990	10580	9470
1978 1	12580	13080	10720	16320	14670	12100		17090	15100	11430	11570	10280
2	13100	13390	10680	16490	15330	12510		17680	15620	12170	12100	10710
3	14700	14650	11970	18200	17720	13650		20680	17630	13170	13620	11070
4	15230	15810	12360	19340	19830	14790		21740	19030	13090	13720	11680
1979 1	16430	17110	13520	20340	19980	15750		24160	20190	14200	14530	13200
2	17540	18660	14330	21630	21460	16580		26720	23010	16250	15960	13910
3	19160	19280	16050	23870	23470	18540		27800	24380	17080	16710	15160
4	21210	21130	17780	24910	24960	20380		29960	26050	17940	18850	16880
1980 1	22290	22360	19050	26180	26260	21330		30750	26640	19400	19140	17160
2	23440	22660	20000	26840	26100	22170		31340	27990	20940	20350	17770
3	23680	22530	19700	27750	25650	22160		32380	27760	20930	19740	18560
4	23030	22280	18980	26650	26250	22620		31870	28130	21030	19870	18660
1981 1	23860	22560	19260	28560	26740	22440		32100	28060	21880	20340	19140
2	24140	23490	20260	30830	27180	23110		32430	28110	22230	21260	19490
3	23280	22990	20330	30130	26680	23090		33790	28630	22200	20630	20110
4	24680	21940	19370	29510	25970	21750	40870	30810	27150	21710	20180	18000
1982 1	24250	22850	19170	29040	26760	22770	42820	33310	28380	22690	20750	19140
2	24230	23330	20670	30150	27760	23250	40030	33880	29250	20780	20770	19540
3	23900	24420	21370	31000	28560	24020	38700	35380	29740	22190	20790	19880
4	25810	24980	21440	30610	29200	25470	36390	36220	30860	22410	21620	19400
1983 1	25960	25620	22510	31490	30040	27280	38060	36410	30870	22460	23020	20960
2	29790	26460	23240	32720	31730	28410	41820	39380	33140	25370	24320	22060
3	29970	26880	24380	33970	32060	27550	42230	38090	34490	23800	23900	21870
4	30920	27180	24030	32720	33290	29650	38270	41840	35490	25010	24100	22240
1984 1	29650	29190	25830	35040	35330	28800	40070	44440	38000	25840	25160	22790
2	30830	30450	27220	39440	36660	32160	43670	43640	39590	25050	26170	23740
3	32940	29480	27330	35060	36390	34070	41580	44690	40680	25940	26790	24480
4	29970	30930	28040	38040	37370	31940	42640	43350	41910	27300	27840	25030
1985 1	31450	32670	29530	38230	39850	34360	43020	47660	44710	26870	27910	26000
2	34020	34080	31570	40910	41180	36540	51120	50520	47120	27510	28650	26710
3	34640	33060	30580	41740	42390	37510	54020	52400	48390	28710	29280	27820
4	38920	36270	32190	44410	41830	39060	57290	52670	50150	30540	29710	28370
1986 1	38570	37450	32850	45620	45890	38970	62920	53830	53080	30620	31280	28730
2	41940	38700	35110	48300	46590	41690	56800	57080	54930	32760	31910	30680
3	41170	40240	35450	51600	48820	44270	59310	62420	58260	33070	33910	32160
4	45130	41200	38290	60390	51510	46940	65620	66900	63070	34550	33020	31920
1987 1	44020	45110	38470	57330	56690	54450	66790	68470	69260	35820	35380	34000

WALES			SCOTLAND			NORTHERN IRELAND		
New	Modern	Older	New	Modern	Older	New	Modern	Older
3570	9780	7450	10910	10690	10320			
2100	9910	7740	11680	11600	11960			
2100	9880	7750	12010	11970	12020			
2130	9930	7870	12540	11970	12110			
2980	10110	8090	12650	12520	12540			
2270	10120	7790	13120	12350	12880			
2090	10060	8270	13870	12660	13210			
2480	10830	8000	13370	12540	13330			
1090	10830	8440	12980	13250	13260			12080
1420	11580	8560		13760	12740			
2680	13020	9420		14740	13750			
2470	12780	9910		14930	16280			
2390	14140	10590		15970	16030			
2130	14810	11460		16190	17650			
2130	15980	11860	17400	17630	17960			13340
2740	17910	12670	20120	18120	19840			13060
2030	17360	13560	20110	17540	21750			13620
2940	18930	13060	20000	17520	22590			13460
2960	17710	13620	20180	17990	21770	16930		14030
2880	18500	14640	21920	19580	22050	18450		12530
2860	19320	14400	20580	21560	21130	18610		12190
2280	18290	14910	20620	21210	21230	18370		12530
	20490	14390	22590	21620	21350	20210		12070
2550	17600	14330		19580	23270	17590		12450
2250	19060	14870	22600	22790	22590	16030		12260
1760	18450	14960	23590	20810	22150	16670		13000
	18790	16120	22870	20500	22280	16520		11630
2270	20970	16440	23510	23930	24390	17350		12580
2120	20680	16130	23850	23100	25050	18160		13320
2350	22400	15990	25580	23220	26110	19050	17350	13920
2570	21810	16550	27160	24070	25900	19110		14670
1920	21680	17380	29210	22680	27350			14060
2070	21510	17340	32060	23680	26040	22170		13750
1330	22190	18190	31320	25060	29350			14070
2630	24870	17650	31620	28050	27800			14240
	23670	18920	30980	27420	29720	19860		14480
2550	25210	18650	28280	26940	29520	17960		15690
	23580	19510	28730	28410	31690	19010		15830
	24790	19960	32400	28510	28060	19670		16060
	24680	20830	33090	27450	31010	20370		16780
	25140	20930	29560	27140	30400	19080		16620
2550	25060	21590	30900	29770	30240	19520		17120
2510	25890	21520	32720	29090	33810	19510		17300
	26140	21680	33870	28190	31540	25530	19370	16050
	26200	22060	33560	28430	35640	19020		16650

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AVERAGE PRICES (at approval stage) 1976 -

15.13 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
BUNGALOWS, FLATS & MAISONNETTES

Year	UNITED KINGDOM			NORTHERN			YORKS & HUMBERSIDE			NORTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976 1	11870	11610	10900	12040	9840	7940	10050	10300	8170	11610	10210	10430
2	12200	12020	11170	12960	9830	8590	10490	10280	7910	12110	10460	11030
3	12550	12410	11490	12690	10040	8740	10640	11160	8110	12460	10640	10650
4	12810	12460	11680	12810	10280	9850	11520	11070	8550	12610	10850	12300
1977 1	13120	12620	11700	14220	10730	9110	12070	11030	9500	12660	11110	12670
2	13660	12950	11930	14720	10850	10060	12430	11500	10490	13460	11790	13320
3	14000	13190	12200	14840	10910	9750	12720	11650	10220	13070	11800	14150
4	14220	13400	12330	15250	11400		12110	12700		14020	12060	
1978 1	15250	14010	12700		11580		13610	12770		14040	12840	
2	15500	14530	13420		12140		13790	12460		14550	13490	
3	16540	16100	14480		12740		14490	14020		15680	14410	
4	17430	17080	15330		14050		15490	13880		17120	15830	
1979 1	18390	17770	16450		14100		16360	15460		17760	16850	
2	19760	19150	17970		15570		16570	16060		20220	18700	
3	20680	20600	19120	19690	17610		17610	17780		21190	18240	
4	21820	21980	20760		18570		18650	18970		20720	20370	
1980 1	22920	22830	21780	21630	19600	17030	19180	19390		22580	21590	
2	24300	23470	22080	22200	18530	17350	20570	20380	18540	24830	21800	21690
3	25230	23920	22220	23390	20960	18410	23590	21580	19370	25340	22940	22940
4	25640	23470	21950	22680	19350	19180	23760	19870	20090	27800	22520	23440
1981 1	25760	23910	21690	22490	19260		23420	23290		24850	21980	21360
2	27050	24700	22630		21390		24370	22680	19780	27450	24370	19690
3	26110	25020	22250		20420	18970	23800	22280	17030	24870	24420	20970
4	26210	24510	22470	23720	20510		25220	22160		25980	24570	
1982 1	27440	24770	22590	25320	20760		27910	23160		26820	22910	
2	27890	25510	23640	26330	20650		25710	23290		27270	25080	22950
3	27470	26020	23470	25860	22460	20930	25620	23430		27130	23900	
4	28110	26610	24410	24560	22610	19130	26230	23950		27940	25590	25320
1983 1	28090	27300	24740	26630	21440	19430	27300	24900	24650	26270	25130	26780
2	28610	28150	25860	26010	24280	19550	28130	24410	23990	27020	26760	27000
3	29100	29270	26550	27940	26360	20300	26300	24760	25050	26410	27180	24650
4	30050	29930	27300		26650	22980	28840	26440		30370	28440	27250
1984 1	30820	30660	28190		25930	20370	31060	26700		30320	29160	28600
2	32030	32150	29530		29050	19290	28620	28070		30550	29980	29130
3	31350	31870	30060		26070		29010	27450		28870	29380	29970
4	33390	33830	31280		27350	20760	32490	28640	29670		31310	37370
1985 1	34930	34050	32070		26470	22570	29540	30730		34030	31630	36430
2	34970	34780	32120		27860	18920	29270	30370	25940	34110	31880	36440
3	37240	35690	32810		30110		31650	29360	29880	36350	32690	31360
4	38370	36270	33680		30970		32310	32630		35050	30870	31460
1986 1	39500	36230	34610		30100	25110	33730	30010		36140	31840	29310
2	39700	37970	35170		31620	22590	33410	30760	31420	34160	33110	36620
3	41560	38960	37460		30550	26090	39090	31230	31000	36170	33220	36620
4	41810	40310	38670		28660			32260		37760	34000	33420
1987 1	43750	41650	39510		29830	25360		33730		43080	33000	

ST MIDLANDS			WEST MIDLANDS			EAST ANGLIA		
W	Modern	Older	New	Modern	Older	New	Modern	Older
940	9990	8910	12000	10370	11540	10240	10640	9550
620	10270	9360	12010	11030	11710	10730	10960	10190
150	10250	10300	11830	11210	11140	10780	11640	10220
310	10960	9650	13040	11220	13270	11590	11500	9850
550	10910	9760	13130	11210	13620	11970	11540	10620
600	11030	10950	13340	11710	13870	12290	11720	10720
670	11730	10490	13420	12190	14780	12540	12200	11310
580	11420	10880	13540	11900	15500	12770	12510	10960
790	11940	10800	14010	12650		13600	13070	
140	12300	10340	14420	13030		13730	13430	
100	13030	13020	15190	14310		14220	14840	
920	14130		15970	15990		15080	15160	
320	15070		17780	15540		17110	15320	
530	15910		18640	16560		19190	16940	
850	16240	17100	19320	18400		19710	18680	
800	17190	17800	20090	19180		20590	20230	
540	18820	17130	21630	19200		22400	21370	
430	20310	18930	21440	20750		23060	23050	
970	21170	20660	23160	20890	22210	23790	23720	
240	20900	19920	25370	19360	19850		23530	21120
820	21010	18850		20800		24160	22980	22730
130	21070	22370		21190			22660	21580
980	22660	19360	26240	22600	23780	26670	23890	23720
290	21160	20770		20920	25580	26520	25310	23250
530	22620	19690	25440	21190		25520	22970	
570	22930	22940	27250	21740	23140	24440	24040	25080
190	23310	23680	26600	22440	22860	25700	24690	26340
130	23690		27480	23540		24170	25380	27360
550	24200	22590	26720	23870	22100	26070	26040	26460
450	24370	25570	27630	24650	23500	27880	27280	29100
770	24800	25400	26980	25260	23110	26800	28260	
950	25120	21840		24030	22980		30590	
590	26730			25920	22670		29210	
560	26010			25400	26200		30780	28790
500	26840		27430	27630	24910	32480	31340	30960
850	29240		29740	29200	24570	31010	33220	
740	29250	25910	33120	27890	26600	34340	34190	31710
450	29320	31770	32340	30040		36350	32620	40090
530	31790	24630	35540	30120	29580	37530	37010	
170	30740			29530	29970		38370	
530	30910			27160	33450		38750	
740	32630	31620	31470	28590	31470	42090	38560	35600
550	31520	35010	36950	28730	30030	41260	39830	35380
530	34230			29710	33500	47730	43410	40740
160	35440			30910	33100		40200	

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15.13 UNITED KINGDOM AND REGIONS BY AGE OF HOUSE:
BUNGALOWS, FLATS & MAISONNETTES (continued)

Year	OUTER SOUTH EAST			OUTER METROPOLITAN			GREATER LONDON			SOUTH WEST		
	New	Modern	Older	New	Modern	Older	New	Modern	Older	New	Modern	Older
1976 1	11880	12620	12270	13200	13670	14430	12930	12900	12050	11750	12080	11600
2	12460	12920	12980	14000	14370	14030	13320	13010	12160	12240	12590	12470
3	12750	13190	12780	14080	14720	15390	13730	13450	12330	12040	13120	12520
4	12900	12930	12850	13670	14610	15370	14020	13170	12300	12080	13320	12270
1977 1	13110	13010	12930	13750	14790	15170	13880	13450	12270	12460	13710	12930
2	13140	13390	13070	14270	15480	15460	14100	13730	12340	12670	13530	13110
3	14230	13630	13950	14290	15530	15820	14890	13850	12450	12890	13650	13030
4	14060	13990	13810	15240	15610	15310	14350	13840	12640	13490	14570	12580
1978 1	15140	14560	13450	16280	16120	16270		14660	13050	14250	14730	14030
2	15040	15030	15010	16160	16370	16370		15480	14060	14970	15210	13720
3	16570	17020	16480	17800	19320	18860		17320	15040	16080	17210	15330
4	18620	18490	17390	18690	20600	21670		18430	16170	17490	18100	16820
1979 1	19120	19830	17700	19680	20850	20840		19970	17910	17800	18390	18050
2	21630	20730	18320	22560	22040	22960		21290	19950	19070	20620	18790
3	23030	23370	19870	24270	23410	24100		23280	21030	21580	22960	20160
4	26690	24230	21050	24880	25730	25340		25150	22820	23550	23630	22330
1980 1	25680	25780	22810	26250	27150	28710		25840	23910	22900	24780	24020
2	28100	25170	23340	27720	27490	27700		26650	24440	25000	25830	22540
3	29860	26110	24800	29660	27260	28340		26790	23900	26710	25120	22860
4	29270	25250	23720	30120	27090	28820		25670	23670	24610	26350	22680
1981 1	29690	25540	23210		27230	27650		26430	23800	27050	25750	23070
2	32820	27130	23760		26860	28740		26740	24150		27340	23070
3	33500	27290	22830		28150	27500		26820	24070	26430	27160	21230
4	31440	27070	23210	31390	27750	29970	27460	26450	24420	26200	24990	20920
1982 1	34450	26820	23960	32070	27830	30410	26350	27200	24140		26000	22780
2	30750	28020	23140	30000	28780	28360	26920	27500	25240	28190	27450	22960
3	29440	28470	24750	31730	29900	29790	28470	27810	24950	28090	28100	24120
4	29610	28400	25290	32040	30240	31790	29550	28430	26320	28980	28360	24360
1983 1	31070	29870	26550	32630	31360	29990	31740	28610	26660	27110	29670	27960
2	33680	30890	26990	32240	33010	34020	30990	29520	27600	29350	29800	25260
3	32190	34020	27280	34330	34990	31740	33210	31790	28970	30860	30570	27530
4	32050	33770	26550	31940	36230	33950	33040	31490	29690	30780	31800	26970
1984 1	35710	34750	26470	37110	36930	36740	34540	32620	31040	31160	33030	27280
2	38490	36940	29830	37010	39620	38600	40230	35810	32450	33700	34500	30540
3	39970	36740	29520	35220	37950	41000	36720	34850	33250	35360	35050	27550
4	37750	37280	30660	37280	40750	39780	42850	37400	35210	38980	37350	32810
1985 1	37750	38790	33990	38010	41350	40830	40490	40120	37360	39630	37210	32490
2	39390	39680	32070	38190	44130	41430	40630	41170	39450	38020	37570	32980
3	41130	40970	34250	42820	44600	45940	42510	41590	40340	42040	38520	32010
4	44980	41030	35370	43530	45430	46660	47550	44140	43800	40430	39830	32980
1986 1	48550	40970	37230	45550	47550	47080	48170	44770	44790	39270	40280	35500
2	47690	45040	37130	45830	48910	45710	49110	48550	46650	43140	42360	34560
3	49950	46070	39830	46490	51970	52150	52290	51360	50400	44580	44200	38260
4	48380	48470	41580	48940	52800	56000	52800	54250	53490	49370	45800	37430
1987 1	50640	51180	43180	49970	56060	55230	54830	58300	55440	44160	47500	41100

LES			SCOTLAND			NORTHERN IRELAND		
W	Modern	Older	New	Modern	Older	New	Modern	Older
410	10670	10090	13250	13210	9040	13550	12010	11950
700	11190	10310	12770	14120	9450	13930	13080	11550
360	11140	10520	13590	14370	9940	14630	14490	14240
440	11450	10530	13670	14440	10330	14650	14760	12980
190	11620	10670	13700	14580	10260	15550	14740	13410
650	11750	10510	14300	14930	10550	17180	15130	13500
160	11810	10830	15350	15280	10960	17060	15960	13820
210	12060	11150	15040	14890	11070	18060	15540	
030	12430		16360	15850	11360	19630	17450	
890	13370		16350	17050	11840	20420	17760	
150	14620		17830	17710	12660	21260	19690	
090	15270		17710	18360	12580	21840	20220	
160	16060		18840	18960	13270	22660	19730	
250	18530		19980	19760	14320	23200	21520	
180	18620		19450	21240	15300	24450	23350	
140	20710		22570	22480	16910	24040	24100	
590	20350		22040	22000	16920	27810	25190	
300	21210		24870	22540	17160	28280	25230	
520	21980		25640	21800	17570	26820	25390	
220	21690	22650	27190	23140	17290	25010	24690	18860
230	22750		26090	23070	16600	27210	24650	21620
970	22020		27220	24870	19070	28380	25880	22600
	23120	20020	25290	24750	18750	25820	25070	20230
210	22560	21820	29970	23920	17820	25960	25530	
050	22750	22980		25020	18270	25620	26390	20550
300	22660	20140	31660	25940	19180	27170	25340	22080
520	23880	23370	31150	26310	19040	25210	27150	23770
540	24430		32000	27040	19620	27390	27600	
360	25870	22140	31060	28020	19590	26470	27770	23710
760	25240	22730	29050	28960	21280	26740	28170	23120
080	26040	22760	31750	28560	21880	26810	27790	
940	26180	25620	32440	29790	22880	27960	29120	
	26030	24960	31990	30150	22990	28080	30290	27120
550	25930	33940	32490	32580	22670	29110	29600	26310
130	26760	27430	29410	31040	23950	27970	30800	
900	29550	30640	33720	33880	23290	28690	31260	
750	28830		33770	34300	24870	29180	31340	
400	29850	26190	33390	32900	25370	29330	32160	
980	29890	31730	33260	34490	25480	31430	33610	27930
300	32330	27220	34940	33970	25280	31280	31250	
470	31290		37080	34420	25460	30790	31750	
420	30820	27120	35270	35140	26250	32800	33110	25880
010	32980	29360	35380	34730	27180	32900	33760	33920
340	33560		35100	35690	26550	33050	31640	
300	32880		35310	36470	26930	32100	30600	

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1954-1975

15.14 REGIONS: NEW DWELLINGS

E

Year	North Eastern	North Western	Midland	Eastern	London & S East	Southern	Western	Scotland	Northern Ireland
1954 4	1776	1978	1847	2092	2533	2173	2183	2082	
1955 4	1930	2052	1848	2089	2798	2403	2341	2205	
1956 4	2071	2069	1983	2260	2579	2505	2318	2451	
1957 4	2046	2132	2087	2277	2781	2516	2466	2528	
1958 4	2052	2112	2081	2264	2969	2605	2424	2534	
1959 4	2096	2224	2264	2436	3025	2699	2471	2607	1707
1960 1	2107	2160	2266	2388	3041	2705	2418	2584	1687
2	2173	2283	2304	2545	3077	2842	2603	2687	1764
3	2196	2333	2384	2490	3118	2855	2618	2720	1906
4	2185	2328	2457	2565	3335	2894	2744	2649	1831
1961 1	2328	2367	2400	2679	3343	3043	2736	2890	1895
2	2355	2465	2538	2802	3561	3138	2865	2944	1993
3	2424	2452	2557	2882	3700	3291	2865	2866	2118
4	2445	2632	2707	2878	3697	3227	2897	3190	2067
1962 1	2440	2497	2679	2963	3746	3414	2985	3063	2193
2	2522	2548	2727	2889	3744	3503	3007	3044	2182
3	2591	2563	2775	2942	3684	3408	3016	3003	2329
4	2545	2678	2708	3087	3788	3409	3036	3256	2265
1963 1	2711	2630	2801	3119	3739	3497	3057	3120	2334
2	2645	2725	2856	3171	3898	3587	3164	3262	2178
3	2743	2723	2999	3184	3929	3529	3092	3286	
4	2704	2695	2995	3280	4133	3667	3232	3336	2277
1964 1	2720	2807	2985	3331	4103	3763	3233	3329	2449
2	2815	2906	3059	3325	4319	3841	3284	3430	2510
3	2960	3047	3109	3633	4695	3869	3366	3685	2488
4	2886	2849	3133	3807	4867	4037	3460	3690	2597
1965 1	2917	3126	3275	3907	4800	4221	3442	3786	2584
2	2963	3232	3364	3972	5137	4392	3578	4051	2657
3	3157	3299	3393	4020	5024	4422	3560	3997	2808
4	3125	3219	3414	3919	5051	4605	3697	4009	2888
1966 1	3231	3280	3488	4033	5003	4526	3588	4238	2933
2	3286	3385	3581	4085	5208	4723	3753	4191	3078
3	3473	3495	3571	4137	5182	4634	3897	4281	3075
4	3423	3628	3750	4017	5223	4773	3905	4459	3370
1967 1	3477	3613	3882	4001	5216	4895	3948	4698	3305
2	3657	3710	3962	4012	5474	4912	4041	4723	3624
3	3640	3754	4204	3989	5421	5012	3968	4392	3439
4	3711	3893	4130	4274	5482	4914	4101	4453	3351
1968 1	3691	4080	4360	4224	5853	4987	4082	4717	3913
2	3837	4093	4361	4266	5610	5352	4218	4706	3767
3	3900	4201	4475	4492	5935	5402	4291	4932	4608
4	3930	4405	4398	4550	5688	5484	4482	4722	3798
1969 1	3946	4261	4341	4425	5563	5428	4418	5164	4158
2	4194	4398	4501	4605	6283	5541	4433	5182	4291
3	4104	4177	4400	4649	5801	5619	4601	4990	4777
4	3983	4302	4554	4698	5894	5634	4437	5059	4442
1970 1	4018	4420	4638	4601	6115	5600	4515	5118	4495
2	4107	4566	4756	4633	6074	5857	4615	5201	4685
3	4273	4575	4806	4674	6461	6145	4686	5269	4683
4	4429	4463	4821	4843	6541	6017	4848	5334	4670
1971 1	4312	4793	4841	5077	6862	6220	4836	5317	4701
2	4560	4961	5194	5299	7431	6658	5125	5610	4883
3	4958	5235	5573	5674	8276	7493	5536	5843	5063

yr	North Eastern	North Western	Midland	Eastern	London & S East	Southern	South Western	Wales	Scotland	Northern Ireland
1 4	4925	5400	5698	5798	9644	8014	5678	5404	5922	5041
2 1	5309	5607	5874	6572	10187	9107	6096	5715	6358	5085
2 2	5831	6036	6219	7166	11531	10043	6988	6033	6373	5244
3 3	6557	6924	7236	8888	13326	11769	8606	6659	6886	5220
4 4	6926	7878	8126	9534	13205	12289	9153	7285	7361	5600
3 1	7341	7636	8510	10309	13704	13572	9971	7654	7681	5791
2 2	7749	8140	8429	10846	13703	13654	9998	7792	8158	6132
3 3	8224	8581	8996	10504	13980	13377	10128	8146	8510	6403
4 4	7917	8419	8890	10438	12743	13185	10285	8752	8646	6587
4 1	7963	8478	8777	10105	12551	12752	10275	8734	9165	7186
2 2	8505	8871	8999	10662	12857	12831	10165	8880	9733	7430
3 3	8483	9187	9723	10549	14124	13341	10500	9220	10139	7920
4 4	8732	9172	9608	11212	14153	13176	9994	9604	10934	8297
5 1	9265	10212	9925	11419	13975	13891	10766	10110	11185	9022
2 2	9788	10291	10877	11959	14754	14623	11041	10591	11470	9830
3 3	10180	10417	11380	12567	16836	15048	11488	10666	12470	10586
4 4	10563	10776	11645	12583	16418	15188	12235	10703	12653	11179

e: From 1971 Q4 Wales was defined as a separate region

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1952-1975

15.15 REGIONS: EXISTING DWELLINGS

£

Year	North Eastern	North Western	Midland	Eastern	London & S East	Southern	Western	Scotland	Northern Ireland
1952 4	1351	1522	1705	1710	2546	2245	1608	1511	
1953 4	1287	1220	1488	1707	2297	1895	1438	1465	
1954 4	1344	1159	1474	1583	2330	1855	1406	1351	
1955 4	1438	1372	1653	1674	2461	2007	1553	1570	
1956 4	1473	1450	1688	1712	2515	2195	1687	1815	
1957 4	1487	1510	1832	1873	2532	2112	1780	1666	
1958 4	1471	1429	1678	1786	2646	2247	1772	1677	
1959 4	1311	1196	1469	1751	2324	1827	1633	1617	1400
1960 1	1289	1228	1406	1751	2452	1852	1746	1625	1318
2	1439	1238	1507	1833	2548	1894	1769	1777	1352
3	1543	1316	1606	1807	2689	2035	1813	1706	1374
4	1425	1333	1572	2016	2709	2072	1786	1790	1345
1961 1	1368	1211	1633	1946	2867	2132	1797	1863	1550
2	1561	1317	1653	2030	2929	2191	1779	1878	1818
3	1452	1367	1784	1948	3008	2383	1862	1941	1675
4	1750	1704	1982	2427	3502	2743	2009	2186	1523
1962 1	1761	1692	1927	2181	3381	2654	2266	2079	1689
2	1788	1654	1975	2320	3436	2782	2220	2065	1689
3	1707	1748	1963	2414	3550	2794	2352	2163	1397
4	1736	1651	2046	2384	3584	2841	2330	2289	1423
1963 1	1880	1825	2158	2570	3671	2997	2360	2278	1542
2	2150	2038	2569	2842	3862	3292	2585	2536	1889
3	2338	2161	2598	2915	4077	3477	2853	2691	
4	2316	2282	2688	2882	4120	3625	2878	2720	2218
1964 1	2256	2296	2590	3079	4306	3526	2936	2624	2085
2	2371	2291	2869	3276	4472	3715	3151	2837	2287
3	2480	2430	2906	3569	4658	3710	3190	2971	2566
4	2415	2475	2971	3527	4743	4060	3355	3328	2266
1965 1	2507	2620	2858	3748	4708	4035	3203	3368	2393
2	2612	2757	3008	3960	5054	4196	3335	3363	2543
3	2684	2766	2958	3749	4948	4178	3432	3602	2579
4	2604	2618	3083	3620	4850	4154	3283	3472	2823
1966 1	2722	2684	3097	3888	4859	4217	3271	3546	2772
2	2876	2871	3173	3939	5038	4380	3469	3659	2740
3	3030	3049	3187	3943	5077	4412	3632	3938	2811
4	3006	2924	3315	3573	4924	4298	3500	3686	2620
1967 1	2878	3040	3367	3622	5234	4379	3610	3821	2823
2	2996	3205	3546	3748	5260	4521	3596	4042	3317
3	3145	3184	3644	3730	5191	4757	3568	3986	3238
4	3222	3282	3707	3767	5270	4719	3639	4074	3323
1968 1	3273	3363	3729	3704	5347	4888	3870	4033	3449
2	3327	3571	3847	4203	5539	4884	3906	4124	3446
3	3507	3596	3980	4301	5430	5046	4013	4293	3752
4	3350	3618	3894	4103	5516	4980	3964	4415	3639
1969 1	3445	3153	3962	4279	5424	5088	3942	4282	3880
2	3386	3755	3998	4454	5603	5149	4000	4375	3741
3	3441	3577	3940	4550	5578	5199	4111	4283	4005
4	3542	3757	3897	4485	5605	5148	3977	4391	4033
1970 1	3537	3856	3877	4686	5649	5218	4031	4319	3650
2	3646	3933	4133	4650	5866	5576	4004	4595	3980
3	3812	4056	4201	4731	6099	5661	4441	4573	3996
4	3785	4166	4180	4956	6200	5960	4375	4799	4146
1971 1	3889	4073	4343	4754	6378	5887	4417	4655	4318
2	4086	4321	4544	5325	6871	6447	4986	4351	4216
3	4531	4443	4648	5438	7448	6985	5246	4984	4191

North Eastern	North Western	Midland	Eastern	London & S East	Southern	South Western	Wales	Scotland	Northern Ireland
4382	4649	4873	5008	8073	7555	5426	4767	5063	4320
4432	4774	4988	6253	8534	7850	6006	5434	5314	4397
4873	5140	5479	7375	10030	9321	6673	5639	5718	4612
5546	5746	6219	9081	11708	11742	8709	6270	6565	4989
6201	6384	6948	10332	11992	12014	8674	6802	6781	5141
6444	6644	7352	9861	12123	11992	9301	7169	6831	5218
6680	7227	7787	10117	12743	12255	9239	7294	7254	5672
7666	7758	8230	10663	12704	12311	9753	8066	8154	6135
7531	7621	8145	10528	12314	11788	9738	8115	8191	6301
7760	7996	8660	10556	12259	11906	9785	8183	8726	7055
7635	8212	8409	10435	12620	11668	9535	7894	8762	7589
8069	8008	8424	10607	12785	11910	9973	8247	8896	7720
8191	8306	8771	10854	12868	11768	9884	8227	9094	8091
8449	8702	9413	10749	13125	12465	10720	9236	9806	8114
8963	9388	10056	11343	13819	13247	11259	9546	10435	8591
9856	9941	10525	12000	14450	13705	11949	9789	11170	9784
9400	9821	10547	12155	14271	13936	12234	9910	11487	10345

From 1971 Q4 Wales was defined as a separate region

NATIONWIDE BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1977-1981

15.16 REGIONS: TYPE OF BUYER

Year	Northern	Yorks & Humberside	North West	East Midlands	West Midlands	East Anglia
FIRST-TIME BUYERS						
1977 4	9600	8840	9130	8910	9930	10220
1978 1	9290	8740	9380	9040	10060	10970
2	10080	8850	9310	9260	10270	11100
3	10010	8970	10460	9450	10750	11540
4	10580	10240	10990	10270	11800	11770
1979 1	11270	10910	11400	10880	12240	12870
2	11560	11210	11620	10440	13320	13670
3	12690	11620	13120	12100	14000	14390
4	12810	12810	14350	13010	15420	16080
1980 1	13200	12980	14690	12900	15650	16830
2	13550	13240	14560	13610	15530	16830
3	13730	13530	14990	13820	16830	17590
4	13380	13760	15200	14360	16360	17570
1981 1	13690	14320	15490	14060	16540	18130
2	13230	13870	14960	13640	15990	16740
3	14460	13930	15530	13380	16650	18160
4	14480	13600	14580	13750	16650	18990
FORMER OWNER-OCCUPIERS						
1977 4	14220	13940	13890	12950	15460	14140
1978 1	13570	14370	14420	13830	16190	14850
2	14730	14470	14710	14020	16620	15780
3	16020	15800	17790	15630	18580	17680
4	17210	16300	17750	16430	20110	18910
1979 1	17700	16770	18620	18070	20090	19050
2	17450	16910	20430	17880	20290	20210
3	20310	19460	22040	19400	23230	23130
4	21230	20750	23340	21370	25510	25920
1980 1	21150	21810	24120	23210	25500	27940
2	20800	22730	24360	22690	25940	27360
3	22950	22220	25670	23470	27510	28400
4	22390	23200	24560	23710	27270	28080
1981 1	22060	22850	24450	23660	27020	29140
2	23510	24170	25750	24440	28150	27630
3	22230	23740	25620	23790	27710	28320
4	22630	22350	23730	23790	26160	28050

Iter	Outer	Greater	South	Wales	Scotland	Northern
South	East	London	West			Ireland
390	13130	13760	11210	9800	12230	12570
800	13550	13910	11510	10300	12400	13000
180	14560	14780	11720	10600	12610	13990
220	14800	15880	12750	11080	13750	15090
940	16710	16880	13380	11540	13990	14770
980	16980	18560	14080	12240	14250	16070
900	18550	20130	14870	13220	15150	16850
270	19890	21910	15900	13530	15120	17160
300	21380	23590	17810	14820	16340	17810
120	22170	24490	18250	15020	16500	18660
190	22640	24250	18650	14490	16300	18780
380	22860	24500	19050	14850	16610	17620
580	22700	24470	19380	15800	17130	17440
880	23000	24310	19300	16000	17100	17370
120	21890	24470	19070	15310	15870	15330
120	23220	24230	18850	16000	17470	17570
540	22810	24480	19270	16050	17350	16490
930	20080	20040	15210	13370	17420	18750
110	20660	20235	15680	14310	18110	19920
440	22640	22350	16940	15700	19030	20280
570	25650	24620	18950	16580	19570	21380
340	27110	26090	19680	17940	21080	21920
440	27580	27370	20490	18810	20760	22530
350	30060	29580	22280	19410	21700	24920
580	32210	31850	24980	20850	23670	25350
520	35810	34780	26910	23350	25540	26830
370	36130	35620	27980	23510	26040	28270
150	37300	36020	28320	23410	25920	28420
360	37230	36580	28550	24240	26770	28180
750	36710	36420	28510	24610	25730	28770
400	37080	36160	28530	24750	26990	27330
290	36980	36670	29740	23380	27610	28290
220	36880	36350	29240	24280	28680	28410
370	35450	35330	29030	23620	27490	25460

NATIONWIDE BUILDING SOCIETY

INDEX OF PRICES 1946 -

15.17 UNITED KINGDOM:
ALL, NEW, MODERN AND OLDER

Year (4th Quarter)	All	New	Modern	Older
1946 (4th Quarter) = 100				
1946		100	100	100
1947			125	121
1948			120	121
1949			131	131
1950			133	135
1951			145	150
1952		140	138	143
1953		140	135	144
1954		141	132	142
1955		147	139	148
1956		155	143	152
1957		159	144	156
1958		161	146	159
1959		170	153	167
1960		184	164	180
1961		198	179	198
1962		210	186	210
1963		222	210	229
1964		239	227	246
1965		257	245	264
1966		273	253	276
1967		288	272	298
1968		310	288	319
1969		322	304	338
1970		342	321	364
1971		414	390	435
1972		610	549	623
1973		697	633	732

Year (4th Quarter)	All	New	Modern	Older
'3 (4th Quarter) = 100				
'3	100	100	100	100
'4	105	105	104	106
'5	116	119	114	116
'6	125	131	123	125
'7 1	128	134	125	127
2	131	138	128	129
3	134	141	130	132
4	135	145	132	134
'8 1	142	152	138	141
2	148	159	145	148
3	163	173	161	161
4	172	183	171	171
'9 1	182	195	179	182
2	195	207	193	197
3	210	223	206	213
4	225	236	221	229
'0 1	232	251	228	235
2	239	260	234	242
3	242	264	237	245
4	241	266	235	244
'1 1	243	275	239	245
2	248	280	243	249
3	248	278	245	249
4	244	285	240	243
'2 1	247	290	242	248
2	253	292	249	254
3	256	295	254	256
4	262	302	260	264
'3 1	268	304	267	269
2	280	319	279	281
3	289	327	287	291
4	294	336	293	296
'4 1	304	344	302	306
2	321	362	319	324
3	322	358	318	329
4	336	371	333	341
'5 1	347	390	344	347
2	357	401	354	359
3	363	411	357	365
4	371	427	363	374
'6 1	377	435	368	378
2	391	447	381	394
3	406	463	395	411
4	422	478	410	427
'7 1	440	493	424	448

5. Northern Rock Building Society

TECHNICAL DETAILS

(a) Source of data and timing

Society's own lending records at the mortgage approval stage

(b) Types of data and periods covered

Average prices: 1984 Q4 to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES
HOUSE DATA	
All houses	*
New/Non-new	
Type	*
Size	
Age	*
LOCAL DATA	
Regions	
Sub-regions	*
Towns	
BUYER DATA	
First-time buyer	
Former owner-occupier	

(c) Frequency

Quarterly

(d) Geographical coverage

North of England, subdivided into six sub-regions which are defined by postcode groupings. The sub-regions are: North Tyne, South Tyne, Northumberland, Durham, Cumbria and Teesside.

(e) Method of analysis

Average prices with some adjustments made to take into account changes in sample sizes and mix of properties sampled over the previous quarter. Sales at non-market prices are excluded. Prices are rounded to the nearest £50.

16.2 LIST OF TABLES

Average prices

16.1 North of England - Sub-regions: type/age group of dwellings. 1984-

16.3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

The numbers in the grid below refer to the table compiled for this data source

ALL HOUSES			NEW	NON-NEW				
			AGE		TYPE			
					SIZE			
16.1						REGIONS		
16.1			16.1	16.1			SUB-REGIONS	
								TOWNS
								FTB/FOO
HOUSE DATA						LOCAL DATA		BUYER TYPE

(b) Three-way classifications

North of England - Sub-regions by type of dwelling by age of dwelling: Table 16.1

16.4 PUBLICATIONS

(a) Data

Press Release published by Northern Rock Building Society, Newcastle-upon-Tyne and referred to as the *Northern Rock-Homemaker House Price Survey*.

(b) Description of methodology

None

(c) Supplementary studies

None

NORTHERN ROCK BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1984 -

6.1 NORTH OF ENGLAND - SUB-REGIONS: TYPE/AGE GROUP OF DWELLINGS

£

Year	All	North Tyne	South Tyne	Northumberland	Durham	Cumbria	Teesside
ALL PROPERTIES							
1985 4	22250						
1986 1	22500						
2	23250						
3	23900						
4	24250						
1987 1	25050						
DETACHED HOUSES							
1984 4	36772	37781	39448	30333	36450	31442	38517
1985 1	37250	38350	39850	30550	36900	32050	39100
2	37750	38900	40400	30950	37350	32450	39650
3	39550	40750	42300	33100	39100	34000	41550
4	40250	41450	43050	33800	39850	34600	42250
1986 1	40650	41850	43500	34150	40250	34950	42650
2	42550	43850	45550	36500	42100	36600	44650
3	44150	46350	47250	40600	43700	37950	45050
4	44200	46400	47300	42250	43750	38000	45100
1987 1	46400	48750	48250	44350	44800	40900	47350
SEMI-DETACHED HOUSES - PRE-1946							
1984 4	23798	24401	24068	17595	23346	26000	23600
1985 1	24200	24900	24450	17900	23700	26350	23950
2	24750	25500	25000		24250		24500
3	26000	26800	26250	24000	25500	26000	24000
4	26500	27300	26750	24650	25970	26500	24400
1986 1	26800	28100	27050		26250		24650
2	27300	28650	27550	25100	26750	27250	25100
3	28400	29800	28700	26150	27850	28350	26150
4	28650	30050	28950	26400	28100	28500	26200
1987 1	29250	30650	29550	26950	29250	29200	26750
SEMI-DETACHED HOUSES - 1946 ONWARDS							
1984 4	23830	26053	28088	21771	22350	24625	20486
1985 1	24050	26200	28400	21900	22600	24750	20700
2	24200	26350	28550	22000	22750	24950	20800
3	24550	26750	28950	22300	23050	25300	21500
4	24750	26950	29200	22500	23250	25500	21800
1986 1	24950	27200	29450			25700	21950
2	25500	27800	30100	23000	24000	26250	22450
3	26000	28350	30650	24150	24450	26800	22900
4	26400	28800	31100	24650	24850	27200	23250
1987 1	27300	29750	32000	25200	26850	28100	25000

NORTHERN ROCK BUILDING SOCIETY

AVERAGE PRICES (at approval stage) 1984 -

16.1 NORTH OF ENGLAND - SUB-REGIONS: TYPE/AGE GROUP OF DWELLINGS
(continued)

£

Year	All Regions	North Tyne	South Tyne	Northumberland	Durham	Cumbria	Teesside
SEMI-DETACHED HOUSES - ALL							
1984 4	23811	24900	25530	19873	22796	25400	22111
1985 1	24100	25300	25800	20000	23150	25800	22400
2	24600	25850	26300		23600		22900
3	25200	26750	26950	23100	24150	25700	23400
4	25450	27000	27250	23400	24450	25950	23650
1986 1	25500	27500	27300	23450			23700
2	26000	28050	27850	23900	25000	26500	24150
3	26700	28800	28800	25100	25650	27250	24850
4	26950	29050	29050	25350	25900	27500	25000
1987 1	27800	30000	29950	26000	27100	28400	25800
TERRACED HOUSES - PRE-1946							
1984 4	16190	19880	14983	17400	14306	17075	12034
1985 1	16450	20050	15300	17600	14500	17250	12200
2	16750	20450	15600	17900	14750	17600	12400
3	17150	20750	15850	18150	15000	17850	13800
4	17250	20850	15900	18300	15200	17950	14000
1986 1	17350	21000	15950		15250	18050	14050
2	17750	21300	16350	18900	15600	18450	14400
3	18800	21600	17300	20100	16750	19550	15600
4	19200	22050	17650	20500	17100	20000	15900
	19950	23370	19500	21700	17700	21200	16850
TERRACED HOUSES - 1946 ONWARDS							
1984 4	19492	20994	21429	21083	15450		18750
1985 1	19600	21150	21550	21150	15500		18800
2	20100		22100		15900	19900	19300
3	21250	22350	23350		16800		19350
4	21750	22850	23900	23500	17200	21550	19800
1986 1	22000	23100	24200	23750			20000
2	22200	23300	24400	24000	17550	22000	20200
3	22250	23600	24500	23500	18000	22050	20250
4	22300	23650	24550	23550	18100	22100	20300
	22900	25150	25150	25050	19000	23550	20950
TERRACED HOUSES - ALL							
1984 4	16563	20039	15548	17825	14492	17075	12781
1985 1	16850	20400	15850	18200	14650		12950
2	17200	20800	16150		15000	17750	13250
3	17800	21500	16700		15500		14150
4	18000	21800	16900	19250	15650	18550	14750
1986 1	18150	21950	17050				14900
2	18500	22400	17400	19850	16050	19050	15200
3	19450	23350	18300	21200	17100	20050	16350
4	19700	23700	18550	21500	17300	20300	16550
1987 1	20400	25000	20000	22800	18100	21550	17550

£

ar	All Regions	North Tyne	South Tyne	Northumberland	Durham	Cumbria	Teesside
NGALOWS							
34 4	28912	30739	28557	40000	21938		26625
35 1	29250	31000	28950	40350	22250		26900
2	29750	31550	29450	41050	22600	32750	27350
3	30250	32100	29950	41750	23000	33300	27800
4	30400	32200	30100	41950	23100	33450	27950
36 1	31000	32850	30700		23550	34100	28500
2	32250	34200	31950	44500	24500	35500	29650
3	32700	34650	32350	44500	26150	35950	29400
4	33250	32250	32900	45000	27000	36600	29900
37 1	34400	36050	33900	46000	29600	37200	30600
VTS							
34 4	14338	14234	13507	16038	15639		14750
35 1	14550	14400	13700	16300	15850		15000
2	14900	14750	14000	16700	16250	14600	15350
3	15100	16000	14200	16950			15550
4	15350	16250	14450	17200	16750	15050	15800
36 1	15550	16450	14600				
2	16200	17150	15250	18000	17650	15900	16650
3	16550	17550	16050	18350	17700	16200	17050
4	17000	18350	16600	19000	18100	16750	17600
37 1	17650	18950	17150	19600	18700	17300	18150

17. Principality Building Society

17.1 TECHNICAL DETAILS

(a) Source of data and timing

Society's own records at the mortgage completion stage

(b) Types of data and periods covered

Average prices: 1983(1st half) - to date

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES
HOUSE DATA	
All houses	*
New/Non-new	*
Type	
Size	
Age	
LOCAL DATA	
Regions	*
Sub-regions	*
Towns	*
BUYER DATA	
First-time buyer	
Former owner-occupier	

(c) Frequency

Biannual (covering first 6 months and then all 12 months of each year)

(d) Geographical coverage

Wales, subdivided into counties and 3 major towns

(e) Method of analysis

Simple average prices of properties on which the Society has made loans. Sales at non-market prices are included.

17.2 LIST OF TABLES

Average prices

17.1 Wales (counties and towns): all, new and existing properties. 1983-

3 CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

The numbers in the grid below refer to the table compiled for this data source

ALL HOUSES			NEW	NON-NEW								
						AGE						
							TYPE					
								SIZE				
17.1	17.1	17.1							REGIONS			
17.1	17.1	17.1								SUB-REGIONS		
17.1	17.1	17.1									TOWNS	
												FTB/FOO
HOUSE DATA									LOCAL DATA			BUYER TYPE

(b) Three-way classifications

None

PUBLICATIONS

(a) Data

Press release. Biannual. Principality Building Society, Cardiff

(b) Description of methodology

None

(c) Supplementary studies

None

PRINCIPALITY BUILDING SOCIETY

AVERAGE PRICES (at completion stage) 1983 -

17.1 WALES (COUNTIES AND TOWNS): ALL, NEW AND EXISTING DWELLINGS

YEAR	Wales	Clwyd	Dyfed	Gwent	Gwynnedd	Mid-Glamorgan
ALL DWELLINGS						
1983 (1st half) (year)	20113					
1984 (1st half) (year)	21599 22463	22278 21065	21197 22207	19495 20800	19106 19506	19288 20255
1985 (1st half) (year)	22661 23848	23183 21225	20266 22244	22878 22572	20550 21805	19896 22139
1986 (1st half) (year)	27815	25106	28482	26839	25346	25000
NEW DWELLINGS						
1983 (1st half) (year)	26169					
1984 (1st half) (year)	27467 29647	23990	25599	28321	22956	26776
1985 (1st half) (year)	30251 33360	25543	27141	33780	24135	33735
EXISTING DWELLINGS						
1983 (1st half) (year)	19289					
1984 (1st half) (year)	21154 21788	20875	21454	19960	18778	19615
1985 (1st half) (year)	21754 22467	20463	21552	20976	21547	19813

£

South amorgan	West Glamorgan	Powys	Cardiff	Newport	Swansea
			23501		
322	19480	22212	26506	21282	20096
548	21678	20835	26733	22973	20993
031	21946	20878	24813	24730	21797
252	22761	20990	27851	25037	23318
579	26133	25612	30136	27986	28967
			27859		
786	25693	23250	29232	28029	24894
			34313		
387	28758	26964	35537	36115	35031
			22899		
745	19882	18755	26232	22026	20324
			25994		
278	21163	19372	24741	23131	22550

18. Ryden Residential Ltd

formerly KENNETH RYDEN AND PARTNERS (CHARTERED SURVEYORS)

18.1 TECHNICAL DETAILS

(a) Source of data and timing

Data supplied by the Halifax Building Society from its lending records at the mortgage approval stage

(b) Types of data and periods covered

Average prices: 1983-1985

Available data

DATA BREAKDOWNS	DATA TYPE
	AVERAGE PRICES

HOUSE DATA

All houses

New/Non-new

Type

*

Size

*

Age

*

LOCAL DATA

Regions

Sub-regions

Towns

*

BUYER DATA

First-time buyer

Former owner-occupier

(c) Frequency

Biannual

(d) Geographical coverage

Scottish cities (Aberdeen, Dundee, Edinburgh, Glasgow)

(e) Method of analysis

Simple average prices of houses mortgaged by the Halifax Building Society in four Scottish cities, updated at six-monthly intervals. Sales at non-market prices are excluded.

18.2 LIST OF TABLES

Average prices

18.1 Scottish cities: type, age and size of house. 1983-1985

CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

The numbers in the grid below refer to the table compiled for this data source

ALL HOUSES	NEW	NON-NEW	AGE	TYPE	SIZE	REGIONS	SUB-REGIONS	TOWNS	FTB/FOO
			18.1	18.1	18.1				
HOUSE DATA						LOCAL DATA			BUYER TYPE

(b) Three-way classifications

None

PUBLICATIONS

(a) Data

Scottish Residential Property Review. Ryden Residential Ltd (formerly Kenneth Ryden and Partners), Edinburgh. Biannual from January 1983 to February 1986. Discontinued.

(b) Description of methodology

None

(c) Supplementary studies

Each issue of *Scottish Residential Property Review* included a brief analysis of the Scottish housing market.

RYDEN RESIDENTIAL LTD

AVERAGE PRICES (at approval stage) 1983-1985

18.1 SCOTTISH CITIES (Aberdeen, Dundee, Edinburgh, Glasgow)

E

YEAR	Pre-1919 houses				Post-1960 detached houses 6/7 habitable rooms or 4 bedrooms				Bungalows				
	A	D	E	G	A	D	E	G	A	D	E	G	
1983	Jan-Jun	60864	26143	48373	44058	55014	40138	51245	48025	42251	30989	39699	37450
	Jul-Dec	60538	37341	49368	43686	57789	39405	55513	45580	43814	31195	43671	39900
1984	Jan-Jun	68694	38538	49348	42142	75106		53569	49304	43845	32383	40957	39348
	Jul-Dec	69035		48738	41649	69879	42371	51752	47517	40395	29542	42299	43231

YEAR	Pre-1919 houses with 3 or more habitable rooms				Post-1950 detached houses with 6/7 habitable rooms or 4 bedrooms				Bungalows				
	A	D	E	G	A	D	E	G	A	D	E	G	
1984	Jul-Dec	58719	31155	48632	41776	63712	43236	52517	45905	39151	29188	42696	42906
1985	Jan-Jun		31635	60906	43788	60330			54321	50195	30818	48137	43848

YEAR	Pre-1919 houses with 2 or more bedrooms				Post-1950 detached houses with 4/5 bedrooms				Bungalows				
	A	D	E	G	A	D	E	G	A	D	E	G	
1985	Jan-Jun		33748	59417	44835	71613		66302	56437	47769	30376	47774	43462
	Jul-Dec	53000	35496	59589	42821	72650		69298	65125	47811	32424	51136	42306

Key:

- A Aberdeen
- D Dundee
- E Edinburgh
- G Glasgow

Year	Post-1950 semi-detached houses with 3 bedrooms				All purpose-built flats				Pre-1919 flats with 3 habitable rooms			
	A	D	E	G	A	D	E	G	A	D	E	G
1983 Jan-Jun	40977	26287	32789	28494	25965	15993	21452	19531	21621	15698	18607	16589
Jul-Dec	43739	29575	35446	30388	25923	16624	24131	20866	22520	14950	21604	16547
1984 Jan-Jun	46313	27307	36239	32061	26822	18727	22726	21245	24021	15392	20938	18231
Jul-Dec	42594	29853	27489	33041	27733	18153	24734	21903	25494	16075	22545	19904

Year	Post-1950 semi-detached houses with up to 3 bedrooms				Post-1918 purpose-built flats				Pre-1919 flats with 3 or less habitable rooms			
	A	D	E	G	A	D	E	G	A	D	E	G
1984 Jul-Dec	38571	27780	34740	31127	36433	20356	25677	24299	26849	19495	25533	20496
1985 Jan-Jun	37418	29791	36294	33085	25595		26791	24896	28143	19149	25723	22280

Year	Post-1950 semi-detached houses with 3 bedrooms				Post-1918 flats purpose-built converted*				Pre-1919 flats with 1 bedroom 2 bedrooms*			
	A	D	E	G	A	D	E	G	A	D	E	G
1985 Jan-Jun	41858	31942	37629	34318	26145	18591	27059 25638*	24782	23504	15245	21142	18854
Jul-Dec	43528	30114	38470	34774	28732	21081	27155 26751*	24306	34870*	22879*	30958*	25722*
									23418	14741	20406	18290
									33371*	21116*	29547*	25261*

19. Woolwich Equitable Building Society

19.1 TECHNICAL DETAILS

(a) Source of data and timing

Valuations of typical property types made by the Society's own valuers

(b) Types of data and periods covered

Price ranges: available data

DATA BREAKDOWNS	DATA TYPE
	PRICE RANGES

HOUSE DATA	
All houses	
New/Non-new	
Type	*
Size	*
Age	*
LOCAL DATA	
Regions	
Sub-regions	
Towns	*
BUYER DATA	
First-time buyer	
Former owner-occupier	

(c) Frequency

Price ranges: annual (biannual up to 1982)

(d) Geographical coverage

United Kingdom - 36 selected towns spread across 11 regions (see data tables)

(e) Method of analysis

Price ranges: typical upper and lower prices for three types of properties with two age bands for each in 36 towns. Based on assessments provided by surveyors. Data currently rounded to nearest £50.

2 LIST OF TABLES

Price ranges

- 19.1 United Kingdom - towns: house type and size by age of house. July 1980
 19.2 United Kingdom - towns: house type and size by age of house. December 1980
 19.3 United Kingdom - towns: house type and size by age of house. June 1981
 19.4 United Kingdom - towns: house type and size by age of house. October 1981
 19.5 United Kingdom - towns: house type and size by age of house. March 1982
 19.6 United Kingdom - towns: house type and size by age of house. June 1982
 19.7 United Kingdom - towns: house type and size by age of house. September 1983
 19.8 United Kingdom - towns: house type and size by age of house. November 1984
 19.9 United Kingdom - towns: house type and size by age of house. May 1986
 19.10 United Kingdom - towns: house type and size by age of house. March 1987

CROSS-CLASSIFICATIONS OF DATA

(a) Two-way classifications

None

(b) Three-way classifications

United Kingdom - towns: by house type and size by age of house - Tables 19.1-19.10

PUBLICATIONS

(a) Data

Woolwich Review (including *Woolwich House Price Guide*) currently published once a year but at irregular intervals (formerly two to three times a year).

(b) Description of methodology

None

(c) Supplementary studies

Each issue of the *Woolwich Review* includes a brief study of a selected topic pertinent to the housing market. A list of these to date is provided below:

Housing in the 80s. September 1980

Challenging Times? January 1981

Providing Homes. July 1981

New Concepts. November 1981

Building Societies and Monetary Control. April 1982

Building Societies and Their Role in Inner City Areas. July 1982

Woolwich Housing Initiatives. November 1983

Cost of Moving. February 1985

Cost of Moving Survey. June 1986

WOOLWICH EQUITABLE BUILDING SOCIETY

RICE RANGES (typical valuations) JULY 1980

9.1 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
GREATER LONDON												
Enfield	26000	22000	32000	27000	42500	30000	42500	36000	75000	50000	75000	50000
Harrow	28500	23800	30000	27500	36500	29000	42000	38500	80000	55000	87500	60000
Weybridge	28000	21000	35000	28000	45000	32000	55000	32000	60000	40000	75000	60000
Uxbridge	34000	30000	45000	35000	48000	38000	50000	40000	70000	55000	80000	70000
Windsor	30000	24000	35000	28000	45000	32000	55000	33000	65000	45000	75000	45000
Windsor	23500	21000	29000	25000	40000	31000	35000	29000				
Windsor	33000	28000	34000	33000	33000	31000	35000	34000	60000	50000	60000	50000
NORTHERN												
Leeds												
Leeds	9000	6000	17000	14000	18500	14000	20000	16500			35000	25000
Leeds	11000	8500	18000	15000	20000	15000	22000	17500			35000	27000
SOUTH WEST												
Exeter												
Exeter	12500	8000	14000	11000	18000	14000	22000	16000	40000	25000	55000	30000
Exeter	9000	7500	16500	13700	22000	16500	20000	16500	50000	25000	35000	25000
SOUTH WEST												
Exeter												
Exeter	13000	10000	17500	14000	25000	18500	24000	20000			45000	32000
Exeter	12000	9000	15000	12500	20000	17500	22000	17500			40000	32000
Exeter	16000	9000	24000	16500	30000	16500	28000	18500	45000	22000	60000	35000
ISLANDS												
London												
London	14000	11000	22000	18700	21000	18000	24000	19500	42500	37500	45500	40500
London	10200	6200	17500	16200	21200	17500	20700	18200	43000	34000	43000	32500
London	9200	6200	14200	12800	15400	14300	22000	17500	23500	20500	31600	25800
London	11500	7500	16500	15000	17500	12000	20000	16000	32500	22000	35000	27000
EAST ANGLIA												
London												
London	15500	13000	21500	18000	26000	22000	26000	23000	40000	33000	40000	34000
London	15000	12500	20000	16500	22000	19000	24000	21000	39000	32000	37000	32000
SOUTH EAST												
London												
London	24000	19000	29500	22800	28500	22000	34000	23500	52000	40000	68000	42000
London	22000	18000	28500	24500	35000	27000	35000	27000	70000	40000	52500	44000
London	18300	14000	22600	19500	32000	21000	32000	23500	43000	35000	47000	37000
London	18000	15000	23500	20000	30000	23000	28000	24000			55000	40000
London	18000	14000	23500	22500	25200	23800	29000	27000				
London	19000	15800	30000	27500	28000	24000	30500	27800			56000	48000
London	17000	13500	23500	19000	25500	21000	28000	24500	45000	39500	52000	47000
SOUTH WEST												
London												
London	16500	13000	19500	16500	21000	19000	25000	21000	46000	40000	55000	40000
London	20000	16000	23000	19000	27000	19000	25000	19000	35000	25000	40000	27500
SCOTLAND												
London												
London			21000	18500	35000	27000	28000	24500			50000	35000
London			22000	18000	24000	20000	23000	19000	36000	25000	35000	25000
WALES												
London												
London	15000	10000	20000	15000	27000	19000	25000	18000	40000	30000	45000	30000
London	13000	9000	14000	12000	16000	14000	16000	14000			35000	28000
London	12000	8000	18000	14000	15000	10000	22000	17000			42000	29000
NORTHERN IRELAND												
London												
London	17500	8000	16000	14000	22000	17000	23000	19000	38000	35000	40000	35000
London	18000	10000	18000	16000	25000	19000	26000	19000	40000	35000	45000	35000

DOLWICH EQUITABLE BUILDING SOCIETY
ICE RANGES (typical valuations) DECEMBER 1980
2 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

E

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
MIDLANDS												
LONDON												
Wimbledon	26000	24500	31000	26000	45000	34750	42500	35000	70000	50000	70000	57500
Wimbledon	27500	22500	29500	27000	34500	28500	40000	36000	73500	52500	80000	59000
Wimbledon	30000	24000	36000	28500	45000	32000	55000	35000	60000	42000	75000	60000
Wimbledon	34000	30000	45000	35000	48000	38000	50000	40000	70000	55000	80000	70000
Wimbledon	32000	25000	36000	28500	45000	32000	60000	35000	75000	50000	80000	50000
Wimbledon	24000	22000	29000	25000	38000	30000	35000	29000				
Wimbledon	33000	28000	34000	33000	33000	31000	35000	34000	60000	50000	60000	50000
THE NORTH												
WYKINGHAM												
Wykingham	10000	6500	17000	15000	19000	15000	20000	17000			35000	26000
Wykingham	12000	9000	18000	16000	20000	16000	22000	18500			36000	28000
THE SOUTH												
WILTSHIRE												
Wiltshire	12500	7500	15000	10000	25000	16000	25000	17500	45000	30000	60000	35000
Wiltshire	10000	8000	17000	14500	22500	16500	21000	17000	50000	27000	38000	27000
THE WEST												
MERSETHER												
Mersey	13500	11000	19500	14000	25000	20000	24000	20000	50000	35000	45000	37000
Mersey	12500	9500	15500	13000	22000	17500	22000	17500	50000	35000	40000	32000
Mersey	17000	10000	25000	17000	30000	17500	28500	20000	45000	24000	60000	35000
THE SOUTH WEST												
PLYMOUTH												
Plymouth	14500	11000	22000	18700	21000	18000	24000	19500	42500	37500	50000	40000
Plymouth	11500	8000	17500	16200	21500	17500	20700	18200	43000	34000	42000	32500
Plymouth	10000	7200	14500	13000	17500	14500	22000	16000	25000	20000	35000	25000
Plymouth	11500	7500	17500	15000	17500	13000	22000	17000	35000	24000	40000	30000
THE SOUTH EAST												
BRISTOL												
Bristol	15500	13000	20000	17500	24500	20000	24000	20000	36000	28500	35000	29000
Bristol	15000	13000	20000	16000	22000	18000	23000	19000	35000	29000	34000	29000
THE SOUTH WEST												
EXETER												
Exeter	25500	18000	29000	23500	31000	22000	37400	25000	53000	43600	76500	42000
Exeter	22500	19000	27500	23000	33500	26000	35000	26500	70000	40000	52500	44000
Exeter	18000	14000	22600	19500	32000	21000	31000	22000	43000	35000	47000	37000
Exeter	18000	15000	23500	20000	32500	25000	28000	24000			55000	40000
Exeter	23500	22000	26000	23750	29000	22500	34000	27500	70000	45000	70000	45000
Exeter	21700	19000	27800	23400	31200	25600	33400	28300			47500	41300
Exeter	16300	11200	21500	19500	24000	19100	26500	23200	45900	40200	53000	47900
THE SOUTH WEST												
PLYMOUTH												
Plymouth	17500	14250	19500	16500	21000	19000	25000	21000	46000	40000	55000	40000
Plymouth	20000	16000	23000	19000	27000	19000	25000	19000	35000	25000	40000	27500
THE SOUTH WEST												
PLYMOUTH												
Plymouth			21000	18500	35000	27000	28000	24500			50000	35000
Plymouth			22000	18000	24000	20000	23000	19000			35000	25000
THE SOUTH EAST												
PLYMOUTH												
Plymouth	18000	13000	20000	16000	27000	19000	25000	18000	40000	30000	45000	30000
Plymouth	13000	9000	14000	12000	16000	14000	16000	14000	40000	30000	35000	28000
Plymouth	14000	10000	18000	14000	15000	10000	22000	17000			42000	29000
THE SOUTH WEST												
PLYMOUTH												
Plymouth	17000	8000	17000	14000	22000	17000	23000	17500	38000	34000	40000	35000
Plymouth	18000	10000	18000	16000	25000	18000	25000	18000	40000	35000	42000	35000

WOOLWICH EQUITABLE BUILDING SOCIETY
PRICE RANGES (typical valuations) JUNE 1981
9.3 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

E

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
GREATER LONDON												
Bromley	27500	24500	32500	26000	45000	35000	42500	35000	70000	55000	70000	55000
Chingford	30000	24500	37000	28500	35000	29000	43000	35500	75000	52000	77000	55500
Croydon	28000	23000	36500	29000	45500	32500	60000	35500	65000	50000	80000	56000
Ealing	40000	32000	45000	35000	48000	38000	52000	42000	75000	60000	85000	70000
Kingston	34000	26000	37000	28500	46000	32000	60000	36600	80000	50000	85000	58000
Tomford	24000	22000	29000	25000	38000	30000	35000	29000				
Uxbridge	33000	28000	34000	33000	33000	31000	35000	34000	60000	50000	60000	50000
NORTHERN												
Liddlesbrough	10500	7000	17500	15000	19500	15000	20500	17000			35000	26000
Newcastle	12500	9500	18500	16000	20000	16500	22500	18500			36000	28000
YORKSHIRE												
Leeds	13500	8500	16500	11000	26000	16000	27000	17500	45000	30000	60000	35000
Sheffield	12500	9500	17500	15500	24000	18500	23500	18500	55000	33000	45000	34000
ORTH WEST												
Lancaster	14500	12000	18500	15000	25000	20000	24000	20000	52500	37500	50000	35000
Liverpool	14000	10000	16500	13500	22000	17500	22500	17500	50000	35000	40000	32000
Manchester	18000	12500	26000	18500	31000	19000	30000	22000	45000	27500	65000	40000
ISLANDS												
Birmingham	15800	11300	22000	18700	23000	19200	25000	20000	42500	37500	50000	40000
Bicester	13500	9500	18000	16500	22000	17500	21000	18200	43000	34000	42000	32500
Nottingham	11000	7000	14500	11500	18500	14500	22000	15000	25000	19000	37500	25000
Olverhampton	14000	8500	17500	15000	20000	14000	23000	18000	35000	24000	40000	30000
EAST ANGLIA												
Ipswich	16300	13500	21000	18000	24500	19500	26000	21000	36000	28000	36000	29000
Norwich	15800	13500	20500	17000	23000	18000	24000	19500	35000	29000	35000	29000
SOUTH EAST												
Brighton	26000	20000	30000	26000	34500	24800	38000	25000	62000	44000	85000	45000
Canterbury	23000	19500	28300	24200	34000	26000	36200	27000	70000	36000	56000	48000
Cheriton	18700	14200	23500	19500	32800	20500	32000	21500	44000	35000	50000	36500
Maidstone	19000	17000	23000	21000	32000	25000	28000	24000			53000	42000
Margate	28000	22000	29500	24000	34000	24000	34000	28000	75000	45000	75000	45000
Medway	21300	18400	27000	23700	35200	31700	28000	27000			48800	43400
Southampton	18700	15600	24000	21500	26000	22300	28000	24500	42500	38500	50000	43500
SOUTH WEST												
Bristol	18400	14500	19500	16500	20600	18400	24500	20000	45000	34000	55000	34000
Lynmouth	21000	17000	24500	19500	28000	21000	27000	21000	50000	30000	50000	35000
SCOTLAND												
Edinburgh			25000	22000	40000	30000	31000	28000			58000	42500
Glasgow			23000	19000	26000	20000	27000	22000	60000	40000	50000	35000
WALES												
Cardiff	18500	13000	20000	16000	27000	19000	25000	18000	40000	30000	45000	30000
Llandudno	14000	10000	15000	12500	16500	14000	16500	14000	40000	30000	36000	30000
Wansea	14000	10000	18000	14000	15000	10000	22000	17000			42000	29000
NORTHERN IRELAND												
D Belfast	18500	8000	17500	14000	22500	17000	23500	17000	39000	34000	40000	34000
D Coleraine	18000	10000	18500	16000	24000	17500	24000	17500	40000	35000	42000	35000

OLWICH EQUITABLE BUILDING SOCIETY
CE RANGES (typical valuations) OCTOBER 1981
UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
SOUTH LONDON												
Beckenham	27500	24500	32500	26000	45000	35000	42500	35000	70000	55000	70000	55000
Bromley	30000	24500	37000	28500	35000	29000	43000	35500	75000	52000	77000	55500
Crayford	30000	23200	37000	29000	46000	32500	60000	35500	68000	50000	82000	56000
Greenwich	40000	32000	45000	35000	48000	38000	52000	42000	75000	60000	85000	70000
Plumstead	33000	25000	37000	28500	47500	32500	60000	35000	75000	52500	85000	57500
Sutton	24000	22000	29000	25000	38000	30000	35000	29000				
Woolwich	33000	28000	34000	33000	33000	31000	35000	34000	60000	50000	60000	50000
EAST LONDON												
Barnet	10500	7000	17500	15000	19500	15000	20500	17000			35000	26000
Enfield	12500	9500	18500	16000	20000	16500	22500	18500			36000	28000
MIDDLESEX												
Uxbridge	13500	8500	16500	11000	26000	16000	27000	17500	45000	30000	60000	35000
Windsor	13000	10000	17500	15500	24500	19000	23500	18500	55000	35000	45000	35000
WEST MIDDLESEX												
Barnet	15000	12000	18500	15000	25000	20000	24000	20000	52500	37500	50000	35000
Greenwich	14500	10000	17000	14000	22000	17500	22500	17500	50000	35000	40000	32000
Westerham	18500	13500	26000	19000	32000	20000	30000	22500	46000	28000	65000	40000
SOUTH MIDDLESEX												
Windsor	15800	11300	22000	18700	23000	19200	25000	20000	42500	37500	50000	40000
Westerham	13500	10000	18000	16500	22000	17500	21000	18200	43000	34000	42000	32500
Windsor	11000	7000	14500	11500	19000	15000	22000	16000	25000	19000	40000	25000
Windsor	17000	8500	18500	15000	20000	14000	23000	17000	35000	23000	40000	29000
SOUTH ANGLIA												
Windsor	17000	13500	21000	18000	24500	19500	26000	21000	36000	28500	36000	29000
Windsor	16500	13500	20500	17000	23000	18000	24000	19500	35000	29000	35000	29000
EAST ANGLIA												
Barnet	27000	21000	30000	26000	35500	25800	38000	25000	62000	44000	85000	45000
Barnet	23000	19500	28300	24200	34000	26000	36200	27000	70000	36000	56000	48000
Barnet	18700	14200	23500	19500	34500	20500	33500	21500	48000	35000	56000	36500
Barnet	20000	18000	23000	21000	35000	28000	30000	27000			55000	44000
Barnet	29000	22500	29500	24500	35000	24000	35000	28000	80000	48000	76000	48000
Barnet	22000	19000	27300	25700	28000	24000	32500	28500	54200	50700		
Barnet	19500	16500	24500	22500	27500	23500	29500	26000	43800	39500	56000	46500
WEST ANGLIA												
Barnet	19000	15000	20000	16500	20600	18400	24500	20000	45000	32000	55000	32000
Barnet	21000	17000	20000	18000	28000	19000	24000	21000	60000	30000	50000	35000
SOUTH ANGLIA												
Barnet			26500	23000	42000	31000	31500	28000			60000	43000
Barnet			23000	19000	27000	22000	28000	23000	65000	45000	50000	35000
SOUTH ANGLIA												
Barnet	19000	11000	21000	15000	30000	20000	30000	20000			60000	30000
Barnet	14500	10500	15000	12500	16500	14000	16500	14000	40000	30000	36000	30000
Barnet	17000	11000	20000	14000	20000	10000	25000	18000			50000	30000
EAST IRELAND												
Barnet	18200	8000	17500	14000	22200	17000	23200	17000	39000	34000	40000	34000
Barnet	18000	10000	18500	16000	24000	17500	24000	17500	40000	35000	42000	35000

WOOLWICH EQUITABLE BUILDING SOCIETY

RICE RANGES (typical valuations) MARCH 1982

2.5 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
GREATER LONDON												
Bromley	29000	26500	35000	28500	45000	36500	45000	35000	70000	57500	65000	58000
Crayford	29500	24000	36500	28000	33800	28000	41500	34500	74000	52000	76000	54000
Croydon	30000	23000	37000	29000	46000	32000	58000	35500	65000	48000	78000	55000
Dalying	40000	32000	45000	35000	45500	38000	50000	42000	71000	57000	80000	66500
Hillington	33000	25000	36500	28500	47500	32500	60000	35000	75000	52500	85000	57500
Wimbledon	24000	22000	28000	24000	33000	28500	33000	27500				
Wimbledon	33000	28000	34000	33000	33000	31000	35000	34000	57000	47500	57000	47500
NORTHERN												
Leeds	11000	8000	17500	15000	19500	15000	20500	17000			35000	26000
Newcastle	13000	10000	18500	16000	20000	16500	22500	18500			36000	28000
DERBYSHIRE												
Leeds	13500	8500	16500	11000	26000	16000	27000	17500	45000	30000	60000	35000
Sheffield	13000	10000	17500	15500	24500	19000	23500	18500	55000	35000	45000	35000
NORTH WEST												
Manchester	15000	12500	18500	15500	25000	20000	24000	20000	52500	37500	50000	35000
Liverpool	15000	11000	18000	15000	22000	17500	23000	18000	50000	35000	40000	32000
Manchester	18500	14000	25500	18500	31000	20000	28000	22000	45000	27500	60000	37500
MIDLANDS												
Birmingham	16500	12000	22000	18700	23000	19000	25000	20000	42500	37500	50000	40000
Coventry	13500	10000	18000	16500	22000	17500	21000	18200	43000	34000	42000	32500
Liverpool	11500	7500	15000	12000	18500	14000	20000	15000	24000	18000	40000	23000
Liverhampton	16000	8500	17500	14500	20000	14000	23000	16000	35000	23000	37500	29000
EAST ANGLIA												
Southwicks	17000	13000	19000	17000	22500	17500	25000	19000	36000	27000	37000	29000
Southwicks	18000	14000	23000	19000	23000	18000	25000	20000	35000	29000	35000	29000
SOUTH EAST												
Brighton	27000	21000	30000	26000	35500	25800	38000	25000	62000	44000	85000	45000
Canterbury	23500	20000	29000	25000	35000	27000	36500	28000				
Canterbury	18700	14200	23500	19500	36000	20500	34000	21500	48000	35000	58000	36500
Canterbury	20000	18000	23000	21000	35000	28000	30000	27000			55000	44000
Canterbury	29500	23500	29500	24500	35000	26000	36000	28000	75000	46000	74000	46000
Canterbury	25500	19500	30000	24500	30000	24800	32000	28500			60000	45000
Canterbury	19000	17500	25000	21500	26000	23000	28000	24500	39900	34000	52000	41000
SOUTH WEST												
Exeter	10000	14300	21500	17500	22000	19000	25000	20500	42500	30000	55000	30000
Exeter	21000	17000	20000	18000	28000	19000	24000	21000	60000	30000	50000	25000
DORSET												
Bournemouth			27000	23500	43000	32000	32500	29000			63000	45000
Bournemouth			23500	20000	28000	23000	29000	24000	65000	45000	55000	35000
SOUTH WEST												
Exeter	19500	11000	21000	15000	30000	22000	30000	20000			60000	30000
Exeter	15000	11000	16500	13500	16500	14000	17000	15000	40000	30000	36000	30000
Exeter	17000	11000	20000	14000	20000	10000	25000	18000			50000	30000
NORTHERN IRELAND												
Dublin	17800	8000	18000	14000	22300	17200	23000	17500	40000	34000	40000	35000
Dublin	18000	10000	18500	15500	23500	17500	23500	18000	38500	35000	41000	36000

DOLWICH EQUITABLE BUILDING SOCIETY

PER AND LOWER PRICES (typical valuations) JUNE 1982

6 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919 Upper	Lower	Post-1945 Upper	Lower	Pre-1939 Upper	Lower	Post-1945 Upper	Lower	Pre-1939 Upper	Lower	Post-1945 Upper	Lower
MIDDLESEX LONDON												
Amley	29000	26500	35000	28500	45000	36500	45000	35000	70000	57500	65000	58000
Angloford	30500	25000	37000	28500	34500	28500	41500	34500	74000	52000	76000	55000
Angloford	30000	23500	38000	30000	47000	32000	58000	35500	65000	48000	78000	55000
Angloford	40000	32000	45000	35000	45500	38000	50000	42000	71000	57000	80000	66500
Angloston	33500	25000	37000	29000	49000	33000	62500	36000	77500	54000	86000	57500
Angloford	27500	22000	30000	23000	36000	31000	36000	30000				
Angloridge	33000	28000	34000	33000	33000	31000	35000	34000	57000	47500	57500	47500
DERBYSHIRE												
Charnley	11500	8000	17500	15000	20000	16000	21000	17500			36000	26500
Charnley	13500	10000	18500	16000	20500	17000	23000	19000			37000	28500
DERBYSHIRE												
Charnley	13500	8500	16500	11000	26000	16000	27000	17500	45000	30000	60000	35000
Charnley	14000	10500	17500	16000	25000	20000	24000	19000	55000	35500	46000	35500
DERBYSHIRE WEST												
Charnley	15500	12500	19000	16000	25000	20000	25000	20000	52500	37500	50000	35000
Charnley	15500	10500	18500	15000	22000	17500	23500	18000	50000	35000	40000	32000
Charnley	18500	15000	26000	19000	32000	20000	30000	24000	50000	28000	70000	40000
DERBYSHIRE												
Charnley	16500	12000	22000	18700	23000	19000	25000	20000	42500	37500	50000	40000
Charnley	13500	10500	18000	16500	22000	17500	21000	18200	43000	34000	42000	33000
Charnley	12000	8000	17500	13000	18500	13000	20000	16000				
Charnley	16000	8500	17500	14500	22000	14500	23000	16500	35000	25000	40000	30000
SOUTH ANGLIA												
Charnley	17500	12000	20000	17000	23000	19000	25000	19000	35000	28000	40000	30000
Charnley	17500	15000	24000	19000	23000	18000	26500	21000	35000	29000	42000	29000
SOUTH ANGLIA EAST												
Charnley	28000	21800	31000	27000	36000	26500	38500	25500	62000	44000	85000	45000
Charnley	24500	21000	29800	26000	36000	28000	37300	29000				
Charnley	18700	14200	23500	19500	36000	20500	34500	21500	48000	35000	58000	36500
Charnley	20000	18000	23000	21000	35000	28000	30000	27000			55000	44000
Charnley	29500	23500	29500	24500	35000	26000	36000	28000	75000	46000	74000	46000
Charnley	25500	19500	30000	24500	35000	25000	35000	38500			60000	45000
Charnley	21000	19300	26300	22000	27000	24100	28500	25000	42000	34700	55000	43100
SOUTH ANGLIA WEST												
Charnley	20000	14300	23500	19300	23000	20000	27500	21500	44600	30000	60000	30000
Charnley	21000	17000	20000	18000	28000	19000	24000	21000	60000	30000	50000	35000
SOUTH ANGLIA												
Charnley			28500	25000	45000	33500	35000	30000			65000	45000
Charnley			24000	21000	30000	24000	29000	24000	65000	45000	55000	35000
SOUTH ANGLIA												
Charnley	19500	11000	21000	15000	30000	22000	30000	20000			60000	30000
Charnley	15500	11000	17000	13500	17000	14000	17500	15000	40000	30000	36000	30000
Charnley	17000	11000	20000	14000	20000	10000	25000	18000			50000	30000
SOUTH ANGLIA IRELAND												
Charnley	18000	8500	18500	14000	22700	17500	24000	17500	41000	35000	41000	35700
Charnley	18500	10500	19000	15700	23700	17500	23700	18200	39500	35000	41500	36000

WOOLWICH EQUITABLE BUILDING SOCIETY

PRICE RANGES (typical valuations) SEPTEMBER 1983

9.7 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
GREATER LONDON												
Bromley	35000	28000	42500	34000	55000	42000	50000	40000	85000	65000	80000	62500
Chingford	35500	28500	40000	31500	38500	33000	45500	39000	80000	60000	82000	62000
Croydon	35000	27000	45000	35000	52000	36000	62000	39000	75000	50000	85000	57000
Dalrymple	47000	38000	52500	42000	57500	45000	60000	47000	10000	82500	110000	85000
Kingston	39500	31500	45000	36000	58500	39500	72500	45000	87500	65000	95000	67500
Lombard	26000	24500	30000	27000	40000	33000	36000	31000	95000			
Wimbledon	40000	34500	40500	37500	39000	36500	42000	37500	84000	63000	84000	68000
NORTHERN												
Liddesbrough	14000	10500	18500	16500	21500	18000	22500	19500			39000	29000
Newcastle	16500	12500	20000	18000	22500	18500	24500	21000			40000	30000
YORKSHIRE												
Leeds	16000	9000	20000	13000	28000	17000	28500	18500	50000	30000	65000	35000
Sheffield	16500	12500	18700	17500	27500	22500	26200	20800	62000	38000	48500	37000
NORTH WEST												
Manchester	17300	13300	21000	18000	26000	22000	26500	22000	57500	42500	55000	40000
Liverpool	17300	11800	21000	16800	23500	18500	25000	19500	55000	37500	50000	37500
Manchester	21000	16000	27500	22000	34000	24000	34000	25000	55000	32000	70000	42000
MIDLANDS												
Birmingham	16500	12000	22000	18700	23000	19000	25000	20000	42500	37500	50000	40000
Leicester	13500	11500	18000	17000	23000	18500	22000	20000	43000	35000	44000	39000
Nottingham	14500	10500	19500	14000	22000	15500	23000	17500				
Wolverhampton	17500	11500	18500	16000	22500	14500	24500	17500	36000	27500	42500	32500
EAST ANGLIA												
Ipswich	18500	14500	24000	18500	26500	19500	27500	21000	37000	28000	46000	34000
Norwich	22000	17500	24000	19500	26000	23000	28000	22000	36000	29000	38000	31000
SOUTH EAST												
Brighton	31500	25000	35000	31000	40000	33000	45000	35000	69000	50000	90000	53000
Hartford	27500	25000	32500	29500	39500	34000	39800	34300				
Wotton	21000	15000	26000	20000	40000	22000	37500	24000	52500	37500	63000	38000
Widstone	24000	21000	26500	24500	36000	29000	34000	30000	54000	50000	58000	48000
Oxford	37500	32500	33500	30500	38500	32500	38000	35000	75000	50000	75000	50000
Reading	30000	24500	34500	31000	42500	35000	40000	35000			65000	50000
Southampton	25000	20000	27000	23000	33500	26000	32500	26000	56000	37000	63500	43000
SOUTH WEST												
Bristol	21000	15000	25000	20000	25500	22000	30000	23000	45500	35000	70000	40000
Plymouth	24000	18500	28000	24000	38000	24000	35000	26000	70000	35000	70000	40000
SCOTLAND												
Edinburgh			32500	28500	48000	38000	39000	33000			69000	49000
Glasgow			25000	23000	32000	28000	32000	28000	68000	48000	60000	40000
WALES												
Cardiff	24000	15000	26000	18000	38000	25000	37000	22000			70000	42000
Llandudno	17300	13000	19000	15800	20000	16000	20500	16500	42500	30000	38000	30000
Swansea	19000	14000	24000	18000	30000	18000	30000	20000			60000	35000
NORTHERN IRELAND												
Dublin	19000	8500	19500	15000	23500	17500	24500	18000	44000	37000	44000	37000
Coleraine	19200	10800	19500	16000	24000	18000	24200	18500	41500	36000	43000	37000

OLWICH EQUITABLE BUILDING SOCIETY

CE RANGES (typical valuations) NOVEMBER 1984

UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
TER LONDON												
ley	40000	33000	50000	40000	62500	47500	60000	47500	110000	80000	100000	75000
gford	39000	30500	45000	38000	54000	42000	49000	43000	98000	75000	95000	75000
don	41000	33000	50000	41500	65000	44000	70000	48000	100000	60000	105000	65000
ng	57000	47000	63000	50000	69000	54000	72000	56000	135000	100000	135000	100000
ston	45000	35000	52000	44000	66000	46000	80000	52000	92000	68000	100000	71000
ord	32900	30600	39500		51200	41800					72100	70400
idge	48500	43000	49000	45000	50000	44000	50000	46000	100000	80000	100000	80000
HERN												
lesbrough	15500	11500	19500	17500	23000	19000	23500	20500			41500	30500
astle	18000	13500	20500	18500	23500	19500	25500	22000			42500	32000
SHIRE												
s	18000	11000	23000	16000	30000	19000	30000	21000	60000	35000	70000	35000
field	18500	14500	20000	18500	29000	23500	28000	22500	63000	38000	52000	38000
I WEST												
ter	18500	15000	22500	19500	27500	22500	28000	22500	57500	42500	55000	40000
pool	18500	12500	22000	18000	25500	19500	26000	20000	55000	40000	50000	40000
vester	22500	16000	27500	22000	34000	25000	34000	25000	60000	35000	70000	44000
ANDS												
ingham	18000	12000	22000	18000	23000	19000	30000	22000	45000	37500	65000	40000
ester	15500	12500	20000	18000	24000	20000	25500	22000	45000	39000	50000	44000
ingham	16500	12000	21000	16000	22000	17000	25000	19500	53000	30000	60000	40000
erhampton	20000	13000	20500	16500	26000	16500	27000	18000	42500	32500	50000	39000
ANGLIA												
ich	20000	17500	27500	20000	28500	24000	33000	27000	56000	38000	65000	50000
ich	23500	18500	27000	24000	32000	26000	29000	26000	53000	40000	65000	45000
I EAST												
ton	36750	30000	42500	37500	49600	41500	57000	44000	80000	63000	101000	65000
ford	32000	29500	37500	35000	43500	40000	45000	41000				
l	24400	18500	31500	24200	47300	27000	46200	28900	59800	43200	72800	45200
stone	28000	24500	31000	28000	42000	37000	40000	37000	65000	55000	68000	58000
d	40000	32500	40000	32500	42000	35000	42500	36000	90000	70000	90000	70000
ing	32000	27500	37500	32500	50000	40000	45000	37500			85000	60000
lampton	29500	23500	31500	27000	42000	30000	37500	30500	68000	49000	70000	49500
I WEST												
col	22500	17000	27000	22000	28000	24500	32000	26000	50000	37000	80000	46000
uth	28000	23000	33000	28000	38000	27000	38000	28000	80000	35000	80000	50000
AND												
urgh			34500	31500	50000	41000	45000	38000			75000	55000
ow			29000	26000	38000	34000	36000	33000	75000	57000	70000	50000
ff												
udno	26000	17000	31000	24000	45000	21000	38000	28000			95000	45000
ea	18500	14000	21000	17000	22000	17500	22500	18500	42500	30000	40000	30000
ea	23500	16000	27000	22000	38000	25000	36000	23000			80000	42000
ERN IRELAND												
st	20500	9000	22000	17000	26300	18300	26800	19000	48000	39000	48000	39000
aine	20100	11500	21000	18000	26500	19200	26700	20000	44000	38000	45000	38000

WOOLWICH EQUITABLE BUILDING SOCIETY

PRICE RANGES (typical valuations) MAY 1986

9.9 UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

E

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
GREATER LONDON												
romley	47000	39000	60000	45000	70000	55000	70000	55000	130000	90000	140000	90000
hingford	48500	39500	53500	41500	65000	53000	65000	53000	123000	85000	110000	85000
roydon	55000	40000	59000	47000	75000	55000	92000	65500	135000	76000	150000	92500
aling	68000	57000	75000	60000	80000	65000	84000	66000	165000	120000	165000	120000
ingston	52000	44000	60000	52000	78000	53000	86000	58000	110000	75000	122000	90000
omford	40000	36500	46000	40000	63000	47500	58000	49000	98000	78000	90000	70000
xbridge	57500	50000	58000	53000	59500	52000	59500	55000	122000	95000	122000	95000
MIDLANDS												
iddlesbrough	16500	12000	20500	18000	23500	19000	24500	21000			43000	32000
ewcastle	18500	14500	21500	19000	24500	20000	27000	23000			45000	33000
DERBYSHIRE												
ees	20000	12500	30000	18000	45000	22500	45000	25000	80000	40000	80000	40000
heffield	20500	16000	21500	20500	32000	24500	30500	24500	67500	41000	57000	40500
DERBYSHIRE WEST												
hester	20000	16000	24000	20000	28000	23000	29000	23000	65000	45000	58000	42500
iverpool	19500	12000	23000	18500	26000	20000	26000	21000	58000	42500	55000	42500
anchester	25000	18000	30000	24000	40000	27500	37500	26000	70000	40000	80000	48000
THE ISLANDS												
irmingham	18000	12000	22500	18000	25000	19000	32500	24000	50000	40000	75000	45000
icester	19000	16000	23000	20000	29000	23000	28000	25000	55000	44000	69000	46000
ottingham	17000	13500	23000	17000	25000	18000	28500	21000	55000	30000	65000	40000
olverhampton	21000	13000	21000	16000	27000	16500	28000	19000	47500	35000	52000	42000
EAST ANGLIA												
pswich	25000	22000	32000	28000	35000	27000	38000	30000	65000	45000	75000	57000
orwich	25000	22000	28000	25000	38000	29000	39500	32000	58000	48000	80000	45000
SOUTH EAST												
righton	44000	37000	53500	47500	63000	52500	69500	56500	97500	77500	117000	81000
artford	36500	33500	44000	40000	51000	46000	50000	44500				
uton	27500	20000	36000	27000	54000	32000	54000	34000	67500	47000	77000	50000
aidstone	36000	32000	39000	36000	50000	45000	48000	44000	75000	65000	75000	67000
xford	53000	37000	55000	39000	65000	42000	55000	42000	105000	85000	100000	85000
reading	40000	32000	43000	38000	62000	45500	55000	42000			95000	69000
outhampton	33000	27500	35000	29000	43500	32500	43000	34000	80000	60000	82000	56000
SOUTH WEST												
ristol	26500	20000	30000	25000	32500	27000	36500	28000	60000	42000	85000	50000
lymouth	32000	26000	34000	29000	42000	32000	42000	33000	85000	45000	85000	55000
SCOTLAND												
inburgh			38000	33000	55000	46000	48000	42000			83000	62000
lasgow			30000	27000	42000	38000	40000	36000	80000	60000	75000	52000
WALES												
ardiff	30000	17000	33000	26000	50000	28000	40000	30000			110000	50000
landudno	19500	15000	22500	18500	23500	18500	24000	19500	46000	33000	46000	33000
wansea	28000	16000	28000	23000	40000	25000	37000	24000			90000	45000
NORTHERN IRELAND												
elfast	24100	9000	24600	18000	28200	19000	28700	19000	55000	42000	55000	42000
olerraine	23000	13000	24000	19000	27500	20000	28000	22500	50000	40000	50000	40000

OLWICH EQUITABLE BUILDING SOCIETY

CE RANGES (typical valuations) MARCH 1987

OF THE UNITED KINGDOM - TOWNS: HOUSE TYPE AND SIZE BY AGE OF HOUSE

£

	2/3 BEDROOMED TERRACED				3 BEDROOMED SEMI-DETACHED				4 BEDROOMED DETACHED			
	Pre-1919		Post-1945		Pre-1939		Post-1945		Pre-1939		Post-1945	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
GREATER LONDON												
Weybridge	56000	47000	71000	54000	82000	63000	85000	68000	160000	100000	170000	105000
Windsor	57500	47500	65000	50000	80000	63000	77000	60000	160000	105000	145000	105000
Wokingham	63000	49500	70000	55000	87000	65000	97000	73000	150000	88000	163000	98000
Woking	80500	68500	89000	72000	95500	77700	99750	78750	200000	145000	200000	145000
Wokingham	74000	59000	85000	68000	98000	78000	108000	75000	129000	98000	165000	120000
Wokingham	47000	44600	53000	45800	70000	53500	67300	55000	106000	81000	93000	76000
Wokingham	69000	60500	69700	64000	72000	63000	62000	66200	147000	114500	147000	114500
MIDLANDS												
Leicester	17000	12500	21000	18000	24000	19500	25000	21500			44000	33000
Leicester	19000	14500	22000	19500	25000	20000	27500	23500			46000	34000
SOUTH WEST												
Sturminster Newton	26000	15000	32500	22500	50000	26000	50000	30000	80000	45000	80000	45000
Sturminster Newton	23000	17000	23000	21500	35000	25000	33000	25000	75000	44000	63500	44000
WEST												
Weston-super-Mare	23000	17000	26000	22000	30000	25000	31000	25000	80000	50000	72000	47500
Weston-super-Mare	20000	12000	24000	19000	27000	21000	27500	22000	62000	45000	60000	45000
Weston-super-Mare	30000	19000	33000	26000	40000	28000	39000	29000	75000	45000	82500	52000
SOUTH EAST												
Wokingham	20000	12000	24000	18000	30000	20000	35000	25000	60000	40000	85000	45000
Wokingham	23000	18000	25000	23000	33000	26000	33000	27000	60000	50000	77000	48000
Wokingham	19000	15000	23500	18500	26000	20000	31000	22000	55000	30000	65000	40000
Wokingham	23000	15000	24500	18000	29500	18000	30000	21000	50000	37500	57500	45000
SOUTH WEST												
Wokingham	29000	25000	36000	28000	41000	35000	43500	38000	60000	48000	90000	50000
Wokingham	31000	26000	35000	30000	38000	29000	39500	34500	65000	48000	85000	55000
SOUTH EAST												
Wokingham	53000	46000	63000	56000	75000	64000	82500	68500	115000	94000	137500	99500
Wokingham	46500	41000	53000	49000	63000	55500	62000	54000				
Wokingham	35000	25000	42000	30000	60000	39000	60000	38000	75000	50000	90000	52000
Wokingham	44000	36000	50000	41000	62000	48000	66000	50000	85000	75000	100000	80000
Wokingham	59700	42900	60200	45000	72800	48900	62400	48900	123500	87500	111250	89500
Wokingham	59000	41000	59000	48000	80000	50000	70000	50000	130000	90000	120000	87000
Wokingham	38000	29000	37000	34500	48000	37500	48000	36500	85000	67500	90000	63500
SOUTH WEST												
Wokingham	30000	22800	35000	29000	37500	31500	42000	33600	68800	48000	100000	58500
Wokingham	34000	26000	35000	31000	44000	33000	43000	36000	100000	47000	100000	60000
SOUTH EAST												
Wokingham			40000	35000	55000	45000	48000	42000			89000	67000
Wokingham			33000	28000	45000	38000	42000	36000	80000	65000	75000	55000
Wokingham	37000	34000	30000	28000	36000	32000	38000	33000	70000	50000	60000	45000
Wokingham	75000	55000	48000	42000	65000	55000	48000	42000	100000	70000	85000	60000
SOUTH												
Wokingham	33000	18000	37000	26000	52000	33000	52000	33000			130000	52000
Wokingham	21000	16000	24000	19000	25000	20000	25000	21000	54000	37500	54000	37500
Wokingham	32000	17000	33000	24000	45000	25000	45000	27000			95000	48000
MIDLANDS												
Wokingham	25000	9500	26500	19000	29500	19500	29500	19500	56500	42000	56500	42000
Wokingham	23000	13000	24500	19000	27500	20000	28000	22500	50000	40000	50000	40000

Appendices

APPENDIX A

Other Sources of Data

This Appendix gives details of other sources of information for which the statistics themselves are not included in the data tables in this book. In the main they are sources which rely on information which is covered in the data tables (the local authorities listed below, in particular, fall into this category); sources which provide occasional analyses but do not publish regular series; or sources which have now been discontinued. The sources covered here are as follows:

- 1 Bradford & Bingley Building Society
- 2 Bristol & West Building Society
- 3 Countrywide Estate Agents
- 4 Estates Gazette
- 5 Fox & Sons Estate Agents
- 6 Guardian Guide to House Prices
- 7 London and Cambridge Economic Service
- 8 National Association of Estate Agents
- 9 National & Provincial Building Society
- 10 Parkers Property Price Guide
- 11 Property Auction Guide
- 12 Royal Institution of Chartered Surveyors
- 13 Under the Hammer Property Records
- 14 University of Reading, Department of Land Management and Development
- 15 University of Ulster, Department of Surveying
- 16 Local Authorities:
 - Bedfordshire County Council
 - City of Bristol Planning Department
 - Cheshire County Council
 - Dorset County Council
 - Lancashire County Council
 - Northamptonshire County Council
 - Oxfordshire County Council
 - County of South Glamorgan
 - West Sussex County Council
 - Wiltshire County Council

1 BRADFORD & BINGLEY BUILDING SOCIETY

Housing Bulletin has been published quarterly since March 1985. Each issue takes for its theme a particular aspect of the housing market as it relates to the Society's own mortgage lending. Statistics are presented in tabular form with brief commentaries.

Who Borrows from Bradford & Bingley? and What Sort of Property Does Bradford & Bingley Lend On? March 1985, March 1986 and March 1987

Women Borrowers June 1985

On What Type of Properties Does Bradford & Bingley Lend? September 1985 and December 1986

Bradford & Bingley and Home Improvement Lending December 1985 and October 1986

BRISTOL & WEST BUILDING SOCIETY

Factual Background 1967 to date. This bulletin contains tables which draw together information on building societies and housing statistics in general from a number of well known published sources. The Society does not produce original data.

COUNTRYWIDE ESTATE AGENTS (formerly MANN COUNTRYWIDE)

This is an association of estate agents throughout the United Kingdom designed to assist company personnel and individuals in moving house within the United Kingdom.

A booklet entitled *United Kingdom Residential Property Price Index* is published on an irregular basis (about twice a year) and gives information on estimated typical prices for five property types and sizes in over 300 towns throughout the United Kingdom. The prices quoted are asking prices and are intended as a guide for prospective purchasers. Eight issues of the booklet have been published so far, the latest at the time of writing (March 1987) being Autumn 1986.

ESTATES GAZETTE

National Homes Network Market Survey appears annually in the mid-January issue of *Estates Gazette*. The information in this survey is supplied to *Estates Gazette* by members of National Homes Network, which is an association of smaller firms of estate agents with offices throughout the United Kingdom and in the Irish Republic. In total, about 600 offices are covered.

The survey makes no claims to be comprehensive but seeks to give a flavour of the housing market over the previous year. Price ranges and price movements are given for three house types (detached, semi-detached and terraced) broken down by three age groups (pre-1945, post-1945 and new).

FOX & SONS, ESTATE AGENTS

An Index of House Prices published jointly by Fox & Sons, Exeter and the University of Exeter. Included a weighted index of house prices quarterly from 1979 Q1 to 1982 Q4, covering all dwellings sold by Fox & Sons during this period.

THE GUARDIAN

Guardian Guide to House Prices. Published monthly in the *Guardian* from 31st May 1974 to 5th May 1975 (discontinued). The guide showed average house prices for five particular house types/sizes in 43 towns throughout the United Kingdom.

LONDON AND CAMBRIDGE ECONOMIC SERVICE (LCES)

The British Economy: Key Statistics 1900-1970, Times Publishing Company, London, 1971 (discontinued). An index was compiled by the London and Cambridge Economic Service using data supplied by the former Co-operative Permanent Building Society (now Nationwide) and the Halifax Building Society. It was based on crude average prices and covered only secondhand houses sold with vacant possession and for owner-occupation. Houses with shops and sales to sitting tenants were excluded.

The series is now of historical interest only but it provides a useful index of prices from 1946-1970 (the Nationwide Building Society series for the period from 1946 is given in Table 15.17). An index for the period 1900-1945 was also published by LCES but it was based on indices of building costs rather than house sales.

A description of the methodology is given in: Adams, A.A. "An Index of House Prices", *London and Cambridge Bulletin. The Times Review of Industry*, December, 1954, p.xii.

NATIONAL ASSOCIATION OF ESTATE AGENTS

Guide to House Prices. Published 1978 Q1-1978 Q4 (discontinued). Four quarterly editions of the guide were published, giving average prices for the quarter and an index of prices for 55 towns throughout Great Britain. Information was supplied by estate agents in response to a questionnaire. Prices for six property types/sizes were given.

9 NATIONAL & PROVINCIAL BUILDING SOCIETY

Occupational Lending Survey. Seven surveys have been published - four annual surveys up to 1983, another covering the last quarter of 1985 and two in 1986, for the second and fourth quarters. The Society intends to continue the survey on a twice yearly basis.

Each survey examines a sample of mortgages granted during the previous quarter. It records average incomes, purchase prices, percentage advances and mortgages under different occupational headings. Occupations are categorized into six groupings - top management and professional; junior and middle management; manual workers; self-employed; services; others. Statistics are given for each occupational type, as well as for each group and detail age of property purchased, type of loan and type of purchaser. Information on first-time buyers is also given and compared with the figures for all buyers.

10 PARKERS PROPERTY PRICE GUIDE

Published monthly from 1972 to 1976 (discontinued). A guide to house prices at the local level. The source of data is not specified in the guide. Price ranges and average prices were given for seven house types according to number of bedrooms for several hundred towns in England, Scotland and Wales and areas of London. The location of representative, typical houses of each type were given for each town, enabling an interested buyer to go and look at actual houses to get an idea of what price he might have to pay for a similar house in that area.

11 PROPERTY AUCTION GUIDE

Published fortnightly from April 1st 1987 to date. This pocket-size guide lists forthcoming auctions in the United Kingdom and subsequently the auction results by area and street. It also includes a quarterly review of market trends.

12 ROYAL INSTITUTION OF CHARTERED SURVEYORS

Housing Market Survey. Issued monthly in a press release: *RICS News*. March 1984 to date. This gives the results of a questionnaire returned by members of the RICS. The survey shows the percentages of agents reporting changes in house prices of the following magnitudes - very much higher (about 8% or more); much higher (about 5%); slightly higher (about 2%); the same; or lower. Changes are recorded as a comparison with average prices three months before. Six house types are covered: pre-1919 terrace, inter-war semi-detached, inter-war detached, post-war semi-detached, post-war detached and new houses.

The Survey covers agents in England and Wales and each issue gives both the national figures and results for one selected region; a different region is chosen each month.

13 UNDER THE HAMMER PROPERTY RECORDS

Published fortnightly since 1905 by Rogers (Printers) Birmingham Ltd. The publication, in five editions, summarises forthcoming property auction sales and, subsequently, the prices realised at auction. The five editions cover East Midlands, West Midlands, North East Yorkshire, Lancashire and Cheshire, and the South West.

14 UNIVERSITY OF READING, DEPARTMENT OF LAND MANAGEMENT AND DEVELOPMENT

Byrne, P.J. and Mackmin, D.H. *The Residential Market in Oxfordshire and Parts of Berkshire and Buckinghamshire. An Analysis and Review.* Biannual 1975-1981 (discontinued).

Each issue contained statistical analyses of six months' data provided by Messrs. Buckell and Ballard, Chartered Surveyors of Oxford and branches. Analyses of prices by house type and size were presented; price ranges, arithmetic means and medians were given.

15 UNIVERSITY OF ULSTER (JORDANSTOWN), DEPARTMENT OF SURVEYING

Northern Ireland Property Market Analysis. Published quarterly from 1984 Q4 to date. The reports are based on questionnaire surveys carried out by the Property Market Analysis Unit within the Department of Surveying. Information is obtained from estate agents on houses sold throughout Northern Ireland. House prices are given by property type, age, location and size for eleven areas and for Northern Ireland as a whole.

16 LOCAL AUTHORITIES

BEDFORDSHIRE COUNTY COUNCIL

Since 1972 Bedfordshire County Council Planning Department has conducted eight surveys of house prices, using data supplied from three sources: Nationwide Building Society, Abbey National Building Society and the Council's own regular questionnaire survey of local estate agents. In these surveys house prices in Bedfordshire are compared with those in surrounding areas, with particular reference to different types of properties and of buyers.

CITY OF BRISTOL PLANNING DEPARTMENT

Private Housing in Bristol, 1982. The report includes a survey of house prices for the period January to March 1982, covering 34 districts of Bristol. Prices are based on over 600 observations taken from local newspapers and estate agents' particulars. The prices shown reflect average prices *asked* for a range of properties from two-bedroomed terraced to four-bedroomed detached, excluding flats. They are not, therefore, necessarily the prices realised for sales of these properties.

The Private Housing Market in Bristol, May 1985. Survey of advertised house prices for first quarter 1985, as above.

CHESHIRE COUNTY COUNCIL

House Prices in Cheshire. An Analysis of Information from the Abbey National, Halifax and Nationwide Building Societies. February 1986. The report is divided into two parts. The first analyses house-price variations within the county, while the second looks at the rate at which prices have risen over time (1979-1985). In both parts comparisons are made with house prices outside the county.

DORSET COUNTY COUNCIL

House Price Survey, 1981-1986. This is an annual survey of the housing market in Dorset, based on asking prices as advertised in six or seven local newspapers during the first two weeks in April. Average (median) house prices by type of property by district are compared with those of earlier surveys (back to 1976 for some districts). Each issue of the survey looks at a different aspect of house prices; for example, the 1986 survey shows the availability of lower priced housing, suitable for purchase by first-time buyers, in the various districts covered by the survey.

Joint Dorset County Council/South Dorset Association of Estate Agents Survey of the Property Market in the Weymouth/Portland/Dorchester Area, May 1985. Results of a survey carried out among estate agents in the Dorset area during April/May 1985 based on responses to a questionnaire asking for details of each property sold during the survey period. Results given show average prices by district, by type and age of property and by family type.

A separate report, dated August 1985, compares the results of the above survey of estate agents with those of the 1985 newspaper survey.

APPENDIX A

LANCASHIRE COUNTY COUNCIL

Houses for Sale. A Survey of the Private Housing Market in Lancashire, June 1974. A detailed survey, published in July 1976, covering two aspects of the house market - the characteristics of houses for sale and their average prices and price ranges in the county. Several housing characteristics and their spatial variations are examined and cross-tabulated: type, age, locational environment and the provision of household amenities, garages, central heating and gardens. Average house prices and price ranges are considered in relation to the availability of each particular characteristic or attribute. Trends in average house prices over the county between 1970 and 1976 are examined and comparisons made with the national experience, as shown by Nationwide Building Society.

House Prices in Lancashire. October 1984. A similar but much less detailed survey. Both used data obtained from newspaper advertisements and estate agents' particulars of asking prices.

NORTHAMPTONSHIRE COUNTY COUNCIL

House Sales Survey. Quarterly reports from April 1979 to mid-1982. House-price data at county and district level supplied by Nationwide and Abbey National Building Societies were analysed alongside more local information on house prices collected by questionnaire survey of local estate agents, developers and building societies. Prices were analysed by house type, buyer type, and origin of buyer (whether in-county or migrant purchaser) and relative price by area.

OXFORDSHIRE COUNTY COUNCIL

Four unpublished surveys have been carried out, using estate agents' advertisements in local newspapers to compare prices asked for properties in each of 12 areas of Oxfordshire. Newspapers were scanned for a week or less in each of the four years 1973, 1980, 1983 and 1985 and produced an average of 1350 properties a year for analysis.

Data are analysed by house type, number of bedrooms and district. Average prices are given, but it is realised that the method of surveying has problems in that the asking price may not represent selling prices, advertisements may be duplicated and, in some smaller areas sample sizes may be correspondingly small.

COUNTY OF SOUTH GLAMORGAN

Three recent housing surveys have been published. The first, in May 1979, was carried out in connection with the dispersal of the Ministry of Defence from London to St Mellons in Cardiff and was entitled, *Ministry of Defence Dispersal. A Strategic Examination of Housing in South East Wales.* This report examined housing stock and new building, as well as house prices. The two subsequent surveys in November 1983 were aimed specifically at up-dating information on house prices in the area.

House price data were collected from local property newspapers and individual estate agents for 10 sub-areas of the county. These were analysed by house type and number of bedrooms and a typical price and price range recorded for each category.

WEST SUSSEX COUNTY COUNCIL

Annual Monitoring Report. Since 1979 the Planning Department has operated and published an annual house-price monitor in conjunction with the Director of Property. In February of each year information is obtained from local estate agents on that month's selling prices for houses of certain types (see below) on particular estates in the county. The aim is to indicate the value of housing of similar characteristics for each of 19 planning areas. The five particular house types selected are: detached houses with 4 bedrooms, semi-detached houses with 3 bedrooms, terraced houses with 2 or 3 bedrooms and flats with 2 bedrooms. These are principally chosen to represent properties at the lower end of the market so as to provide the best indication of how far local needs are being met. Regional and national figures for similar properties, provided by Nationwide Building Society, are shown for comparison.

WILTSHIRE COUNTY COUNCIL

Housing Market Survey. Three surveys have been undertaken for 1981 Q4, 1982/3 and 1985 Q1. The first and last of these are the more detailed and include analysis of data on house prices obtained from estate agents for secondhand property and builders for new property. These estimates are compared with figures for the South West Region published by the Nationwide and Abbey National Building Societies. Five sub-areas of the county are defined and figures are given by house type and age (new, modern and older).

APPENDIX B

Definitions of Official Standard Regions

DEFINITIONS OF OFFICIAL STANDARD REGIONS

For the purpose of official statistics the United Kingdom is divided into Standard Regions classified by the Central Statistical Office. The definitions of these regions, which are classified according to local authority areas, are given below. Major revisions of the boundaries of the regions were made in 1965 and 1974. In 1965 Economic Planning Regions (EPRs) were set up and the Standard Regions for Statistical Purposes were revised to coincide with them. The regions were adjusted again on 1 April 1974 to take account of local government reorganization. A map illustrating the current regional boundaries and the changes introduced in 1974 is shown following the definitions.

STANDARD REGIONS BEFORE 1965

The list below shows the names of the Standard Regions in Great Britain and the area covered by each. Counties, etc., are defined by reference to local government administrative areas.

Northern

Cumberland, Durham, Northumberland, Westmorland and the North Riding of Yorkshire.

East and West Ridings

The East and West Ridings of Yorkshire and the City of York.

North Midland

Derbyshire (except the High Peak District, which is included in the North Western Region), Leicestershire, Lincolnshire, Northamptonshire (including the Soke of Peterborough), Nottinghamshire and Rutland.

Eastern

Bedfordshire, Cambridgeshire (including the Isle of Ely), Hertfordshire, Essex, Huntingdonshire, Norfolk and Suffolk, except such parts of Essex and Hertfordshire as are within the London and South Eastern Region.

London and South Eastern

London (administrative county), Middlesex, Kent, Surrey and Sussex, parts of Essex (the boroughs of Barking, Chingford, Dagenham, East Ham, Ilford, Leyton, Walthamstow, Wanstead and Woodford, and West Ham, and the urban districts of Chigwell and Waltham Holy Cross) and parts of Hertfordshire (the urban districts of Barnet, Bushey, Cheshunt, and East Barnet, and the rural district of Elstree).

Southern

Berkshire, Buckinghamshire, Hampshire (including the Isle of Wight), Oxfordshire and Poole.

South Western

Cornwall (including the Isles of Scilly), Devonshire, Dorset* (excluding Poole), Gloucestershire, Somerset and Wiltshire.

Wales

The whole of Wales and Monmouthshire.

Midland

Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.

* Transferred from Southern Region in 1958

DEFINITIONS OF OFFICIAL STANDARD REGIONS

North Western

Cheshire, Lancashire and the High Peak District of Derbyshire (the boroughs of Buxton and Glossop, the urban districts of New Mills and Whaley Bridge, and the rural district of Chapel-en-le-Frith).

Scotland

The whole of Scotland.

The changes made in 1965 to bring the regions into line with the new Economic Planning Regions were as follows:

- (i) Lincolnshire (parts of Lindsey) was transferred from the former North Midland Region and added to the East and West Ridings to form the new Yorkshire and Humberside Region.
- (ii) The remainder of the former North Midland Region, *less* the Soke of Peterborough (which has been joined to Huntingdonshire) was renamed the East Midlands Region. The County Borough of Lincoln remained in this region.
- (iii) Part of the former Eastern Region - Norfolk, Suffolk, Cambridgeshire and Huntingdonshire - together with the Soke of Peterborough formed the new Region of East Anglia.
- (iv) The remainder of the Eastern Region, together with the former London and South Eastern and Southern Regions, formed the new South East Region. It should be noted* that this region differed from that covered by the South East Study, which included East Anglia.
- (v) The remaining regions had the same definitions and names as before, except that the former Midland Region was renamed the West Midlands Region.

STANDARD REGIONS FROM 1965 TO 31 MARCH 1974

North

Cumberland, Durham, Northumberland, Westmorland, and the North Riding of Yorkshire.

Yorkshire and Humberside

The East and West Ridings of Yorkshire (including City of York) and Lincolnshire (parts of Lindsey excluding Lincoln C.B.)

East Midlands

Derbyshire (except the High Peak District, which is included in the North West Region), Leicestershire, Lincolnshire (Part of Holland, Parts of Kesteven and Lincoln C.B.), Northamptonshire, Nottinghamshire and Rutland.

East Anglia

Cambridgeshire and Isle of Ely, Huntingdon and Peterborough, Norfolk and Suffolk.

South East

Bedfordshire, Hertfordshire, Essex, Berkshire, Buckinghamshire, Oxfordshire, London (Greater London Council area), Kent, Surrey, Sussex, Hampshire, Isle of Wight and Borough of Poole*.

South West

Cornwall (including the Isles of Scilly), Devon, Dorset (excluding the Borough of Poole*), Gloucestershire, Somerset and Wiltshire.

West Midlands

Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.

* Poole is in the South West Economic Planning Regions but has been included in the South East statistical region.

APPENDIX B

North West

Cheshire, Lancashire and the High Peak District of Derbyshire (the Boroughs of Buxton and Glossop, the urban districts of New Mills and Whaley Bridge and the rural district of Chapel-en-le-Frith).

Wales

The whole of Wales

Scotland

The whole of Scotland

Northern Ireland

Antrim, Down, Armagh, Fermanagh, Tyrone, Londonderry, Belfast C.B., Londonderry C.B.

STANDARD REGIONS FROM 1 APRIL 1974

North

Tyne and Wear, Cleveland, Cumbria, Durham, Northumberland.

Yorkshire and Humberside

South Yorkshire, West Yorkshire, Humberside, North Yorkshire.

East Midlands

Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire.

East Anglia

Cambridgeshire, Norfolk, Suffolk.

South East

Greater London, Bedfordshire, Berkshire, Buckinghamshire, East Sussex, Essex, Hampshire, Hertfordshire, Isle of Wight, Kent, Oxfordshire, Surrey, West Sussex.

South West

Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerset, Wiltshire.

West Midlands

West Midlands, Hereford and Worcester, Salop, Staffordshire, Warwickshire.

North West

Greater Manchester, Merseyside, Cheshire, Lancashire.

Wales

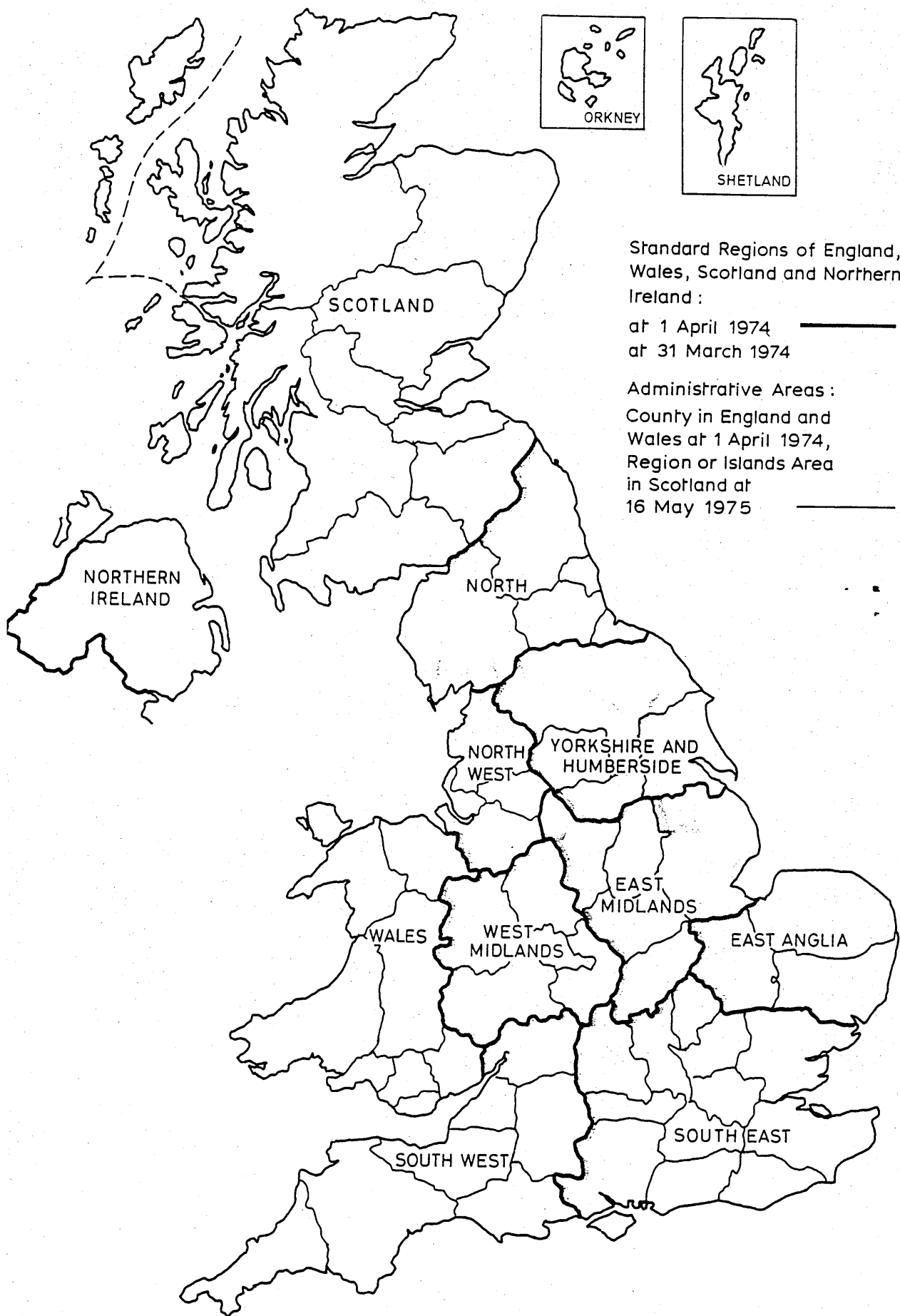
The whole of Wales

Scotland

The whole of Scotland

Northern Ireland

Antrim, Down, Armagh, Fermanagh, Tyrone, Londonderry, Belfast C.B., Londonderry C.B.



OFFICIAL STANDARD REGIONS OF THE UNITED KINGDOM

APPENDIX C

List of Names and Addresses

1 GOVERNMENT SOURCES

Information on data published in *Housing and Construction Statistics* may be obtained from the Directorate of Statistics, Department of the Environment, 2 Marsham Street, London SW1P 3EB

Board of Inland Revenue (Survey of Conveyances), Somerset House, Strand, London WC2R 1LB

Inland Revenue Valuation Office, New Court, Carey Street, London WC2A 2JE

Policy Planning and Research Unit (PPRU), Department of Finance and Personnel, Parliament Buildings, Stormont, Belfast BT4 3SS, Northern Ireland

Surveyors Publications, 12 Great George Street, London SW1P 3AD

2 BUILDING SOCIETIES

Abbey National Building Society, Abbey House, Baker Street, London NW1 6XL

Anglia Building Society, Moulton Park, Northampton NN3 1NL

Bradford & Bingley Building Society, PO Box 2, Main Street, Bingley BD16 2LW

Bristol & West Building Society, Research Department, PO Box 27, Broad Quay, Bristol BS99 7AX

Halifax Building Society, Trinity Road, Halifax HX1 2RG

Leeds Permanent Building Society, The Headrow, Leeds LS1 1NS

National & Provincial Building Society, Provincial House, Bradford, West Yorkshire BD1 1NL

Nationwide Building Society, New Oxford House, High Holborn, London WC1V 6PW

Northern Rock Building Society, Northern Rock House, Gosforth, Newcastle-upon-Tyne NE3 4PL

Principality Building Society, PO Box 89, Principality Buildings, Queen Street, Cardiff CF1 1UA

Woolwich Equitable Building Society, Corporate Affairs Department, Equitable House, London SE18 6AB

3 ESTATE AGENTS AND CHARTERED SURVEYORS

Countrywide Estate Agents, 22 Commercial Way, Woking, Surrey GU21 1HB

Estates Gazette Ltd, 151 Wardour Street, London W1V 4BN

Fox & Sons, Estate Agents, 22 Cathedral Yard, Exeter EX1 1HQ

Incorporated Society of Valuers and Auctioneers, 3 Cadogan Gate, London SW1X 0AS

National Association of Estate Agents, Arbon House, 21 Jury Street, Warwick CU34 4EH

Royal Institution of Chartered Surveyors, 12 Great George Street, Parliament Square, London SW1P 3AD

Ryden Residential Ltd, 33 George Street, Edinburgh EH2 2HN

ADDRESSES OF DATA SOURCES

4 LOCAL AUTHORITIES: Departments of Planning

Bedfordshire County Council, County Hall, Cauldwell Street, Bedford MK42 9AP

City of Bristol Planning Department, Cabot House, Deanery Road, Bristol BS1 5TZ

Cheshire County Council, County Hall, Chester CH1 1SF

Dorset County Council, County Hall, Dorchester, Dorset DT1 1XJ

Lancashire County Council, PO Box 78, County Hall, Preston PR1 8XJ

Oxfordshire County Council, Speedwell House, Speedwell Street, Oxford OX1 1SD

County of South Glamorgan, County Headquarters, Newport Road, Cardiff CF2 1XA

West Sussex County Council, County Hall, Chichester PO19 1RL

Wiltshire County Council, County Hall, Trowbridge, Wiltshire BA14 8JG

5 OTHER

Department of Land Management and Development, University of Reading, Whiteknights, Reading, Berks RG6 2BU

Department of Surveying, University of Ulster (Jordanstown), Shore Road, Newtownabbey, County Antrim BT37 0QB

The Guardian, 119 Farringdon Road, London EC1R 3ER

Property Auction Guide, 47 Holland Park Mews, London W11 3SP

Rogers (Printers) Birmingham Ltd, 5 Aston Road North, Birmingham B6 4DS

National House-Building Council, Chiltern Avenue, Amersham, Bucks HP6 5AP

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VOLUME II

SUBMITTED PUBLICATIONS

**ECONOMIC ASPECTS OF THE UK HOUSING
AND HOUSING FINANCE MARKETS**

by

JOSEPH G NELLIS

Submission for PhD under Regulation 14.9

1991

LIST OF SUBMITTED PUBLICATIONS

VOLUME I

Fleming, M. C. and Nellis, J. G. (1981a) "The Interpretation of House Price Statistics for the United Kingdom", *Environment and Planning A*, Vol. 13, pp. 1109-1124.

Fleming, M. C. and Nellis, J. G. (1981b) "The Inflation of House Prices in Northern Ireland in the 1970s", *The Economic and Social Review*, Vol. 13, pp. 1-19.

Fleming, M. C. and Nellis, J. G. (1985a) "Research Policy and Review 2. House-Price Statistics for the United Kingdom: A Survey and Critical Review of Recent Developments", *Environment and Planning A*, Vol. 17, pp. 297-318.

Fleming, M. C. and Nellis, J. G. (1985b) "The Application of Hedonic Indexing Methods: A Study of House Prices in the United Kingdom", *Statistical Journal of the United Nations Economic Commission for Europe*, Vol. 3, pp. 249-270.

Fleming, M. C. and Nellis, J. G. (1987) *Spon's House Price Data Book*, London: E. & F. N. Spon.

VOLUME II

Fleming, M. C. and Nellis, J. G. (1988) **Analysis of House Price Movements: A Study of NABS Data Incorporating House and Neighbourhood Location Characteristics**, Research Project Report submitted to the Nationwide Anglia Building Society.

Fleming, M. C. and Nellis, J. G. (1989) **The New Nationwide Anglia Mix-Adjusted House Price System: Quarterly Series for the Period 1983(Q1) - 1989(Q1)**, Final Research Project Report submitted to the Nationwide Anglia Building Society.

Fleming, M. C. and Nellis, J. G. (1990) "The Development of Standardised Indices for Measuring House Price Inflation Incorporating Physical and Locational Characteristics", **Cranfield School of Management, mimeo.**

Nellis, J. G. and Longbottom, J. A. (1981) "An Empirical Analysis of the Determination of House Prices in the United Kingdom", **Urban Studies**, Vol. 18, pp. 9-21.

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Fleming, M. C. and Nellis, J. G. (1988) **Analysis of House Price Movements: A Study of NABS Data Incorporating House and Neighbourhood Location Characteristics**, Research Project Report submitted to the Nationwide Anglia Building Society.

REPORT

ANALYSIS OF HOUSE PRICE MOVEMENTS
A study of NABS data incorporating house
and neighbourhood location characteristics

Methodology and Quarterly Series for 1986

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Report submitted to the NATIONWIDE ANGLIA BUILDING SOCIETY

January 1988

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**ANALYSIS OF HOUSE PRICE MOVEMENTS:
a study of NABS data incorporating house
and neighbourhood location characteristics**

1. INTRODUCTION

This report discusses the development of standardised house price index numbers for the Nationwide Anglia Building Society (NABS) using the statistical data base provided by the Society* for 1986 and presents quarterly results for this year. Although the original proposal envisaged the preparation of quarterly series for the period 1984 to 1986 with a base date of 1975, the analysis reported here is confined to 1986 only because of the non-availability of corresponding data for the previous periods. The methodology is described in detail, recommendations are made regarding the specific procedures to be preferred for use in maintaining the indexes in future, and the procedure that has to be followed in applying it is set out in full. The results presented here provide nine sets of quarterly standardised series of index numbers for the 13 regions of the United Kingdom (as used by the NABS) as follows:

1. All houses
2. New houses
3. Post-1970 ("modern") houses
4. Pre-1971 ("older") houses
5. 1945-1970 houses
6. 1919-1944 houses
7. Pre-1919 houses
8. First-time buyers (all houses)
9. Former owner-occupiers (all houses)

* The data used is that for the former Nationwide Building Society, but throughout the report we refer to the newly merged Nationwide Anglia Building Society.

In addition, nine corresponding sets of index numbers for the UK are derived from these regional series as weighted averages.

The need for "standardisation" arises out of the fact that no two houses are alike: they may differ according to a variety of quantitative and qualitative characteristics relating to the physical attributes of the house itself or to its location. Thus analyses of average house price differences between one region and another or of changes in average prices over time are not based on the comparison of like with like if the "characteristics-mix" of houses traded is not standardised. Until recently, little or no attention was paid to this problem: both official and unofficial analyses were based on simple averages of prices and were thus beset by the problem of non-comparability. Fuller consideration of these problems and of the series available can be found in Fleming and Nellis (1981, 1985a and 1987).

The main developments aimed at overcoming these problems were introduced by the Department of the Environment (DOE) and by the Halifax Building Society. The former has adopted a system of mix-adjustment in their house price series based on weighted averages but, due to the limitations in the data base, only taking into account variations in four house characteristics. The Halifax series, on the other hand, employs a regression-based (so called "hedonic") approach, the research for which was carried out by ourselves. This is a much more sophisticated methodology which permits the simultaneous analysis of the influence on house prices of a very wide range of house characteristics. Naturally, its application requires an extensive and detailed data base about house prices and house characteristics.

However, both of these developments focus on *house* characteristics and thus fail to allow for the influence of *locational* characteristics on house prices. In principle, this is a serious shortcoming. In this project, the research extends the hedonic approach to the analysis of house price movements to *explicitly* incorporate information about locational characteristics as well as the attributes of the houses themselves. Furthermore, the Nationwide Anglia Building Society's data base, which permits a more refined measurement of house attributes than is available in any other source, is fully utilised. Thus, the incorporation of locational characteristics, together with improved information about house characteristics, provides the foundation for a significant improvement in the quality and reliability of house price information in the UK.

The data are described fully in the next section. This is followed in Section 3 with an explanation of the methodology and its application. The results of the study are given in Section 4, while an appraisal of the results is given in Section 5. Conclusions and recommendations follow in Section 6.

2. THE NABS DATA BASE

The data base provided by the Society for 1986 has three particular merits from the point of view of this study. First, the size of the data base is exceptionally large because the number of house purchase transactions financed by the Society each quarter is very large and all of these are covered in the statistical reporting system. As a consequence, the analytical procedures followed in this study permit much more reliable estimation than would otherwise be the case. Secondly, the scope of the data collected about house characteristics is extensive. This is an essential requirement for the application of the hedonic technique and again helps to improve the reliability of the statistical analysis. Thirdly, the classification of mortgage transactions according to two sophisticated locational classification systems with one at the micro level of residential neighbourhoods (ACORN*) and the other at a broader, macro level focusing on the classification of Parliamentary Constituencies, provides a valuable means of measuring the influence of location on house prices. Nonetheless, the data base is not beyond improvement and we make suggestions about this in the concluding section of this report.

Although one hundred per cent coverage of all house purchase transactions financed by the Society is obtained, not all of the data are allowed to enter the analyses. In general, properties which are not for private occupation and those that are likely to have been sold at prices which may not represent "free" or "normal" market prices are excluded (for example, council house sales, sales to sitting tenants etc). In addition, certain "unusual" properties are also excluded as well as those without vacant possession or which are mixed freehold/leasehold.

* ACORN denotes "A Classification of Residential Neighbourhoods". For details see Appendix A.

Fuller details of the exclusion criteria are given in Appendix B which sets out the technical details of the methodology.

We now summarise the information available about location and house characteristics investigated in the subsequent analyses. This is as follows:

1. Purchase price (at approval stage)
2. Location
 - (a) Standard regions - described in Appendix C
 - (b) Residential neighbourhood type - ACORN code
 - (c) Area type - Parliamentary Constituency code
3. House characteristics
 - (a) House type:
 - detached house
 - semi-detached house
 - terraced house
 - detached bungalow
 - semi-detached bungalow
 - purpose-built flat or maisonette
 - converted flat or maisonette
 - (b) Tenure:
 - freehold or feuhold with vacant possession
 - freehold or feuhold without vacant possession
 - leasehold
 - part freehold/part leasehold

- (c) Garage:
 - single garage
 - double garage
 - parking space
 - neither garage nor parking space
- (d) Central heating:
 - no central heating
 - full central heating (gas, electric, oil or solid fuel)
 - partial central heating (gas, electric, oil or solid fuel)
- (e) Number of rooms:
 - reception rooms
 - bedrooms
 - total rooms
 - bathrooms
- (f) House size (floor area in square feet)
- (g) Age of dwelling (number of years)
- (h) Site valuation (for new houses only)

It should be appreciated that, as a result of the technical analyses, some of these variables are omitted from the final model specifications. For details, see Appendix B.

3. THE METHODOLOGY AND ITS APPLICATION

3.1 Methodology

This section of the report provides a very brief and relatively non-technical account of the methodology used in deriving the various sets of standardised index numbers presented in Section 4 and the underlying analyses. Full details concerning the more technical aspects of the analysis are to be found in Appendix B.

The methodology is based on the "hedonic" approach to price measurement (see Lancaster 1966, 1971, Griliches 1971, Triplett 1971 and Fleming and Nellis 1985b). This approach uses multivariate regression analysis to isolate the variations in price that are caused by changes in the *qualitative* and *quantitative* characteristics of goods (in this case housing), from those which reflect other market forces (that is, purely inflationary factors). Given data on house prices and the attributes of the houses sold in different time periods, we can thus estimate the change in average price, from one time period to another, on a *standardised* basis (that is, keeping the mix of attributes or characteristics constant). An obvious analogy is with the *standard* "basket" of goods in the retail price index.

Earlier research by the authors has shown that the hedonic technique, as applied to housing, is regularly employed in only one other country, namely the USA. Details of the US approach may be found in Musgrave (1969) and US Department of Commerce (1981). We now turn to the application of the hedonic approach to the NABS data base.

In relation to the present study, a sample of house prices, P_{it} , may be observed, where t represents the time period in which each house i is sold. Given the supply and demand conditions in the housing market, such houses may be priced differently due to differences in qualitative characteristics (such as the type of property, the availability of certain amenities, the location of the property etc), and to differences in quantitative characteristics (such as the age of the property, the size of the property, garages, bathrooms etc). Thus, for each house i , we can write P_{it} as some function of these various characteristics, X_j , together with a group of unmeasured factors (assumed to be randomly distributed) which are specific to each house but for which data are not available, e_{it} ; that is:

$$P_{it} = f(X_{1t}, X_{2t}, \dots, X_{jt}, e_{it})$$

Given the nature of the data employed in this study, qualitative characteristics can only be represented by "dummy variables" which take the value of one or zero depending upon the presence or absence of a particular attribute*. Definitions of the variables and their assigned coding are listed in Appendix D. The technique of multivariate regression using ordinary least squares allows us to estimate the coefficients pertaining to each of the explanatory variables in the above equation. As indicated earlier, the analyses are carried out to generate nine sets of index numbers for each of the 13 standard regions of the UK as used by NABS.

Although in principle it may be thought desirable to use all the information available about explanatory variables, in practice certain variables may be so correlated one with another that it may be impossible to measure particular

* When employing sets of dummy variables as explanatory variables in regression analysis, one constituent of each dummy variable set must be excluded before estimation. This avoids the statistical problem of "over specification" of the regression equation. For full details see Heathington and Isibor (1972) and Appendix D.

coefficients in any one set or subset of the data without the statistical problem of "multicollinearity". As a consequence, it is necessary to conduct appropriate statistical tests to examine the possible existence of this problem and, if necessary, to take the appropriate remedial action. The problem of multicollinearity in statistical analyses of this kind is a matter of degree: the problem, where it exists, can rarely be eliminated and the aim of the researcher, therefore, can only be to minimise its effects. In the present study the problem was only found to be of importance with regard to the variables reflecting the size of properties, namely number of habitable rooms (bedrooms and reception rooms) and floor area. A common procedure is to drop independent variables from the analysis which are highly correlated with other independent variables. However, for the purpose of the analysis in this study, the procedure for selecting variables was not determined solely on the basis of simple correlation but by systematic computer routines which explore the simultaneous correlation between *sets* of explanatory variables - these procedures are briefly described in Appendix B. Using these methods, our research has indicated that of the alternative size variables available, the incorporation of floor area provides the best explanatory power as a determinant of price. The degree of correlation between pairs of explanatory variables employed in the final analyses may be observed from the correlation matrix in Appendix F.*

* It will be seen from Appendix F that the coefficients are generally small but in a small number of cases larger values are obtained. It will be appreciated that these are not unexpected; for example the correlation between size and detached house type (DH) is 0.44, and that between leasehold (LH) and freehold or feuhold (FFVP) is -1.00 (since in the final analysis we only use LH or FFVP to classify properties, then a correlation of -1.00 logically follows).

Equally important is the need to determine the appropriate form of the functional relationship between the variables. This stage forms a crucial part of the analysis, for it provides the essential foundation for the subsequent application of the methodology for deriving standardised price index numbers. It is worth noting that in the analysis of functional form the dummy variable technique is particularly useful because it allows the incorporation of variables to which price may be related non-linearly, without the necessity of specifying the nature of the non-linearity. This, of course, is not the case for those variables such as age of property, size of property etc, which are not dichotomous variables and which are thus incorporated into the estimation procedure as integer values. Extensive analyses involving several hundred computer runs were carried out based on polynomial transformations of these variables over a feasible set of alternative specifications and combinations. With regard to the independent variables, it was concluded that despite the extensive analyses carried out, there was little advantage to be gained by employing transformation techniques, bearing in mind the need for convenience of implementation of the methodology to the future derivation of price index numbers. But, in contrast, transformation of the dependent variable, price, proved to be statistically beneficial. This was confirmed by the use of advanced statistical procedures (Box-Cox tests) which indicated a preference for a semi-logarithmic functional form for the estimating regression equations, with P_{it} expressed in natural logarithms. Appendix B outlines the Box-Cox test procedure as well as the analysis of functional form referred to above.

3.2 Application of the Methodology

The methodology is applied in two stages. First it is employed to generate regional index numbers for the nine house and buyer-type groups, across the 13

regions. The second stage is the calculation of index numbers for the UK.

3.2.1 *Regional index numbers*

The methodology may be employed to generate index numbers in two basic ways. The usual way of devising an index, employing the hedonic approach, is to take a weighted average of the estimated regression coefficients, each coefficient being regarded as an implicit price of the corresponding characteristic. The other way is to incorporate an additional dummy variable for time into a regression model covering more than one time period, such a dummy directly reflecting the change in price from one time period to another. However, this second approach has certain disadvantages. In particular, from the viewpoint of practicality, it makes greater computational demands in terms of computer processing time and space because it requires the chaining together of the data for many time periods and does not permit the adoption of alternative characteristics weights (that is, other than those which are internal to the particular data set). This is particularly important in this project because of the desire of NABS to investigate the use of alternative weighting systems independent of the Society's data base and covering periods of time greater than one quarter (as in the Society's current system of analysis which involves rolling weights). In addition, an important consideration is the need to be able to explain the methodology to the interested layman. Again, the time dummy method presents difficulties in this respect. The weighted average approach does not suffer from these disadvantages. It is therefore preferred and is employed in all of the analyses reported below.

The steps involved using the weighted average method may be summarised as follows:

- (i) calculate the weights, Q_{jt_0} for the j explanatory variables in a chosen reference time period t_0 , corresponding to the proportions of the qualitative variables and the means of the quantitative variables present in this time period;
- (ii) with price recorded in natural log form estimate the regression coefficients b_j for the j explanatory variables, in both the chosen time period (that is, b_{jt_0}) and for every subsequent time period (such as, b_{jt_n} for the current time period).

An index for the current period (I_{t_n}) may then be calculated as the ratio between the sum of the weighted coefficients for the current period and the sum of the weighted coefficients for the chosen reference period (both expressed in exponent form). That is:

$$I_{t_n} = \frac{\exp \sum b_{jt_n} Q_{jt_0}}{\exp \sum b_{jt_0} Q_{jt_0}} \times 100$$

For the purpose of this project, five alternative sets of weights have been explored with regard to the generation of regional index numbers. These correspond to the weights pertaining to each of the four quarters of 1986 and to 1986 as a whole. As noted in the Introduction, index numbers are derived for nine house and buyer groupings for each of the 13 regions of the UK. Thus,

combining the alternative weights with these groupings across the regions gives rise to some 585 sets of house-price index numbers for the four quarters of 1986. These analyses were carried out in order to explore the sensitivity of the results to the choice of the reference time period. It will be appreciated that the range of weights which we were able to explore was restricted by the availability of only one year's data. In practice, the Society may desire to choose a different weighting period or to employ a set of rolling weights over several time periods. Results based on the five alternative weights are set out in full in Appendix E, together with the corresponding regression coefficients, weights employed and the relevant statistical summary measures.

3.2.2 *UK index numbers*

For the purpose of deriving index numbers for the UK as a whole it would be possible to follow the same procedure outlined above with regard to regional indices, namely using the regression-based technique. However, this has not been adopted in this project because, following prior consultation with the Society's house price research team, it was agreed that a system should be retained which allows discretion in the choice of weights that it would be appropriate to allocate to each region in arriving at a UK index. This preference is due to the fact that the regional distribution of the Society's own mortgage lending is not representative of mortgage transactions in general across the UK.

Series for the UK are simply derived as weighted averages of the 13 individual regional index numbers for each of the nine house and buyer groups. Although at the regional level we have derived index numbers using five *alternative* sets of location and house weighting patterns (see above), for the purpose of exposition

here we have selected only *one* of these regional sets of results, namely those based on the total transactions for 1986 as a whole, to compute series for the UK as a whole.

It will be appreciated that each region must be given a weight appropriate to its importance in the national pattern of housing transactions. Again, we explore several alternatives:

- (a) the pattern of NABS mortgage transactions in 1986,
- (b) the pattern of all building society mortgage transactions (as revealed in the official DOE 5% sample survey) for 1986, and
- (c) the regional distribution of the stock of owner-occupied houses (based on DOE estimates) for end-1986.

The NABS data base in (a) above permits breakdowns according to the nine house and buyer groupings noted earlier. However, the same range of breakdowns are not readily available from the other two sources (b) and (c). Comparisons using alternative regional weights, therefore, are confined to the "all houses" group (see Section 4).

Ideally, the regional weighting system used should reflect the pattern of *all* house purchase transactions, rather than merely building society transactions alone or the distribution of the owner-occupied housing stock. Use of stock figures may be a suitable proxy for total transactions but of course it involves the assumption that regional transactions are always proportional to regional stock. Figures are available for total transactions (from the Inland Revenue Survey of Conveyances) but unfortunately they are available only after a considerable lapse of time, are

confined to one week only of each year, only cover England and Wales and provide no breakdown by house or buyer type (for further details see Fleming and Nellis 1987).

The regional weights from the three sources above for 1986 are presented in Table 1 in Section 4. Index numbers for the UK, based on each of the three weighting systems above, along with the regional indexes are also presented in the next section. A summary statement of operating procedures is set out separately as Appendix G.

4. RESULTS: REGIONAL AND UK INDEXES

Before reporting the regional and UK index numbers, we present the various regional weighting patterns employed to derive the UK indexes, as discussed in the previous section.

4.1 Regional Weights

The regional weights are shown in Table 1, which set out the distributions for each of the three sources referred to earlier, namely:

- (a) the pattern of NABS mortgage transactions
- (b) the pattern of all building society mortgage transactions (from the DOE 5% sample survey), and
- (c) the distribution of the owner-occupied housing stock.

From the table it will be seen that the NABS pattern of lending is relatively more concentrated in the south-east (Greater London, Outer Metropolitan and South East areas) compared with building societies in general, or compared with the distribution of the owner-occupied housing stock. Furthermore, it may be noted that the distribution of total mortgage transactions does not parallel the distribution of the owner-occupied stock: in 1986, the proportions of transactions were relatively greater in the south-east and relatively less in the North and North-West regions. We note in passing that this has important implications for the Society's current method of house price analysis which employs housing stock weights: the evidence presented in Table 1 would tend to suggest that the Society's estimates of house price inflation in 1986 will have been biased downwards.

TABLE 1: REGIONAL WEIGHTS (%)*

Region	(a)NABS Pattern of Lending 1986										(b)DOE 5% Sample 1986 All Houses	(c)Owner-Occupied Housing Stock (end 1986) All Houses
	House Category					Buyer Category						
	All	New	Modern (post-1970)	Older (pre-1971)	1945-1970	1919-1944	Pre-1919	FTB	FOO			
North	2	1	2	2	2	2	2	2	2	2	4	5
Yorks & Humber	4	3	3	5	4	4	5	4	4	4	9	9
North West	8	6	6	8	7	8	9	8	7	7	10	12
East Mids	6	7	7	6	6	5	5	6	6	6	8	7
West Mids	7	9	8	7	9	7	5	8	7	7	9	9
East Anglia	3	5	5	3	4	2	3	3	4	4	4	4
Outer SE	13	14	16	12	14	10	12	11	14	14	**11	**10
Outer Met	17	17	20	16	25	15	11	14	20	20	**12	**11
Gt London	16	7	6	20	9	30	23	19	14	14	10	11
South West	8	10	11	8	8	6	8	8	9	9	9	9
Wales	4	5	4	4	3	3	4	4	3	3	4	5
Scotland	8	9	9	7	5	4	10	9	7	7	7	6
N Ireland	4	7	3	3	4	4	2	5	3	3	2	2

* Percentages may not sum to 100 due to rounding
 ** Split according to the ratio supplied by NABS

4.2 Regional and UK Indexes

Following the methodology described in Section 3, we report regional and UK results for the following groups:

All Houses - Table 2

New Houses - Table 3

Modern (post-1970) Houses - Table 4

Older (pre-1971) Houses - Table 5

1945-1970 Houses - Table 6

1919-1944 Houses - Table 7

Pre-1919 Houses - Table 8

First-Time Buyer Houses - Table 9

Former Owner-Occupier Houses - Table 10

Each table is presented in a standard format: regional indexes are reported first followed by the UK indexes. The results are all based on 1986 weights (the alternative reference point which we have chosen for purposes of exposition).

It will be seen from Table 2 that in the case of the analyses for "All Houses", three series of index numbers are reported for the UK, corresponding to the three regional weighting systems described earlier. These results confirm our observation above that the use of regional housing stock weights will tend to bias downwards the estimation of UK house price inflation. The converse may also be said to be true, namely that the employment of NABS weights will tend to bias the figures upwards (given the regional inflation figures for 1986).

Naturally, the reliability of the UK results depends in turn on the robustness of their regional constituents. We turn to this matter in the next section.

TABLE 2: ALL HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	105.100	101.889	106.247
Yorks & Humberside	100.000	103.411	104.432	105.718
North West	100.000	102.017	104.511	103.409
East Midlands	100.000	103.224	105.287	109.077
West Midlands	100.000	102.040	104.376	106.868
East Anglia	100.000	106.545	110.115	116.095
Outer South East	100.000	103.665	108.528	114.095
Outer Metropolitan	100.000	104.352	110.249	116.832
Greater London	100.000	104.614	112.558	119.823
South West	100.000	103.523	107.841	111.470
Wales	100.000	104.026	103.670	108.807
Scotland	100.000	102.661	103.733	104.095
Northern Ireland	100.000	102.243	103.854	102.336
United Kingdom:				
(a) NABS weights	100.000	103.632	107.590	111.691
(b) DOE weights	100.000	103.547	106.830	110.469
(c) Stock weights	100.000	103.551	106.755	110.340

TABLE 3: NEW HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	109.318	108.543	106.737
Yorks & Humberside	100.000	99.714	101.082	101.129
North West	100.000	104.250	105.497	107.054
East Midlands	100.000	100.685	102.736	108.456
West Midlands	100.000	102.099	105.919	106.565
East Anglia	100.000	99.013	100.401	106.931
Outer South East	100.000	102.281	106.540	109.943
Outer Metropolitan	100.000	103.584	108.240	114.294
Greater London	100.000	101.178	107.690	108.874
South West	100.000	103.860	106.633	113.421
Wales	100.000	100.558	107.116	103.945
Scotland	100.000	102.993	103.079	108.337
Northern Ireland	100.000	102.751	104.514	102.007
United Kingdom:				
(a) NABS weights	100.000	102.414	105.659	108.927

TABLE 4: MODERN (POST-1970) HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
Northern	100.000	102.800	98.898	106.515
Yorks & Humberside	100.000	103.149	104.207	106.165
North West	100.000	103.445	105.519	106.448
East Midlands	100.000	105.595	106.904	112.821
West Midlands	100.000	102.505	105.178	108.382
East Anglia	100.000	107.005	110.372	116.248
Outer South East	100.000	103.020	108.276	113.496
Outer Metropolitan	100.000	104.599	111.346	117.761
Greater London	100.000	103.118	110.986	120.913
South West	100.000	101.871	105.402	110.298
Wales	100.000	103.592	103.142	108.591
Scotland	100.000	103.494	103.702	105.213
Northern Ireland	100.000	104.787	105.504	108.571
United Kingdom: (a) NABS weights	100.000	103.697	107.322	112.252

TABLE 5: OLDER (PRE-1971) HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	105.654	102.129	106.001
Yorks & Humberside	100.000	104.145	104.720	106.857
North West	100.000	102.036	104.672	104.364
East Midlands	100.000	102.516	104.452	107.640
West Midlands	100.000	102.182	104.348	106.846
East Anglia	100.000	106.737	110.169	115.090
Outer South East	100.000	103.696	108.547	114.361
Outer Metropolitan	100.000	104.442	110.307	116.860
Greater London	100.000	104.857	112.685	120.016
South West	100.000	104.152	108.805	112.285
Wales	100.000	104.789	104.957	109.880
Scotland	100.000	102.393	103.969	103.188
Northern Ireland	100.000	100.127	101.996	98.459
United Kingdom: (a) NABS weights	100.000	103.772	107.902	112.060

TABLE 6: 1945-1970 HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	104.569	101.731	108.289
Yorks & Humberside	100.000	102.432	103.663	107.586
North West	100.000	103.314	105.311	107.694
East Midlands	100.000	100.996	103.391	108.682
West Midlands	100.000	103.872	106.072	109.242
East Anglia	100.000	104.733	106.550	109.214
Outer South East	100.000	104.632	109.945	114.756
Outer Metropolitan	100.000	103.644	109.715	115.738
Greater London	100.000	107.530	116.767	122.160
South West	100.000	102.744	108.678	112.592
Wales	100.000	101.703	105.786	115.291
Scotland	100.000	103.513	104.602	103.197
Northern Ireland	100.000	99.083	102.138	100.099
United Kingdom: (a) NABS weights	100.000	105.683	110.186	114.545

TABLE 7: 1919-1944 HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	100.189	98.170	99.820
Yorks & Humberside	100.000	103.964	105.597	115.726
North West	100.000	99.950	101.857	103.688
East Midlands	100.000	101.630	104.528	104.899
West Midlands	100.000	101.794	102.580	109.229
East Anglia	100.000	109.208	112.735	123.942
Outer South East	100.000	100.848	106.176	114.158
Outer Metropolitan	100.000	106.167	111.667	119.217
Greater London	100.000	105.161	112.448	118.747
South West	100.000	105.647	111.006	115.003
Wales	100.000	101.364	104.722	106.286
Scotland	100.000	103.345	106.064	100.337
Northern Ireland	100.000	99.376	101.015	97.601
United Kingdom: (a) NABS weights	100.000	103.596	108.185	113.219

TABLE 8: PRE-1919 HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	106.761	103.305	110.676
Yorks & Humberside	100.000	107.076	105.795	104.267
North West	100.000	102.324	104.989	101.996
East Midlands	100.000	105.684	108.872	111.510
West Midlands	100.000	102.285	103.935	101.512
East Anglia	100.000	107.016	109.504	113.940
Outer South East	100.000	103.669	108.124	113.544
Outer Metropolitan	100.000	104.092	110.892	116.353
Greater London	100.000	104.458	112.463	121.363
South West	100.000	104.832	108.317	110.551
Wales	100.000	105.803	105.064	110.054
Scotland	100.000	102.260	103.517	103.510
Northern Ireland	100.000	105.261	105.720	95.500
United Kingdom: (a) NABS weights	100.000	104.215	108.186	111.637

TABLE 9: FIRST-TIME BUYER HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	103.905	106.933	106.654
Yorks & Humberside	100.000	106.307	104.989	107.160
North West	100.000	102.274	104.352	102.460
East Midlands	100.000	106.089	106.597	112.135
West Midlands	100.000	101.856	103.873	104.305
East Anglia	100.000	108.205	111.413	119.429
Outer South East	100.000	103.822	107.618	111.426
Outer Metropolitan	100.000	102.924	108.551	114.669
Greater London	100.000	104.302	112.262	118.321
South West	100.000	103.791	107.493	109.018
Wales	100.000	103.095	103.452	105.912
Scotland	100.000	102.110	101.712	102.627
Northern Ireland	100.000	101.570	102.523	101.088
United Kingdom: (a) NABS weights	100.000	103.579	107.047	110.210

TABLE 10: FORMER OWNER-OCCUPIER HOUSES - REGIONAL AND UK INDEX NUMBERS

	1986 Weights			
	Q1	Q2	Q3	Q4
North	100.000	106.713	100.320	106.703
Yorks & Humberside	100.000	102.778	105.835	105.144
North West	100.000	102.124	104.935	106.416
East Midlands	100.000	101.608	104.942	106.726
West Midlands	100.000	102.356	105.301	108.865
East Anglia	100.000	104.311	108.964	111.587
Outer South East	100.000	103.649	108.817	115.217
Outer Metropolitan	100.000	105.333	110.617	116.753
Greater London	100.000	104.819	112.299	119.374
South West	100.000	103.531	108.278	112.341
Wales	100.000	103.994	105.361	111.164
Scotland	100.000	103.344	105.826	105.674
Northern Ireland	100.000	103.192	107.048	104.255
United Kingdom: (a) NABS weights	100.000	103.848	108.216	112.440

5. APPRAISAL OF THE RESULTS

An appraisal of the results requires an appreciation of the technical details of the analysis which are set out in full in Appendix B along with the detailed statistical results set out in Appendix E. It is also important to appreciate that some results are subject to greater margins of error than others. There are a number of important considerations to which we would draw attention. These are discussed below.

5.1 Sample Sizes

The number of transactions available per quarter for analysis varies considerably across the regions and more importantly across the various sub-groups. The smallest sample sizes observed in *any* quarter for each of the nine groups and 13 regions are set out in Table 11. Full details of all sample sizes will be found in Appendix E. The first point to note is that sample sizes are exceptionally small for some regions and subgroups, falling as low as 26 (new houses in the North region for Q4 of 1986). Secondly, it will be noted from the figures shown in italics in Table 11 that there are a number of regions which stand out consistently as having relatively small sample sizes in general. These regions are the North, East Anglia, Wales and Northern Ireland. The consequence of small sample sizes is, inevitably, to reduce the statistical reliability of any regression results and thus to increase the margin of error surrounding the derived index numbers.

5.2 Significance of the Regression Models

A major part of the research project has consisted of establishing statistical models which best quantify the relationships between the house and locational

**TABLE 11 NABS REGIONAL LENDING PATTERN:
MINIMUM QUARTERLY SAMPLE SIZES IN 1986***

HOUSE TYPE AND BUYER CATEGORY

Region	All	New	Modern	Older	1945-1970	1919-1945	Pre-1919	FTB	FOO
Northern	225	26	49	171	50	47	74	89	136
Yorks & Humberside	453	47	80	373	47	101	175	216	237
North West	847	97	150	676	182	197	297	374	473
East Midlands	646	135	182	448	150	130	168	213	433
West Midlands	792	133	208	578	234	179	165	342	450
East Anglia	366	95	135	224	84	34	106	126	240
Outer South East	1398	209	427	953	369	200	384	498	900
Outer Metropolitan	1658	223	432	1214	576	319	319	465	1193
Greater London	1739	103	161	1563	221	675	667	754	985
South West	862	163	254	591	225	125	241	300	562
Wales	365	97	108	244	63	61	120	161	204
Scotland	794	138	234	530	107	103	320	405	384
Northern Ireland	399	115	74	210	87	72	51	230	169

* The figures in italics highlight the *three* lowest sample sizes in each house and buyer category

characteristics and the dependent variable price. The reliability of these models is assessed at two levels: with regard to the statistical significance of the individual characteristics and with regard to the overall explanatory power of each model as a whole. Full information with regard to both of these criteria is presented in Appendix E. Attention must also be given to the nature of the underlying data base. The essential features are summarised below.

(a) *Overall explanatory power:*

It is notable that the degree of explanatory power attained by the models in the vast majority of regressions is exceptionally high (as measured on the basis of adjusted R^2 values). Generally, 70-90 per cent of the variation in price is explained by the models. However, in a very small number of cases, the explanatory power is much weaker; this is generally attributable to the problem of small sample sizes as noted above.

(b) *Individual characteristics:*

Again, the statistical significance levels (on the basis of t-tests) for the individual regression coefficients is indicated in Appendix E. The results are once more very encouraging: the vast majority are shown to be statistically significant at the 5 per cent or very much higher levels of significance. In this respect there are two considerations worth bearing in mind. One is that from time to time the significance of any explanatory variable is subject to change, depending on changes in the sample size and structure. The other is that the final choice of model specification has not been *solely* determined by narrow statistical criteria. It was thought desirable for practical considerations to maintain, as far as possible, a fairly consistent specification for the estimating

equations across all house and buyer groupings and regions. The main exceptions to this are: (a) the models for "New Houses" for which locational variables had to be omitted, principally due to the absence of the necessary information from the data base, and (b) analyses for Northern Ireland for which the locational variable codes do not exist. In addition, when employing *sets* of dummy variables in the analysis, the set must be treated as a whole, despite the possibility of some individual elements falling below desirable significance levels.

(c) *Representativeness of NABS data:*

Finally, we would stress that the results must be appraised in the light of any reservations that may exist with regard to the representativeness of the NABS data base. These reservations may arise not only in relation to the Society's cross-regional pattern of lending but also to the intra-regional mix of transactions. Exploration of this possibility was outside the scope of the research project but it would merit investigation at some later stage.

Over time, it is not to be expected that the estimating equations will remain unchanged in all respects. For this reason, it is important that a regular monitoring system be established for purposes of appraisal and for identifying any remedial action that may be desirable as changes in the data base and statistical relationships take place.

6. RECOMMENDATIONS AND CONCLUSIONS

In this final section we wish to bring to the attention of the Society a number of matters requiring decisions prior to the launching of a new NABS house price index information service. These matters relate to the following:

(a) *Weighting systems*

Under this heading three issues arise regarding

- the weights to be employed **across** regions, and
- the weights to be employed **within** regions, and
- whether in both cases the weights should be **fixed** or **varied** in each time period, perhaps on a rolling basis.

With regard to the first of these - regional weights - we have already expressed our reservations regarding the use of NABS internal weights and about the Society's current methodology employing housing stock figures. Of the three possible alternatives explored, therefore, we recommend the use of weights derived from the DOE 5% sample survey of building society lending (in the absence of comprehensive weights for *all* transactions).

Concerning the weights to be employed **within** regions, the Society will inevitably be limited to using its own internal weights, given the range and nature of variables that are employed in using this methodology. An alternative set of variables, comprehensively covering all transactions within any region, is not available.

Thirdly, the Society must decide whether to adopt a fixed set of weights at both the regional and UK levels (subject to periodic revision if necessary) or regularly changing weights defined perhaps, as now, on a rolling basis. We have not been able to explore this subject in the research project owing to the limited time span of the data made available. However, it is possible to make some general observations on the pros and cons of this matter from a practical viewpoint. On the positive side, the use of rolling weights avoids the possibility of any index series gradually becoming unrepresentative of the current mix of transactions and the need for occasional major revision. On the negative side, rolling weights involve additional computational effort, first in determining the weights themselves and, secondly, in chaining the index numbers to produce a continuous series over time.

(b) *Classification of property age sub-groups*

We have analysed a number of property age sub-groups which were recommended at the outset by the Society, as follows:

- new houses
- modern (post-1970) houses
- older (pre-1971) houses
- 1945-1970 houses
- 1919-1944 houses
- pre-1919 houses

These breakdowns inevitably aggravate small sample size problems and it may be felt desirable to pursue analyses only at higher levels of aggregation, in particular with respect to the first three of the above categories. On the other hand, if the Society decides, nonetheless, that it wishes to employ discrete age bands then we recommend that it would be preferable to adopt the *boundaries* for age bands which coincide with those currently used by the DOE in the analysis of the 5% sample survey of building society mortgage lending, viz: post-1980, 1961-1980, 1940-1960, 1919-1939 and pre-1919. Note that this would not necessarily involve using the same *number* of age groups. This would be preferable because it would permit the use of weights for the age groups drawn from the DOE 5% sample survey, as recommended earlier.

(c) *Reporting policy*

A reporting policy must be established with regard to whether or not the Society should report individual results which, on the basis of the various statistical criteria discussed in Section 5, may be regarded as being open to large margins of error. This is a matter of judgement and compromise which of course applies to every organisation which provides information on house prices. Of the three criteria employed (t-tests, adjusted R^2 values and sample sizes) we would suggest that the last of these be given most emphasis, since as the sample size increases, one would expect to observe improvements with regard to the other two criteria. This

matter would naturally constitute an important element in a system regularly monitoring performance of the house-price models.

(d) *Desirable improvements*

Throughout the report we have made a number of comments about reservations and limitations. For convenience, we bring these points together here.

- The assignment of post codes to the whole data base, particularly to new houses, must be pursued to permit the generation of the two locational codes across all data sets as comprehensively as possible.
- We would recommend that the methodology be applied to previous time periods as far as possible in order to construct a continuous standardised time series, as was originally intended. At the very least, there would be great advantage to the Society in strengthening and re-establishing its eminence in the house price analysis field by establishing an earlier base date for the standardised series than 1986. Perhaps 1980 would allow coverage of a useful time span.
- Further improvements to the range of variables in the data base are desirable. Possibly the most important improvement would be the recording of plot size (site area) comprehensively over *all* properties, or at the very least use of a set of plot size categories such as "small", "medium", "large" etc

which would make it easier for surveyors to record. Some consideration may also be given to the inclusion of some additional variables such as an "energy conservation rating" code, the presence of double glazing, etc.

- Finally, it would undoubtedly be beneficial to merge the data sets of the (former) two Societies in order to reduce the problem of small sample sizes. This, of course, would necessitate the redesigning of the data collection systems as used originally by their separate research departments.

(e) *Future monitoring*

The adoption of an "hedonic-based" approach, requiring as it does regression analysis in each successive time period, makes it particularly important that the system established should be regularly monitored. This monitoring must be carried out with regard to the following elements:

- the stability of the estimating regression equations;
- the monitoring of sample sizes pertaining to each sub-group of index numbers;
- detection of any apparently erratic behaviour in the index numbers over time; and finally,
- to monitor the need for rebasing if a fixed weighting system is adopted.

APPENDICES

APPENDIX A: ACORN AND PARLIAMENTARY CONSTITUENCY CLASSIFICATIONS

(a) The Acorn Classification

ACORN stands for "A Classification of Residential Neighbourhoods". It applies published census statistics to classify areas of about 150 households (census enumeration districts) into 38 different neighbourhood types. The ACORN classification takes into account 40 different variables encompassing demographic, housing and employment characteristics. The 38 neighbourhood types are aggregated up to 11 neighbourhood groups, as shown below.

ACORN GROUPS

- A Agricultural areas
- B Modern family housing, higher incomes
- C Older housing of intermediate status
- D Poor quality older terraced housing
- E Better-off council estates
- F Less well-off council estates
- G Poorest council estates
- H Multi-racial areas
- I High status non-family areas
- J Affluent suburban housing
- K Better-off retirement areas

ACORN TYPES

- A 1 Agricultural villages
- A 2 Areas of farms and smallholdings
- B 3 Cheap modern private housing
- B 4 Recent private housing, young families
- B 5 Modern private housing, older children
- B 6 New detached houses, young families
- B 7 Military bases
- C 8 Mixed owner-occupied and council estates
- C 9 Small town centres and flats above shops
- C 10 Villages with non-farm employment
- C 11 Older private housing, skilled workers
- D 12 Unimproved terraces with old people
- D 13 Pre-1914 terraces, low income families
- D 14 Tenement flats lacking amenities
- E 15 Council estates, well-off older workers
- E 16 Recent council estates
- E 17 Council estates, well-off young workers
- E 18 Small council houses, often Scottish
- F 19 Low rise estates in industrial towns
- F 20 Inter-war council estates, older people
- F 21 Council housing for the elderly
- G 22 New council estates in inner cities
- G 23 Overspill estates, high unemployment
- G 24 Council estates with overcrowding
- G 25 Council estates with worst poverty
- H 26 Multi-occupied terraces, poor Asians
- H 27 Owner-occupied terraces with Asians
- H 28 Multi-let housing with Afro-caribbeans
- H 29 Better-off multi-ethnic areas
- I 30 High status area, few children
- I 31 Multi-let big old houses and flats
- I 32 Furnished flats, mostly single people
- J 33 Inter-war semis, white collar workers
- J 34 Spacious inter-war semis, big gardens
- J 35 Villages with wealthy older commuters
- J 36 Detached houses, exclusive suburbs
- K 37 Private houses, well-off elderly
- K 38 Private flats with single pensioners

(b) The Parliamentary Constituency Classification

The classification of Parliamentary Constituencies is similar to that employed by CACI Market Analysis in the development of ACORN. It applies a large number of socio-demographic characteristics, including age structure, household composition, housing, employment and socio-economic status, to categorise constituencies into 28 types and seven broader groups.

PARLIAMENTARY CONSTITUENCY GROUPS

- 1 Inner metropolitan
- 2 Scottish areas
- 3 Poorer, declining industrial areas
- 4 Traditional, stable industrial areas
- 5 Better-off industrial areas
- 6 High status and metropolitan suburbs
- 7 Rural areas, resort and market towns

PARLIAMENTARY CONSTITUENCY TYPES

- 1 1 Metropolitan private rented
- 1 2 Mixed inner metropolitan
- 1 3 Inner metropolitan with council housing
- 2 4 Scottish rural
- 2 5 Scottish industrial
- 2 6 Urban Scotland - domestic overcrowding
- 2 7 Scottish city areas with much council housing
- 3 8 Poor inner city with council housing
- 3 9 Traditional industrial areas, high unemployment
- 3 10 Industrial areas with immigrants
- 3 11 Areas of very poor quality housing
- 3 12 Metropolitan areas with immigrants
- 3 13 Poor immigrant areas
- 4 14 Traditional old industrial areas
- 4 15 Urban industrial areas
- 4 16 Balanced city seats
- 5 17 Mostly affluent towns, light industry
- 5 18 Better off towns
- 5 19 Stable industrial towns
- 5 20 Industrial towns with young families
- 6 21 Metropolitan suburbs
- 6 22 Provincial city seats
- 6 23 City areas, service employment
- 6 24 Very high status area
- 6 25 Suburbia
- 7 26 Well-to-do county towns
- 7 27 Rural areas
- 7 28 Resort and retirement towns

APPENDIX B: TECHNICAL DETAILS OF THE METHODOLOGY

In regression analysis, five types of interrelated problems are commonplace and are especially relevant in the present context, namely:

1. errors in coding and the inclusion of outliers - "cleaning" the data,
2. the choice of functional form for the estimating equations,
3. the choice of the optimum combination of explanatory variables,
4. the degree of correlation between the explanatory variables themselves (multicollinearity), and
5. the possibility of the error term, e_{it} , exhibiting a non-constant variance (heteroskedasticity).

Considerable attention was devoted to each of these problems in arriving at the estimating equations. Our approach and solutions are discussed below.

B.1 Errors in Coding and Outliers - Cleaning the data

The data were examined to detect sales which were (a) genuinely atypical, or (b) appeared to be unusual because of an error in coding the records at source.

These may both give rise to:

- extremely unusual houses or exceptional prices for unexceptional houses, and
- cases where miscoding of records has produced impossible or unlikely combinations of characteristics; for example, a house with *no* bedrooms, or a flat with only two rooms but with a floor area of *4000 sq ft!*

In order to establish a procedure to be followed regularly to detect and eliminate such cases, the structure of the data base for Q1 1986 was analysed in detail by frequency distributions, breakdowns, and by crosstabulations of related characteristics to identify outlying cases on individual variables (univariate outliers). On the basis of these investigations the range of values within which 99 per cent of cases fell was taken as the range to use for further analyses. At the same time, the data were examined for the presence of outlying cases based on the complete set of characteristics (multivariate outliers). Two tests for multivariate outliers were used, namely Mahalanobis' Distances and Cook's Distances (see Section B.1.2 below). It was found that elimination of univariate outliers also removed the most significant multivariate outliers. We refer to this data set as the "cleaned" data set.

B.1.1 *Univariate Outlier Criteria*

The criteria employed to remove extreme cases, on a univariate basis, resulted in only those cases being *included* in the final set which satisfied the following specifications:

Reception rooms

One to five reception rooms for all types of houses and bungalows, and zero to five reception rooms for flats and maisonettes.

Bedrooms

One to eight bedrooms for all types of houses and bungalow, and zero to eight bedrooms for flats and maisonettes*.

Bathrooms

Up to and including three bathrooms for all dwelling types.

Total number of rooms

This figure in all cases is the sum of reception rooms and bedrooms plus one. The included cases are those with two to eleven total rooms for flats and maisonettes, and three to eleven rooms for all houses and bungalows.

Tenure

Only those properties which have freehold, feuhold or leasehold (with vacant possession in each case) have been included. The excluded cases (no vacant possession and part feuhold/part leasehold) account for less than 0.1 per cent of the original data base.

Construction Date

Cases recorded of houses having a construction date of 1987 have been *excluded*, given that the data should only apply to approvals for 1986.

* Cases of flats and maisonettes with zero bedrooms have been retained on the assumption that they are bedsitters.

Size

Frequency distributions of size by house type were used to identify unusual or improbable house areas resulting possibly from an error in coding the measure used (that is sq m instead of sq ft or vice versa). A range of house sizes which covered 99 per cent of the data for each house type was chosen as follows:

Detached houses	400 - 4500 sq ft
Semi-detached houses	350 - 4000 sq ft
Terraced houses	300 - 4000 sq ft
Detached bungalows	350 - 4000 sq ft
Semi-detached bungalows	300 - 4000 sq ft
Purpose-built flat/maisonette	200 - 3000 sq ft
Converted flat/maisonette	200 - 3000 sq ft

Price

All cases where a selling price of zero has been recorded were excluded. In addition, some properties are sold at "non-market" prices and these are also excluded. The Society itself classifies some 14 categories under this heading, but not all of these were automatically excluded. The categories listed by the Society are as follows:

1. Sitting tenant
2. Council tenant
3. Inter-family sale
4. Divorce settlement
5. Direct labour (self-build)
6. Land already occupied

7. Connection with building firm
8. Valuation allows for improvements
9. Property already owned
10. Other
11. Community leasehold
12. Surveyors' rounding
13. Cost sale
14. Housing Society sale

Cases in categories number 1 (sitting tenant), number 2 (council tenant) and number 9 (mortgage to existing owner for purpose other than purchase of the property) have been *excluded*. After determining the ratio of valuation-to-price for properties in the other categories listed above, it appeared that there was a substantial number of cases where the selling price was only minimally below and in some cases even above the valuation. It was therefore decided not to exclude all cases categorised by the Society as being "non-market price" but to exclude only those where the valuation was more than 10 per cent higher than the price, that is to *include* cases where the ratio VAL/PRICE was less than or equal to 1.1.

B.1.2 Multivariate Outlier Criteria

Two statistical tests for multivariate outliers may be used as part of the standard multiple regression procedure with SPSSX (the statistical package used in our analyses). These are Mahalanobis' Distance and Cook's Distance*. Both methods identify individual outlying cases. Mahalanobis' Distance is a

* For full details, see Norusis (1985), pp 28-32.

standardised measure of the distance of the aggregate score on a set of independent variables for a particular case from the mean score on the same variables for all cases. It identifies cases that exhibit combined values which differ markedly from the norm. Cook's Distance, on the other hand, identifies those cases which are influential; that is, those which have a strong influence on the regression results. Such cases do not necessarily show an extreme multivariate score and may not, therefore, be identified by the Mahalanobis test.

These tests were used in combination with the frequency distribution tests which were used to identify outliers on individual variables (see Section B.1.1 above). It was noticeable that the cleaned data set produced fewer and far less extreme cases on the Mahalanobis' test and no significant influential cases on the Cook's test.

In practice, it would not be reasonable to seek, to detect and to eliminate individual outlying cases which remain after the selection criteria for "normal" values of the independent variables have been applied (that is, after univariate outliers have been excluded). The tests have been used here, therefore, primarily as an indication of the validity of our exclusion criteria as set out earlier.

B.2 The Choice of Functional Form

When the problem of outliers has been tackled, the next step in regression analysis is to determine an appropriate functional form for the estimating equation. A potentially serious source of bias in hedonic-price and other regression-based studies may be associated with functional form misspecification. In principle, many functional forms are possible but,

unfortunately, there is no theoretical guidance as to which form is the most appropriate to a particular model. The solution to this problem, therefore, reduces to an empirical one. Box and Cox (1964) have developed a statistical test based on likelihood ratio tests to identify the functional form providing the "best fit". The procedure suggested by Box and Cox is adopted here.

B.2.1 *Box-Cox Test for Functional Form*

At the outset it should be noted that various versions of the Box-Cox test procedure may be employed to test not only for the appropriate transformation of the dependent variable but also for the appropriate transformations of the explanatory variables to be included in the estimating regression equation. However, in relation to the present study a major limitation in applying this test is that many of the explanatory variables are dichotomous (that is, dummy variables taking the value of 1 or 0). This precludes power transformations of these variables which must of necessity be linearly related to the dependent variable. The Box-Cox test cannot, therefore, be used to assess any of the qualitative characteristics, since these are coded as dummy variables. Thus, the search for functional form using the Box-Cox procedure can only be conducted with respect to the quantitative explanatory variables and the dependent variable price. On the other hand, it should be appreciated that the use of dummy variables conveniently permits the incorporation of variables to which price may be related non-linearly without the necessity of specifying the nature of the non-linearity.

Our exploratory analysis clearly indicated that the regression results are substantially more sensitive to transformations of the dependent variable than of

the explanatory variables. Therefore, the search for the most appropriate functional form focused on transformations of the dependent variable.

The procedural steps involved in the Box-Cox test may be summarised as follows:

- (1) define a family of transformations of the dependent variable, price (P_{it}), such that:

$$\begin{aligned} P_{it}^{(\lambda)} &= (P_{it}^\lambda - 1)/\lambda && \text{for } \lambda \neq 0 \\ &= \ln(P_{it}) && \text{for } \lambda = 0 \end{aligned}$$

This family of transformations, generated by the parameter λ (over a range, for example, of $m \leq \lambda \leq n$), is well defined for all $P_{it} > 0$.

In this study, the family of transformations tested corresponds to $-0.5 \leq \lambda \leq 1.1$

- (2) estimate each of the regression equations which correspond to each of the transformations of P_{it} - that is, for each $P_{it} = f(X_{jt}, e_{it})$, for $m \leq \lambda \leq n$
- (3) calculate for each estimated regression a "concentrated log-likelihood" function, L , which takes the following form:*

$$L = \frac{-N}{2} [\ln(2\pi) + \ln(\hat{\sigma}^2) + 1] + (\lambda - 1) \sum \ln(P_{it})$$

where N = the number of observations on $P_{it}^{(\lambda)}$ in each of the estimated regressions, and

$\hat{\sigma}^2$ = the estimated variance of the error term in each regression - this is approximated by RSS/N (where RSS is the regression residual sum of squares)

* For details concerning the derivation of this function, see Spitzer (1982) pp 307-9.

- (4) given the set of computed L values, each one corresponding to a particular value of λ , select the "maximum likelihood" estimator of λ , say $\hat{\lambda}$, which maximises the value of the concentrated log-likelihood function - denoted by $L_{MAX}(\hat{\lambda})$
- (5) a chi-square (χ^2) test with 1 degree of freedom (d.f.) is then carried out on each of the computed L values; for example, to test the appropriateness of the semi-log model, the χ^2 test statistic is given by:*

$$2[L_{MAX}(\hat{\lambda}) - L(\lambda = 0.0)]$$

and for the linear model, the test statistic is given by:

$$2[L_{MAX}(\hat{\lambda}) - L(\lambda = 1.0)]$$

where $L(\lambda = 0.0)$ and $L(\lambda = 1.0)$ represent the values of the concentrated log-likelihood function, L, corresponding to $\lambda = 0.0$ and 1.0 respectively; finally,

- (6) on the basis of the above test, we are then able either to accept or to reject each possible transformation of P_{it} , and to decide on the optimal value of λ (and hence the most appropriate functional form of the hedonic regression equation).

*The test statistic is equivalent to minus twice the logarithm of a likelihood ratio - that is, of the form $-2\log A/B$ which can be rearranged as $2(\log B - \log A)$ as above - which has an asymptotic χ^2 distribution. For proof of this, see Theil (1971), p 396.

Table B1 presents the computed values of the concentrated log-likelihood function, L , which correspond to the range of values explored in the context of the present study (with $-0.5 \leq \lambda \leq 1.1$). A graphical distribution of this function is also shown in Figure B1. It will be seen that the value of L is maximised when $\lambda = 0.0$; that is, $L_{\text{MAX}}(\hat{\lambda} = 0.0) = -189545$, which corresponds to the transformation of P_{it} into natural logs ($\ln P_{it}$).

The results of carrying out the χ^2 test are presented in Table B2. It will be noted that in the interests of brevity we present here only the results for the linear ($\lambda = 1.0$) and semi-logarithmic ($\lambda = 0.0$) cases.

The conclusion to be drawn from the Box-Cox analysis is that the logarithmic transformation of P_{it} provides the most appropriate functional form for the hedonic regression model.

B.3 Optimum Combination of Explanatory Variables

In conjunction with the Box-Cox test outlined above, extensive analyses were also carried out to determine the optimum combinations and appropriate transformations of the explanatory variables in the regression equations. These analyses were conducted with respect to

- (a) *size variables* - the choice rested between area, area squared, square root of area, number of rooms or reception rooms plus bedrooms;

TABLE B.1 BOX-COX TEST FOR FUNCTIONAL FORM*

Transformation parameter	Concentrated log-likelihood function
λ	$L(\lambda)$
-0.5	-191325
-0.4	-190931
-0.3	-190399
-0.2	-189974
-0.1	-189685
-0.0 ---- log model -----	-189545 = $L_{\max}(\hat{\lambda}) = L(\lambda = 0)$
0.1	-189563
0.2	-189748
0.3	-190104
0.4	-190635
0.5	-191341
0.6	-192221
0.7	-193270
0.8	-194487
0.9	-195867
1.0 --- linear model -----	-197406 = $L(\lambda = 1.0)$
1.1	-199103

* Based on NABS data for 1986 Q1.

FIGURE B1 BOX-COX TEST FOR FUNCTIONAL FORM

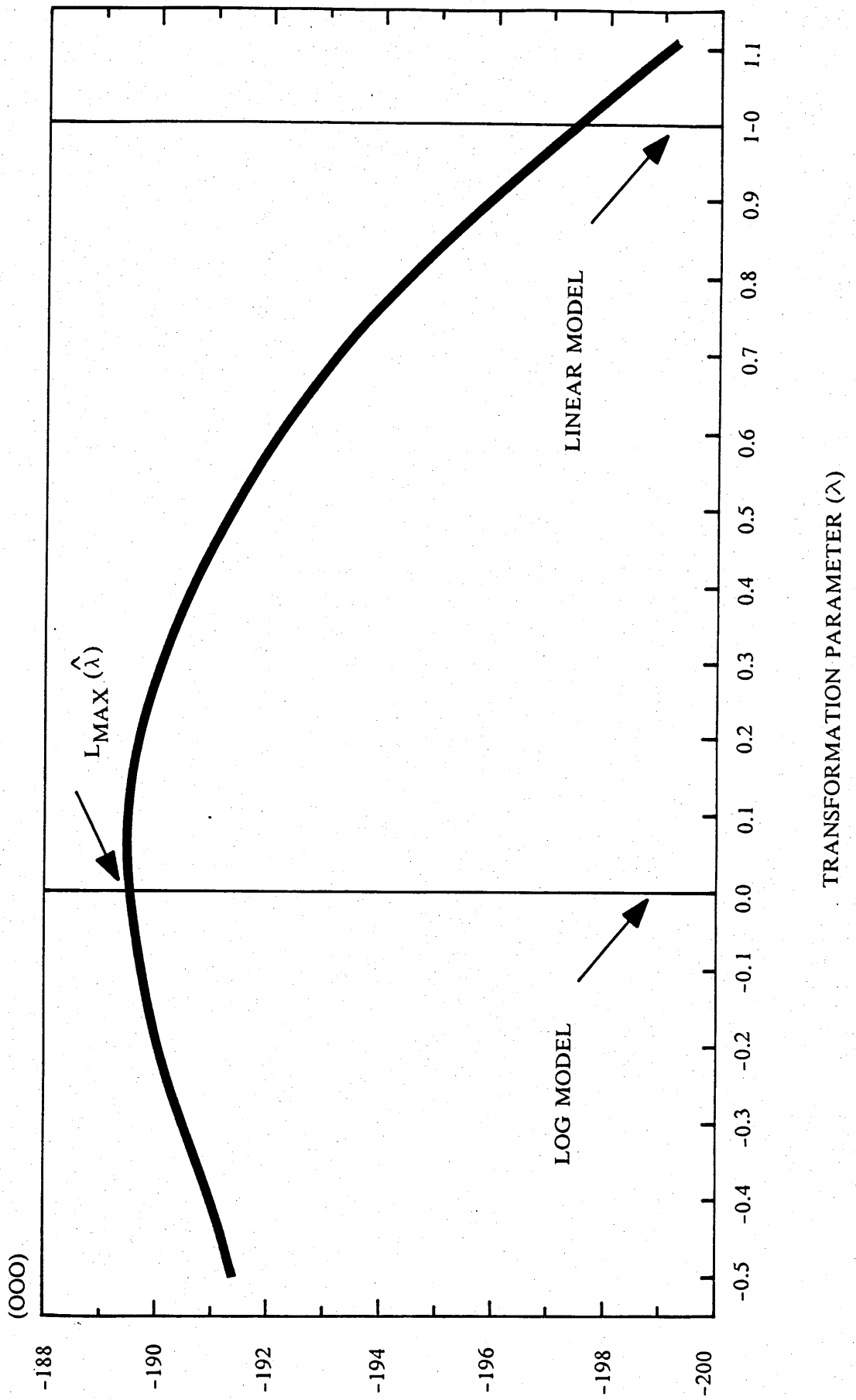


TABLE B2 χ^2 TEST FOR FUNCTIONAL FORM

(i) *Linear Model*

$$P_{it} = f(X_{jt}, e_{it})$$

Null hypothesis $H_0 : \lambda = 1.0$

Alternative hypothesis $H_A : \lambda \neq 1.0$

Test statistic: $2[-189545 - (-197406)]$
 $= 15722$

This exceeds 6.63, the critical value of χ^2 with 1 d.f. that leaves 1% in the upper tail, so we must *reject* H_0 that $\lambda = 1.0$.

The linear model is not optimal.

(ii) *Semi-logarithmic Model*

$$\ln(P_{it}) = f(X_{jt}, e_{it})$$

Null hypothesis $H_0 : \lambda = 0.0$

Alternative hypothesis $H_A : \lambda \neq 0.0$

Test statistic: $2[-189545 - (-189545)]$
 $= 0$

This does not exceed 6.63, the critical value of χ^2 with 1 d.f. that leaves 1% in the upper tail, so we must *accept* H_0 that $\lambda = 0.0$.

We cannot reject the hypothesis that the semi-logarithmic functional form is optimal.

- (b) *age of property* - the choice was between age (in years), age squared or square root of age;
- (c) *central heating* - the choice was between the use of all nine central heating categories provided in the Society's data base or combinations of these to give only a set of three categories, namely full, partial or no central heating;
- (d) *tenure* - the choice was between the use of the separate categories as provided by the Society or only two categories (freehold or feuhold with vacant possession, and leasehold with vacant possession), and
- (e) *locational variables* - the choice was between the use of *either* ACORN codes *or* Parliamentary Constituency classification codes in the final regressions, or *both* as indicators of the impact of locational factors on house prices.

It will be appreciated that the various choices above give rise to an immense number of possible combinations. These were fully examined. It would seem to serve little purpose to present the detailed results of this exploratory analysis here but we do summarise our findings and conclusions below as to the optimum choice of transformations and combinations:

- (a) floor area gave consistently better results (in terms of adjusted R^2 and t-values) than the number of rooms variables. In addition, there was very little to choose between the transformations of area

and hence, for simplicity, floor area in sq ft was finally selected for inclusion;

(b) as with floor area, transformations of age made very little difference to the overall explanatory power of the regression models. Hence we selected age in its "raw" form (that is, number of years) as the candidate for inclusion;

(c) while the use of the nine separate central heating categories gave slightly better results than the three broader groupings (full, none, partial), some of these nine categories were frequently rejected from the equations for the different regions because they failed to meet the significance criteria for inclusion. To avoid this problem therefore, and to maintain consistency across the regions, it was decided to include the broader categories. These have been shown to provide broadly equivalent results;

(d) the use of only two tenure categories (freehold or feuhold with vacant possession and leasehold with vacant possession) gave reasonably consistent results; use of the original categories provided by the Society added little or nothing to the overall explanatory power of the models;

(e) our investigations indicated that the inclusion of *both* ACORN and Parliamentary Constituency codes showed a marked improvement in the overall explanatory power of the regression models compared with those obtained using only one of these. This

seems to suggest that the two locational variables are measuring different locational influences, the former at the "micro" or neighbourhood level, and the latter at a broader, "macro" level. A summary of our findings with regard to these variables is shown in Table B.3.

B.4 Multicollinearity

Multicollinearity refers to the situation in which some or all of the explanatory variables are very highly correlated with each other and are therefore not independently distributed. The existence of such interrelationships can cause problems with respect to the following aspects of regression analysis:

- (a) estimated regression coefficients may not be uniquely determined,
- (b) estimates of the coefficients from sample to sample may fluctuate markedly, and
- (c) less reliability can be placed on the relative importance of variables as indicated by their partial regression coefficients.

It will be appreciated, however, that multicollinearity is inevitably present to some degree in most econometric analyses and can rarely be eliminated completely. It has to be accepted in a study such as this, that certain characteristics will, by their very nature, be closely associated with each other. The aim of the researcher, therefore, is to minimise the influence of multicollinearity as much as possible. Both logical and statistical criteria should be used. A full correlation matrix is presented as Appendix F. It will be seen that high correlation coefficients only arise in a few cases.

**TABLE B3 CONTRIBUTION OF ACORN AND PARLIAMENTARY
CONSTITUENCY (PARL) VARIABLES***

	No ACORN/ No PARL	ACORN Only	PARL Only	ACORN and PARL
North	.733	.758	.741	.772
Yorks & Humberside	.723	.754	.754	.777
North West	.763	.791	.788	.809
East Midlands	.721	.728	.744	.759
West Midlands	.725	.754	.744	.770
East Anglia	.645	.656	.692	.712
Outer South East	.721	.724	.725	.739
Outer Metropolitan	.729	.739	.777	.789
Greater London	.648	.682	.697	.714
South West	.714	.730	.717	.740
Wales	.649	.668	.665	.693
Scotland	.704	.756	.762	.788

* As measured by their influence on adjusted R^2 ; results for Q2 1986.
Northern Ireland is not included since codes for this area are not available

SPSSX has available three regression methods for statistical identification of interrelationship between variables. These are "forward selection", "backward elimination" and "stepwise selection".

Forward Selection

In forward selection, the variables are entered in turn. The first variable entered into the equation is the one with the largest positive or negative correlation with the dependent variable. The F test for the hypothesis that the coefficient of the entered variable is 0 is then calculated. In order to judge whether this variable (and each succeeding variable) is important, a criterion must be established which specifies the actual value of the F statistic that a variable must achieve in order to enter the model, called "F-to-enter".

If the first variable selected for entry meets the criterion for inclusion, forward selection continues. Once one variable is entered, the statistics for variables not in the equation are used to select the next one, and so on.

Backward Elimination

In backward elimination, all variables are initially entered into the regression equation. In contrast to the above procedure, which allows the researcher to specify "entry criteria", backward elimination permits "removal criteria" to be employed, based as before on the F-test. Variables having F values less than a specified "F-to-remove" are therefore sequentially rejected from the regression.

Stepwise Selection

Stepwise selection of independent variables is probably the most commonly used procedure in regression; it is really a combination of the backward and forward

procedures. The first variable is selected in the same manner as in forward selection. If the variable fails to meet entry requirements ("F-to-enter" value), the procedure terminates with no independent variables in the equation. If it passes the criterion, selection of the second variable commences based on the highest partial correlation and, if it also meets entry criteria, it enters the equation. From this point, stepwise selection differs from forward selection in that the F value of the first variable is now examined to see whether it is small enough for the variable to be removed according to the removal criterion (F-to-remove), as in backward elimination.

The next step is to examine the variables not in the equation for entry, followed by examination of the variables already in the equation for removal. Variables are removed until none remain that meet the removal criterion. To prevent the same variable being repeatedly entered and removed, F-to-enter must be greater than F-to-remove. Variable selection terminates when no more variables meet entry and removal criteria*.

Each method will not necessarily give identical results. In the present study, all three methods were employed and were found to give a consistent picture of the relative importance of the variables.

The classic method of dealing with the problem of multicollinearity is to discard redundant variables. If two variables are very highly correlated, the use of either one in the regression (rather than both) will capture the effect of both. It will be appreciated, however, that even though some variables may be shown to

* For a detailed discussion of the computational procedures described above see Norusis (1983), pp 159-65 and Norusis (1985), pp 42-55.

offer little explanatory power, it is not sensible to exclude them if they are members of a set which is, in general, very important in the analysis. For example, DB (detached bungalow) and FC (converted flat) were found to be insignificant in regressions for some regions, as were individual ACORN and Parliamentary Constituency codes but this did not invalidate their usefulness as variables in other regions. Exclusion of a member of a set would necessitate removal of the whole set from the equation.

In this study, the main candidates for redundancy were the alternative characteristics which measure size - numbers of rooms and property area. Examination of the correlation matrix for these variables alone does show high correlations among these characteristics:

	SIZE (floor area)	TOTRMS (total number of rooms)	RECEP (number of reception rooms)	BED (number of bedrooms)
TOTRMS	.7826			
RECEP	.5814	.7895		
BED	.7346	.9067	.4571	
BATH	.3773	.2982	.2294	.2745

Thus, a choice had to be made as to the best variable or variables to use as an indicator of size. As described earlier, SIZE, TOTRMS, RECEP and BED, were tested in a number of separate regression specifications, and this resulted in SIZE being chosen as the preferred variable.

It was expected that the ACORN and Parliamentary Constituency codes would be highly multicollinear because of the similar nature of the characteristics on which the classifications were based. However, the correlation matrix (see Appendix

F) and the variable selection procedures do not reveal any significant problem of multicollinearity with these classification codes. As noted earlier, it appears in general that the Parliamentary Constituency variables tend to reinforce the influence of the Acorn variables, rather than to detract from them. The effect of the Constituency variables is to augment the significance of some Acorn variables while diminishing the significance of others but in general there seemed to be adequate justification for retaining both.

B5 Heteroskedasticity

In regression analyses, the error term e_{it} is assumed to have independent normal values with a mean of 0 and a constant variance of σ^2 . However, when we are dealing with microeconomic data of the kind used in the present study, the constancy of variance assumption may be violated and the appropriate model may in fact be one with a so-called "heteroskedastic" disturbance (error) term - for a detailed discussion of this problem see Kmenta (1971), pp 249-69.

A simple and direct method of detection (and the one employed here) is to plot the residuals generated from the estimated regression equation against the predicted values of the dependent variable. If the spread of the residuals increases or decreases with predicted values, it may be taken as an indicator of heteroskedasticity in the data set.

The resultant scatterplot of residuals for this study in the exploratory data set was observed to be relatively uniform across the range of predicted values for P_{it} . It is concluded therefore that the constant variance assumption appears not to be seriously violated.

In any case, it should be appreciated that even if heteroskedasticity exists, it would only increase the confidence intervals of the indexes; it would not affect their unbiasedness - see Kmenta, (1971) pp 250-54.

APPENDIX C: STANDARD REGIONS ANALYSED BY DISTRICT COUNCIL

NORTHERN	01	YORKSHIRE AND HUMBERSIDE	02
CLEVELAND		SOUTH YORKSHIRE	
Middlesbrough	530	Sheffield	460
Langbaugh	531	Rotherham	461
Stockton on Tees	532	Barnsley	462
Hartlepool	533	Doncaster	463
DURHAM		WEST YORKSHIRE	
Teesdale	534	Kirklees	464
Darlington	535	Calderdale	465
Sedgefield	535	Leeds	466
Easington	537	Bradford	467
Durham	538	Wakefield	468
Wear Valley	539		
Derwentside	540	NORTH YORKSHIRE	
Chester-le-Street	541	Craven	469
		Harrogate	470
TYNE & WEAR		Richmondshire	471
Sunderland	542	York	472
Gateshead	543	Hambleton	473
South Tyneside	544	Ryedale	474
Newcastle upon Tyne	545	Scarborough	475
North Tyneside	546	Selby	476
NORTHUMBERLAND		HUMBERSIDE	
Blyth Valley	547	North Wolds	477
Wansbeck	548	Boothferry	478
Castle Morpeth	549	Glanford	479
Tynedale	550	Scunthorpe	480
Alnwick	551	Cleethorpes	481
Berwick upon Tweed	552	Grimsby	482
		Holderness	483
CUMBRIA		Kingston upon Hull	484
Carlisle	553	Beverley	485
Eden	554		
Allerdale	555		
South Lakeland	556		
Barrow-in-Furness	557		
Copeland	558		
Isle of Man	559		

NORTH WEST	03	EAST MIDLANDS	04
CHESHIRE		NORTHAMPTONSHIRE	
Ellesmere Port	490	South Northamptonshire	420
Chester	491	Northampton	421
Crewe and Nantwich	492	Daventry	422
Vale Royal	493	Wellingborough	423
Halton	494	Kettering	424
Macclesfield	495	East Northamptonshire	425
Congleton	496	Corby	426
Warrington	497		
MERSEYSIDE		LEICESTERSHIRE	
Wirral	498	Harborough	427
Liverpool	499	Blaby	428
Knowsley	500	Leicester	429
Sefton	501	Hinckley and Bosworth	430
St Helens	502	North West Leicestershire	431
		Charnwood	432
GREATER MANCHESTER		Rutland	433
Wigan	503	Melton	434
Bolton	504	Oadby and Wigston	435
Bury	505		
Rochdale	506	DERBYSHIRE	
Salford	507	South Derbyshire	436
Trafford	508	Derby	437
Manchester	509	Erewash	438
Stockport	510	Amber Valley	439
Tameside	511	West Derbyshire	440
Oldham	512	North East Derbyshire	441
		Bolsover	442
LANCASHIRE		Chesterfield	443
West Lancashire	513	High Peak	444
Chorley	514		
Blackburn	515	NOTTINGHAMSHIRE	
Rossendale	516	Rushcliffe	445
Hyndburn	517	Broxtowe	446
Burnley	518	Nottingham	447
Pendle	519	Ashfield	448
Ribble Valley	520	Gedling	449
South Ribble	521	Newark	450
Preston	522	Bassetlaw	451
Fylde	523	Mansfield	452
Blackpool	524		
Wyre	525	LINCOLNSHIRE	
Lancaster	526	South Kesteven	453
		South Holland	454
		Boston	455
		North Kesteven	456
		East Lindsey	457
		Lincoln	458
		West Lindsey	459

WEST MIDLANDS	05	EAST ANGLIA	06
HEREFORD AND WORCESTER		CAMBRIDGESHIRE	
Leominster	250	South Cambridgeshire	400
South Herefordshire	251	Cambridge	401
Hereford	252	East Cambridgeshire	402
Malvern Hills	253	Huntingdon	403
Worcester	254	Fenland	404
Wychavon	255	Peterborough	405
Redditch	256		
Bromsgrove	257	NORFOLK	
Wyre Forest	258	West Norfolk	406
		North Norfolk	407
WARWICKSHIRE		Breckland	408
Stratford-on-Avon	259	Broadland	409
Warwick	260	Norwich	410
Rugby	261	South Norfolk	411
Nuneaton	262	Great Yarmouth	412
North Warwickshire	263		
		SUFFOLK	
STAFFORDSHIRE		Waveney	413
Tamworth	264	Suffolk Coastal	414
Lichfield	265	Mid Suffolk	415
Cannock Chase	266	Babergh	416
South Staffordshire	267	Ipswich	417
Stafford	268	St Edmundsbury	418
East Staffordshire	269	Forest Heath	419
Staffordshire Moorlands	270		
Stoke-on-Trent	271		
Newcastle-under-Lyme	272		
SHROPSHIRE			
North Shropshire	273		
Oswestry	274		
Shrewsbury and Atcham	275		
The Wrekin	276		
Bridgnorth	277		
South Shropshire	278		
WEST MIDLANDS			
Wolverhampton	279		
Walsall	280		
Dudley	281		
Sandwell	282		
Birmingham	283		
Solihull	284		
Coventry	285		

OUTER SOUTH EAST	07		
OXFORDSHIRE			
Cherwell	290	BEDFORDSHIRE (part)	
West Oxfordshire	291	Mid Bedfordshire	331
Vale of White Horse	292	North Bedfordshire	332
Oxford	293	BUCKINGHAMSHIRE	
South Oxfordshire	294	Milton Keynes	333
		Aylesbury Vale	334
BERKSHIRE (part)			
Newbury	295		
HAMPSHIRE (part)			
Basingstoke	296		
Test Valley	297		
Winchester	298		
East Hampshire	299		
Eastleigh	300		
Southampton	301		
New Forest	302		
Fareham	303		
Gosport	304		
Portsmouth	305		
Havant	306		
WEST SUSSEX (part)			
Chichester	307		
Arun	308		
Worthing	309		
Adur	310		
EAST SUSSEX			
Hove	311		
Brighton	312		
Lewes	313		
Wealden	314		
Eastbourne	315		
Rother	316		
Hastings	317		
KENT (part)			
Ashford	318		
Shepway	319		
Dover	320		
Thanet	321		
Canterbury	322		
Swale	323		
ISLE OF WIGHT			
Medina	324		
South Wight	325		
ESSEX (part)			
Maldon	326		
Tendring	327		
Colchester	328		
Braintree	329		
Uttlesford	330		

OUTER METROPOLITAN 08

BUCKINGHAMSHIRE (part)

Wycombe	340
Chiltern	341
South Buckinghamshire	342

BERKSHIRE (part)

Reading	343
Wokingham	344
Bracknell	345
Windsor and Maidenhead	346
Slough	347

HAMPSHIRE

Hart	348
Rushmoor	349

SURREY

Surrey Heath	350
Runnymede	351
Spelthorne	352
Elmbridge	353
Woking	354
Guildford	355
Waverley	356
Mole Valley	357
Epsom and Ewell	358
Reigate and Banstead	359
Tandridge	360

WEST SUSSEX (part)

Horsham	361
Crawley	362
Mid Sussex	363

KENT (part)

Sevenoaks	364
Tonbridge and Malling	365
Tunbridge Wells	366
Maidstone	367
Gillingham	368
Medway	369
Gravesham	370
Dartford	371

ESSEX (part)

Thurrock	372
Basildon	373
Castle Point	374
Southend-on-Sea	375
Rochford	376
Chelmsford	377
Brentwood	378
Epping Forest	379
Harlow	380

HERTFORDSHIRE

East Hertfordshire	381
Broxbourne	382
Welwyn/Hatfield	383
Hertsmere	384
Watford	385
Three Rivers	386
Dacorum	387
St Albans	388
North Hertfordshire	389
Stevenage	390

BEDFORDSHIRE (part)

South Bedfordshire	391
Luton	392

GREATER LONDON**09**

Hillingdon	801
Harrow	802
Ealing	803
Brent	804
Barnet	805
Enfield	806
Haringey	807
Camden	808
Islington	809
Hackney	810
Waltham forest	811
Redbridge	812
Havering	813
Barking	814
Newham	815
Tower Hamlets	816
City of London	817
City of Westminster	818
Kensington and Chelsea	819
Hammersmith	820
Hounslow	821
Richmond-upon-Thames	822
Kingston-upon-Thames	823
Merton	824
Wandsworth	825
Sutton	826
Croydon	827
Lambeth	828
Southwark	829
Lewisham	830
Bromley	831
Greenwich	832
Bexley	833

SOUTH WEST**10****CORNWALL**

Penwith	201
Kerrier	202
Carrick	203
Restormel	204
North Cornwall	205
Caradon	206

DEVON

Plymouth	207
South Hams	208
Torbay	209
Teignbridge	210
West Devon	211
Torridge	212
North Devon	213
Tiverton	214
Exeter	215
East Devon	216

DORSET

West Dorset	217
Weymouth and Portland	218
Purbeck	219
Poole	220
Bournemouth	221
Christchurch	222
Wimborne	223
North Dorset	224

SOMERSET

Taunton Deane	225
Yeovil	226
West Somerset	227
Sedgemoor	228
Mendip	229

AVON

Woodspring	230
Wansdyke	231
Bath	232
Kingswood	233
Northaven	234
Bristol	235

WILTSHIRE

Salisbury	236
West Wiltshire	237
Kennet	238
North Wiltshire	239
Thamesdown	240

GLOUCESTERSHIRE

Cotswolds	241
Stroud	242
Forest of Dean	243
Gloucester	244
Tewkesbury	245
Cheltenham	246

ISLES OF SCILLY

Isles of Scilly	247
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WALES	11
DYFED	
Preseli	601
South Pembrokeshire	602
Carmarthen	603
Dinefwr	604
Llanelli	605
Ceredigion	606
WEST GLAMORGAN	
Swansea	607
Lliw Valley	608
Neath	609
Afan	610
MID GLAMORGAN	
Ogwr	611
Taff-Ely	612
Rhondda	613
Cynon	614
Merthyr Tydfil	615
Rhymney Valley	616
SOUTH GLAMORGAN	
Vale of Glamorgan	617
Cardiff	618
GWENT	
Newport	619
Islwyn	620
Torfaen	621
Blaenau Gwent	622
Monmouth	623
POWYS	
Brecknock	624
Radnor	625
Montgomery	626
CLWYD	
Glyndwr	627
Wrexham Maelor	628
Alyn and Deeside	629
Delyn	630
Rhuddlan	631
Colwyn	632
GWYNEDD	
Meirionydd	633
Dwyfor	634
Aberconwy	635
Arfor	636
Ynys Mon	637

COTLAND	12		
DUMFRIES AND GALLOWAY		GRAMPIAN	
Merrick	640	Kincardine and Deeside	681
Stewartry	641	Aberdeen City	682
Nithsdale	642	Gordon	683
Annandale and Eskdale	643	Banff and Buchan	684
		Moray	685
ORDERS		HIGHLAND	
Roxburgh	644	Inverness	686
Berwickshire	645	Lochaber	687
Ettrick and Lauderdale	646	Skye and Lochalsh	688
Tweeddale	647	Nairn	689
		Badenoch and Strathspey	690
LOTHIAN		Ross and Cromarty	691
Midlothian	648	Sutherland	692
East Lothian	649	Caithness	693
Edinburgh city	650		
West Lothian	651	WESTERN ISLES	
		Western Isles	694
FIFE		ORKNEY ISLES	
Dunfermline	652	Orkney Isles	695
Kirkcaldy	653		
North East Fife	654	SHETLAND ISLES	
		Shetland Isles	696
STRATHCLYDE			
Clydesdale	656	NORTHERN IRELAND	13
Cumnock and Doon Valley	657	COUNTY ANTRIM	701
Kyle and Carrick	659	COUNTY LONDONDERRY	702
Kilmarnock and Londoun	659	COUNTY DOWN	703
East Kilbride	660	COUNTY ARMAGH	704
Hamilton	661	COUNTY FERMANAGH	705
Motherwell	662	COUNTY TYRONE	706
Monklands	663	BELFAST	707
Cumbernauld and Kilsyth	664		
Strathkelvin	665		
Bearsden and Milngavie	666		
Clydebank	667		
Glasgow City	668		
Renfrew	669		
Cunningham	670		
Inverclyde	671		
Dumbarton	672		
Eastwood	673		
Argyll	674		
CENTRAL			
Stirling	675		
Clackmannan	676		
Falkirk and Grangemouth	677		
ANGUS			
Perth and Kinross	678		
Angus	679		
Dundee City	680		

APPENDIX D: DEFINITIONS AND CODE NAMES OF VARIABLES

We list below only those variables that have been included in the final model specifications. Information about all variables which were made available on computer tape by the Society for exploratory analysis is contained in Appendix H.

Variable Name	Code	Variable Type
HOUSE TYPE:		
Detached house	DH*	A set of seven dummy variables coded as 1 for the house type to which the property corresponds, otherwise 0.
Semi-detached house	SDH	
Terraced house	TH	
Detached bungalow	DB	
Semi-detached bungalow	SDB	
Purpose-built flat or maisonette	FB	
Converted flat or maisonette	FC	
SIZE OF DWELLING	SIZE	Floor area in sq ft.
BATHROOMS	BATH	Actual number of bathrooms.
CENTRAL HEATING:		
Full central heating	CHF*	A set of three dummy variables coded as 1 when heating type corresponds and 0 when it does not.
Partial central heating	CHP	
No central heating	NOCH	
TENURE:		
Freehold or feuhold with vacant possession	FFVP*	A set of two dummy variables, coded as 1 when tenure type corresponds, otherwise 0.
Leasehold	LH	
GARAGE:		
Double garage	DGAR*	A set of four dummy variables coded as 1 for the corresponding category, 0 for the others.
Single garage	SGAR	
Parking space	SPACE	
Neither garage nor parking space	NOPARK	

AGE OF DWELLING:

This is calculated from the construction date such that
 $AGE = [(analysis\ year+1)-date]$.
The addition of 1 is necessary to avoid a zero age for houses built in the analysis year, which would then exclude such cases from the regression

AGE Number of years.

ACORN GROUPS

Agricultural areas	A	A set of eleven dummy variables coded as 1 for the corresponding group and 0 otherwise. Not included in specification for "New Houses" due to the absence of the corresponding post codes.
Modern family housing, higher incomes	B*	
Older housing of intermediate status	C	
Poor quality older terraced housing	D	
Better-off council estates	E	
Less well-off council estates	F	
Poorest council estates	G	
Multi-racial areas	H	
High status non-family areas	I	
Affluent suburban housing	J	
Better-off retirement areas	K	

PARLIAMENTARY CONSTITUENCY GROUPS:

Inner metropolitan	P1	A set of seven dummy variables coded as 1 for the corresponding group and 0 otherwise. Not present in specification for "New Houses" due to the absence of the corresponding post codes.
Scottish areas	P2	
Poorer, declining industrial areas	P3	
Traditional, stable industrial areas	P4	
Better-off industrial areas	P5	
High status and metropolitan suburbs	P6*	
Rural areas, resort and market towns	P7	

SITE VALUATION:

Applies to "New Houses" only

SITEVAL Valuation in £

HOUSE PRICE

LP Natural log of house price (P) measured at the mortgage approval stage.

*In the final regression specifications and results (see Appendix E), it will be noted that one constituent of each dummy variable set is excluded. This is necessary in order to avoid the statistical problem of "over-specification" of the ordinary least squares regression equations (see Heathington and Isibor, 1972). The dummy variable elements chosen for exclusion are:- DH, CHF, FFVP, DGAR, B and P6.

**APPENDIX E: REGIONAL RESULTS - INDEX NUMBERS, WEIGHTS
AND REGRESSION COEFFICIENTS***

Table E1:	All Houses
Table E2:	New Houses
Table E3:	Modern (Post-1970) Houses
Table E4:	Older (Pre-1971) Houses
Table E5:	1945-1970 Houses
Table E6:	1919-1944 Houses
Table E7:	Pre-1919 Houses
Table E8:	First-Time Buyer Houses
Table E9:	Former Owner-Occupier Houses

* In all tables showing regression coefficients, * indicates significance at the 5 per cent level (or better).

TABLE E1: ALL HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

		ALL HOUSES NORTH			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	105.839	102.161	105.944	
Q2	100.000	104.694	101.586	106.379	
Q3	100.000	104.751	102.069	106.475	
Q4	100.000	105.387	101.873	105.967	
1986	100.000	105.100	101.889	106.247	

		ALL HOUSES YORKSHIRE & HUMBERSIDE			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.759	103.807	104.609	
Q2	100.000	103.462	104.685	106.200	
Q3	100.000	103.610	104.542	105.815	
Q4	100.000	103.943	104.692	106.174	
1986	100.000	103.411	104.432	105.718	

		ALL HOUSES NORTH WEST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	101.910	104.432	103.339	
Q2	100.000	102.001	104.393	103.598	
Q3	100.000	102.111	104.687	103.108	
Q4	100.000	100.805	102.683	102.203	
1986	100.000	102.017	104.511	103.409	

		ALL HOUSES EAST MIDLANDS			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.001	105.199	108.975	
Q2	100.000	103.648	105.686	109.559	
Q3	100.000	103.185	105.194	108.676	
Q4	100.000	102.504	104.470	108.748	
1986	100.000	103.224	105.287	109.077	

		ALL HOUSES WEST MIDLANDS			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	101.941	104.339	107.003	
Q2	100.000	102.126	104.502	106.959	
Q3	100.000	102.038	105.548	106.686	
Q4	100.000	102.002	104.246	107.784	
1986	100.000	102.040	104.376	106.868	

		ALL HOUSES EAST ANGLIA INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	106.396	110.207	115.650
	Q2	100.000	107.041	110.302	117.082
	Q3	100.000	106.517	110.382	116.247
	Q4	100.000	105.638	109.421	114.354
	1986	100.000	106.545	110.115	116.095

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		ALL HOUSES OUTER SOUTH EAST INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	103.737	108.511	114.125
	Q2	100.000	103.659	108.521	114.141
	Q3	100.000	103.658	108.652	114.084
	Q4	100.000	103.647	108.357	114.045
	1986	100.000	103.665	108.528	114.095

		ALL HOUSES OUTER METROPOLITAN INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	104.246	110.104	116.587
	Q2	100.000	104.299	110.202	116.732
	Q3	100.000	104.473	110.659	117.014
	Q4	100.000	104.520	110.467	117.676
	1986	100.000	104.352	110.249	116.832

		ALL HOUSES GREATER LONDON INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	107.018	115.157	122.540
	Q2	100.000	104.612	112.534	119.828
	Q3	100.000	104.602	111.051	119.815
	Q4	100.000	104.601	112.459	118.011
	1986	100.000	104.614	112.558	119.823

		ALL HOUSES SOUTH WEST INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	103.875	108.217	111.548
	Q2	100.000	103.399	107.839	111.600
	Q3	100.000	103.553	107.587	111.392
	Q4	100.000	103.654	107.849	111.534
	1986	100.000	103.523	107.841	111.470

		ALL HOUSES WALES			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.401	103.949	108.601	
Q2	100.000	103.604	103.510	109.092	
Q3	100.000	104.210	103.622	108.994	
Q4	100.000	104.174	103.611	107.911	
1986	100.000	104.026	103.670	108.807	

		ALL HOUSES SCOTLAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.881	103.930	104.195	
Q2	100.000	102.635	103.602	104.065	
Q3	100.000	102.571	103.713	104.074	
Q4	100.000	102.823	103.957	103.895	
1986	100.000	102.661	103.733	104.095	

		ALL HOUSES NORTHERN IRELAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	101.770	103.264	101.538	
Q2	100.000	102.396	103.980	102.680	
Q3	100.000	102.326	103.956	102.434	
Q4	100.000	102.418	104.263	102.497	
1986	100.000	102.243	103.854	102.336	

NORTHERN			NORTHERN			NORTHERN			NORTHERN			NORTHERN		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.382	-0.25814 *	SDH	0.316	-0.18811 *	SDH	0.309	-0.30720 *	SDH	0.302	-0.33075 *	SDH	0.327	-0.263854 *
TH	0.387	-0.46015 *	TH	0.401	-0.37330 *	TH	0.381	-0.50805 *	TH	0.431	-0.49569 *	TH	0.397	-0.453767 *
DB	0.043	0.14316	DB	0.05	0.06897	DB	0.053	-0.05279	DB	0.04	0.07351	DB	0.048	0.027344
SDB	0.064	-0.17476 *	SDB	0.029	-0.10488	SDB	0.053	-0.15583 *	SDB	0.044	-0.18982 *	SDB	0.047	-0.162733 *
FB	0.038	-0.62543 *	FB	0.048	-0.52582 *	FB	0.053	-0.50191 *	FB	0.058	-0.37636 *	FB	0.049	-0.528173 *
FC	0.006	-0.18481	FC	0.004	-0.39581 *	FC	0.014	-0.36950 *	FC	0.013	-0.68799 *	FC	0.009	-0.387803 *
LH	0.15	0.01892	LH	0.175	0.05890 *	LH	0.167	-0.00998	LH	0.178	-0.01112	LH	0.167	0.025659
SGAR	0.503	-0.09909	SGAR	0.499	-0.13456 *	SGAR	0.488	-0.23536 *	SGAR	0.458	-0.18645	SGAR	0.491	-0.151025 *
SPACE	0.124	-0.16310 *	SPACE	0.158	-0.18543 *	SPACE	0.107	-0.37903 *	SPACE	0.124	-0.18984	SPACE	0.13	-0.228778 *
NOPARK	0.315	-0.22707 *	NOPARK	0.314	-0.25357 *	NOPARK	0.372	-0.39421 *	NOPARK	0.387	-0.28236 *	NOPARK	0.342	-0.286474 *
AGE	50.98	-0.00181 *	AGE	48.397	-0.00146 *	AGE	53.972	-0.00027	AGE	52.538	-0.00022	AGE	51.246	-0.000839 *
NOCH	0.246	-0.13207 *	NOCH	0.193	-0.10954 *	NOCH	0.216	-0.13950 *	NOCH	0.236	-0.21762 *	NOCH	0.219	-0.148439 *
CHP	0.165	-0.04065	CHP	0.096	-0.06452	CHP	0.126	-0.07445 *	CHP	0.107	-0.09995	CHP	0.122	-0.079139 *
SIZE	1036.424	0.00044 *	SIZE	970.402	0.00053 *	SIZE	1016.772	0.00045 *	SIZE	972.147	0.00058 *	SIZE	999.535	0.0004554 *
BATH	1.02	-0.07061	BATH	1.027	-0.02826	BATH	1.035	-0.00726	BATH	1.018	-0.09802	BATH	1.026	-0.033763
A	0.014	-0.14710	A	0.019	0.03582	A	0.019	-0.00824	A	0.022	0.08353	A	0.018	-0.015635
C	0.24	-0.01962	C	0.243	-0.09143 *	C	0.251	-0.03194	C	0.2	-0.13440 *	C	0.238	-0.070319 *
D	0.055	-0.09268	D	0.081	-0.16123 *	D	0.079	-0.20012 *	D	0.08	-0.24073 *	D	0.074	-0.174392 *
E	0.069	-0.10504	E	0.089	-0.15660 *	E	0.086	-0.08676 *	E	0.053	-0.08909	E	0.078	-0.118748 *
F	0.092	-0.10808 *	F	0.079	-0.11203 *	F	0.079	-0.07809	F	0.089	-0.18259 *	F	0.084	-0.118121 *
G	0.026	-0.19273 *	G	0.023	-0.12784	G	0.014	-0.03707	G	0.04	-0.15093	G	0.024	-0.137598 *
H	0.006	-0.54408 *	H	0.002	-0.18260 *	H	0	0.00000	H	0	0.00000	H	0.002	-0.470315 *
I	0.032	-0.01422	I	0.031	0.19774 *	I	0.023	0.05800	I	0.04	0.17330	I	0.03	0.111272 *
J	0.182	0.11841 *	J	0.129	0.07408 *	J	0.151	0.06042	J	0.187	0.08664	J	0.157	0.081604 *
K	0.026	0.10202	K	0.017	0.27823 *	K	0.033	0.05393	K	0.027	0.18402	K	0.025	0.114364 *
P1	0	0.00000	P1	0.002	0.52850 *	P1	0	0.00000	P1	0	0.00000	P1	0.001	0.570867 *
P2	0.003	0.10314	P2	0.002	0.26812	P2	0.002	-0.02681	P2	0.004	0.25292	P2	0.003	0.188847
P3	0.162	-0.18729	P3	0.154	-0.11930	P3	0.149	-0.19697 *	P3	0.182	0.09002	P3	0.159	-0.130267 *
P4	0.552	-0.21405 *	P4	0.538	-0.11969	P4	0.556	-0.20968 *	P4	0.524	0.06247	P4	0.545	-0.139846 *
P5	0.171	-0.26536 *	P5	0.212	-0.14045	P5	0.188	-0.23139 *	P5	0.164	0.01740	P5	0.188	-0.173424 *
P7	0.084	0.07248	P7	0.075	0.17107	P7	0.084	-0.02084	P7	0.084	-0.00920	P7	0.081	0.063084
CONSTANT	1	10.51613 *	CONSTANT	1	10.29229 *	CONSTANT	1	10.59185 *	CONSTANT	1	10.30114 *	CONSTANT	1	10.453037 *
SAMPLE SIZE	346		SAMPLE SIZE	481		SAMPLE SIZE	430		SAMPLE SIZE	225		SAMPLE SIZE	1482	
ADJUSTED R-SQUARED	0.73478		ADJUSTED R-SQUARED	0.77226		ADJUSTED R-SQUARED	0.76588		ADJUSTED R-SQUARED	0.74216		ADJUSTED R-SQUARED	0.75029	
F STATISTIC	32.86		F STATISTIC	53.51		F STATISTIC	49.39		F STATISTIC	23.23		F STATISTIC	144.55	

YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.308	-0.246299 *	SDH	0.349	-0.275881 *	SDH	0.331	-0.297308 *	SDH	0.355	-0.227796 *	SDH	0.331	-0.297308 *	SDH	0.355	-0.227796 *
TH	0.433	-0.39003 *	TH	0.423	-0.45818 *	TH	0.444	-0.456474 *	TH	0.422	-0.452862 *	TH	0.444	-0.456474 *	TH	0.422	-0.452862 *
DB	0.059	0.013299	DB	0.051	0.052092	DB	0.038	0.007571	DB	0.038	-0.038953	DB	0.038	-0.038953	DB	0.038	-0.038953
SDB	0.035	-0.135502 *	SDB	0.036	-0.210021 *	SDB	0.031	-0.214417 *	SDB	0.035	-0.157111 *	SDB	0.031	-0.214417 *	SDB	0.035	-0.157111 *
FB	0.023	-0.314896 *	FB	0.011	-0.327729 *	FB	0.032	-0.456417 *	FB	0.02	-0.402714 *	FB	0.032	-0.456417 *	FB	0.02	-0.402714 *
FC	0	0	FC	0.004	-0.424156 *	FC	0.001	-0.113384	FC	0	0	FC	0.001	-0.113384	FC	0	0
LH	0.129	0.055717 *	LH	0.085	0.063784 *	LH	0.109	0.023702	LH	0.115	-0.031712	LH	0.109	0.023702	LH	0.115	-0.031712
SGAR	0.443	-0.161457 *	SGAR	0.46	-0.081116 *	SGAR	0.419	-0.038579	SGAR	0.446	-0.14259 *	SGAR	0.419	-0.038579	SGAR	0.446	-0.14259 *
SPACE	0.138	-0.248186 *	SPACE	0.144	-0.203148 *	SPACE	0.119	-0.117532 *	SPACE	0.097	-0.209347 *	SPACE	0.119	-0.117532 *	SPACE	0.097	-0.209347 *
NOPARK	0.388	-0.258233 *	NOPARK	0.358	-0.2618 *	NOPARK	0.433	-0.230908 *	NOPARK	0.408	-0.295067 *	NOPARK	0.433	-0.230908 *	NOPARK	0.408	-0.295067 *
AGE	48.103	-0.001136 *	AGE	54.082	0.0003815	AGE	56.214	0.0001961	AGE	57.486	0.0003749	AGE	56.214	0.0001961	AGE	57.486	0.0003749
NOCH	0.381	-0.10397 *	NOCH	0.365	-0.110055 *	NOCH	0.392	-0.13487 *	NOCH	0.347	-0.141102 *	NOCH	0.392	-0.13487 *	NOCH	0.347	-0.141102 *
CHP	0.065	-0.078071 *	CHP	0.063	-0.115165 *	CHP	0.083	-0.057899 *	CHP	0.082	-0.120947 *	CHP	0.083	-0.057899 *	CHP	0.082	-0.120947 *
SIZE	910.527	0.0005408 *	SIZE	940.318	0.0004459 *	SIZE	901.509	0.0004063 *	SIZE	918.4	0.0004251 *	SIZE	901.509	0.0004063 *	SIZE	918.4	0.0004251 *
BATH	1.025	0.024493	BATH	1.024	0.019747	BATH	1.022	0.139831 *	BATH	1.026	0.03654	BATH	1.022	0.139831 *	BATH	1.026	0.03654
A	0.021	0.130592 *	A	0.014	0.086032	A	0.019	-0.033424	A	0.026	-0.151848 *	A	0.019	-0.033424	A	0.026	-0.151848 *
C	0.309	-0.053097 *	C	0.308	-0.003689	C	0.286	-0.026988	C	0.263	-0.077714 *	C	0.286	-0.026988	C	0.263	-0.077714 *
D	0.087	-0.126901 *	D	0.056	-0.096105 *	D	0.072	-0.161873 *	D	0.062	-0.09536	D	0.072	-0.161873 *	D	0.062	-0.09536
E	0.052	-0.085277 *	E	0.071	-0.043737	E	0.063	-0.116182 *	E	0.035	-0.108645	E	0.063	-0.116182 *	E	0.035	-0.108645
F	0.046	-0.175905 *	F	0.074	-0.10806 *	F	0.075	-0.132426 *	F	0.082	-0.138816 *	F	0.075	-0.132426 *	F	0.082	-0.138816 *
G	0.023	-0.229151 *	G	0.034	-0.175838 *	G	0.028	-0.210898 *	G	0.026	-0.137996 *	G	0.028	-0.210898 *	G	0.026	-0.137996 *
H	0.039	-0.314645 *	H	0.04	-0.248427 *	H	0.047	-0.229587 *	H	0.053	-0.229753 *	H	0.047	-0.229587 *	H	0.053	-0.229753 *
I	0.017	0.057046	I	0.019	0.021036	I	0.033	0.044096	I	0.024	-0.154971 *	I	0.033	0.044096	I	0.024	-0.154971 *
J	0.159	0.057436 *	J	0.148	0.086451 *	J	0.147	0.077901 *	J	0.181	0.017846	J	0.147	0.077901 *	J	0.181	0.017846
K	0.032	0.138217 *	K	0.026	0.090258 *	K	0.021	0.072581 *	K	0.049	0.047605	K	0.021	0.072581 *	K	0.049	0.047605
P1	0	0	P1	0	0	P1	0.001	1.079898 *	P1	0	0	P1	0.001	1.079898 *	P1	0	0
P2	0	0	P2	0	0	P2	0.001	-0.068752	P2	0	0	P2	0.001	-0.068752	P2	0	0
P3	0.131	-0.155478 *	P3	0.13	-0.17344 *	P3	0.183	-0.135486 *	P3	0.174	-0.113761 *	P3	0.183	-0.135486 *	P3	0.174	-0.113761 *
P4	0.436	-0.187294 *	P4	0.474	-0.251386 *	P4	0.44	-0.190598 *	P4	0.391	-0.194853 *	P4	0.44	-0.190598 *	P4	0.391	-0.194853 *
P5	0.143	-0.129746 *	P5	0.13	-0.134678 *	P5	0.119	-0.093606 *	P5	0.099	-0.107826 *	P5	0.119	-0.093606 *	P5	0.099	-0.107826 *
P7	0.207	-0.122698 *	P7	0.153	-0.146273 *	P7	0.158	-0.089923 *	P7	0.201	-0.082762 *	P7	0.158	-0.089923 *	P7	0.201	-0.082762 *
CONSTANT	1	10.247248 *	CONSTANT	1	10.302495 *	CONSTANT	1	10.187355 *	CONSTANT	1	10.372838 *	CONSTANT	1	10.187355 *	CONSTANT	1	10.372838 *
SAMPLE SIZE	711		SAMPLE SIZE	1039		SAMPLE SIZE	971		SAMPLE SIZE	453		SAMPLE SIZE	971		SAMPLE SIZE	453	
ADJUSTED R-SQUARED	0.76704		ADJUSTED R-SQUARED	0.77731		ADJUSTED R-SQUARED	0.77201		ADJUSTED R-SQUARED	0.75099		ADJUSTED R-SQUARED	0.77201		ADJUSTED R-SQUARED	0.75099	
F STATISTIC	84.49		F STATISTIC	125.94		F STATISTIC	106.955		F STATISTIC	49.69		F STATISTIC	106.955		F STATISTIC	49.69	

Q1 1986 ALL HOUSES
NORTH WEST

	WEIGHT	COEFF
SDH	0.389	-0.280629 *
TH	0.355	-0.477144 *
DB	0.048	0.03217
SDB	0.045	-0.287648 *
FB	0.025	-0.476752 *
FC	0.003	-0.426379 *
LH	0.406	-0.002943
SGAR	0.386	-0.118053 *
SPACE	0.151	-0.176516 *
NOPARK	0.418	-0.282398 *
AGE	49.907	-0.000201
NOCH	0.329	-0.137496 *
CHP	0.051	-0.042726
SIZE	951.494	0.0004465 *
BATH	1.032	0.175207 *
A	0.01	0.210954 *
C	0.238	-0.032686
D	0.092	-0.158525 *
E	0.047	-0.091681 *
F	0.049	-0.094003 *
G	0.026	-0.030967
H	0.022	-0.204771 *
I	0.035	0.008009
J	0.195	0.063281 *
K	0.027	0.032543
P1	0	0
P2	0	0
P3	0.184	-0.147474 *
P4	0.203	-0.129313 *
P5	0.291	-0.097417 *
P7	0.113	-0.059072 *
CONSTANT	1	10.161731 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
1206	0.80315	170.53
2014	0.80932	295.61
1629	0.80542	233.37
847	0.77957	104.17

Q2 1986 ALL HOUSES
NORTH WEST

	WEIGHT	COEFF
SDH	0.358	-0.282739 *
TH	0.402	-0.46319 *
DB	0.036	-0.035108
SDB	0.034	-0.21455 *
FB	0.032	-0.428547 *
FC	0.005	-0.30001 *
LH	0.414	-0.015492
SGAR	0.398	-0.139743 *
SPACE	0.136	-0.215685 *
NOPARK	0.434	-0.291824 *
AGE	52.506	-0.000387 *
NOCH	0.317	-0.150771 *
CHP	0.054	-0.060765 *
SIZE	932.254	0.0004418 *
BATH	1.032	0.116407 *
A	0.006	0.143637 *
C	0.244	-0.063189 *
D	0.109	-0.138144 *
E	0.053	-0.030759
F	0.06	-0.105266 *
G	0.024	-0.086673 *
H	0.02	-0.283915 *
I	0.038	0.00675
J	0.184	0.097226 *
K	0.019	0.080589 *
P1	0	0
P2	0	0
P3	0.192	-0.186762 *
P4	0.234	-0.18046 *
P5	0.274	-0.123422 *
P7	0.092	-0.109661 *
CONSTANT	1	10.307825 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
2014	0.80932	295.61
1629	0.80542	233.37
847	0.77957	104.17

Q3 1986 ALL HOUSES
NORTH WEST

	WEIGHT	COEFF
SDH	0.355	-0.286157 *
TH	0.408	-0.460402 *
DB	0.044	0.027458
SDB	0.032	-0.236563 *
FB	0.024	-0.427588 *
FC	0.003	-0.496994 *
LH	0.406	-0.010474
SGAR	0.388	-0.125895 *
SPACE	0.13	-0.210911 *
NOPARK	0.443	-0.279401 *
AGE	53.704	-0.000291
NOCH	0.312	-0.12911 *
CHP	0.049	-0.086222 *
SIZE	959.05	0.0004610 *
BATH	1.034	0.092191 *
A	0.01	0.163137 *
C	0.239	-0.045784 *
D	0.108	-0.150765 *
E	0.056	-0.015269
F	0.054	-0.086295 *
G	0.026	-0.14969 *
H	0.01	-0.320172 *
I	0.044	-0.014312
J	0.203	0.081939 *
K	0.032	0.098972 *
P1	0	0
P2	0	0
P3	0.174	-0.196824 *
P4	0.227	-0.204324 *
P5	0.282	-0.116169 *
P7	0.107	-0.118862 *
CONSTANT	1	10.320377 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
1629	0.80542	233.37
847	0.77957	104.17

Q4 1986 ALL HOUSES
NORTH WEST

	WEIGHT	COEFF
SDH	0.355	-0.227796 *
TH	0.422	-0.452862 *
DB	0.038	-0.038953
SDB	0.035	-0.157111 *
FB	0.02	-0.402714 *
FC	0	0
LH	0.115	-0.031712
SGAR	0.446	-0.14259 *
SPACE	0.097	-0.209347 *
NOPARK	0.408	-0.295067 *
AGE	57.486	0.0003749
NOCH	0.347	-0.141102 *
CHP	0.082	-0.120947
SIZE	918.4	0.0004251 *
BATH	1.026	0.03654
A	0.026	-0.151848
C	0.263	-0.077714 *
D	0.062	-0.09536 *
E	0.035	-0.108645
F	0.082	-0.138816
G	0.026	-0.137996 *
H	0.053	-0.229753 *
I	0.024	-0.154971 *
J	0.181	0.017846 *
K	0.049	0.047605
P1	0	0
P2	0	0
P3	0.174	-0.113761 *
P4	0.391	-0.194853 *
P5	0.099	-0.107826 *
P7	0.201	-0.082762 *
CONSTANT	1	10.372838 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
847	0.77957	104.17

1986 ALL HOUSES

	WEIGHT	COEFF
SDH	0.369	-0.280717 *
TH	0.387	-0.468816 *
DB	0.043	-0.001724
SDB	0.036	-0.239293 *
FB	0.028	-0.418471 *
FC	0.004	-0.40584 *
LH	0.407	-0.073149 *
SGAR	0.397	-0.142334 *
SPACE	0.136	-0.226218 *
NOPARK	0.43	-0.300895 *
AGE	52.319	-0.000313 *
NOCH	0.319	-0.142163 *
CHP	0.051	-0.062997 *
SIZE	947.448	0.0004446 *
BATH	1.034	0.100589 *
A	0.008	0.153795 *
C	0.239	-0.047259 *
D	0.108	-0.136088 *
E	0.05	-0.040684 *
F	0.056	-0.085387 *
G	0.025	-0.108695 *
H	0.016	-0.265911 *
I	0.039	-0.016325
J	0.192	0.088433 *
K	0.028	0.076969 *
P1	0	0
P2	0	0
P3	0.18	-0.184189 *
P4	0.225	-0.176963 *
P5	0.279	-0.110335 *
P7	0.104	-0.096167 *
CONSTANT	1	10.320563 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
5696	0.80002	786.63

EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.372	-0.216623 *	SDH	0.352	-0.235468 *	SDH	0.358	-0.216455 *	SDH	0.334	-0.233971 *
TH	0.312	-0.380515 *	TH	0.291	-0.402899 *	TH	0.282	-0.358379 *	TH	0.277	-0.407403 *
DB	0.071	0.043459	DB	0.068	0.018296	DB	0.086	-0.019434	DB	0.084	-0.015476
SDB	0.023	-0.161922 *	SDB	0.026	-0.056784	SDB	0.017	-0.069455	SDB	0.026	-0.17719 *
FB	0.012	-0.256998 *	FB	0.017	-0.333056 *	FB	0.016	-0.182641 *	FB	0.011	-0.204414
FC	0.002	0.235322	FC	0.001	-0.204848	FC	0	0	FC	0.002	0.560696 *
LH	0.027	-0.04355	LH	0.032	-0.124652 *	LH	0.031	-0.193429 *	LH	0.033	-0.142219 *
SGAR	0.467	-0.186019 *	SGAR	0.489	-0.135203 *	SGAR	0.495	-0.217114 *	SGAR	0.498	-0.162023 *
SPACE	0.146	-0.291776 *	SPACE	0.133	-0.248754 *	SPACE	0.128	-0.331664 *	SPACE	0.119	-0.27452 *
NOPARK	0.329	-0.389445 *	NOPARK	0.336	-0.285423 *	NOPARK	0.337	-0.405117 *	NOPARK	0.32	-0.289888 *
AGE	44.238	0.0004278 *	AGE	42.755	0.0001491	AGE	43.348	-0.000118	AGE	45.789	-0.000136
NOCH	0.189	-0.130955 *	NOCH	0.198	-0.137969 *	NOCH	0.179	-0.077158 *	NOCH	0.167	-0.164905 *
CHP	0.081	-0.086094 *	CHP	0.085	-0.067566 *	CHP	0.097	-0.040534	CHP	0.084	-0.125704 *
SIZE	958.104	0.0004794 *	SIZE	932.552	0.0004501 *	SIZE	952.001	0.0004910 *	SIZE	984.023	0.0003833 *
BATH	1.045	0.055493 *	BATH	1.038	0.140943 *	BATH	1.028	0.095936 *	BATH	1.039	0.208827 *
A	0.031	-0.042967	A	0.032	0.071445 *	A	0.026	0.003329	A	0.02	-0.006159
C	0.293	-0.032994	C	0.284	-0.022846	C	0.318	-0.024139	C	0.32	-0.008327
D	0.055	-0.171354 *	D	0.062	-0.096621 *	D	0.05	-0.146459 *	D	0.036	-0.09235
E	0.098	-0.054781 *	E	0.097	-0.024971	E	0.099	-0.002048	E	0.077	-0.042244
F	0.049	-0.026086	F	0.039	-0.052802	F	0.05	-0.035292	F	0.04	-0.020078
G	0.01	-0.118805	G	0.011	0.006483	G	0.014	0.015664	G	0.002	-0.376258
H	0.025	-0.068949	H	0.031	-0.029112	H	0.027	0.004924	H	0.031	-0.056748
I	0.023	-0.024289	I	0.025	0.055322	I	0.024	0.110517 *	I	0.022	0.029249
J	0.132	0.100715 *	J	0.141	0.12083 *	J	0.124	0.107914 *	J	0.156	0.109791 *
K	0.02	-0.013725	K	0.015	0.034921	K	0.015	0.011379	K	0.025	0.090551
P1	0	0	P1	0.001	0.510186 *	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.117	-0.325625 *	P3	0.104	-0.191234 *	P3	0.113	-0.150679 *	P3	0.105	-0.182263 *
P4	0.301	-0.345514 *	P4	0.244	-0.246494 *	P4	0.262	-0.228651 *	P4	0.271	-0.220056 *
P5	0.41	-0.212295 *	P5	0.434	-0.087981 *	P5	0.408	-0.035985	P5	0.42	0.003544
P7	0.15	-0.34401 *	P7	0.192	-0.197374 *	P7	0.19	-0.156324 *	P7	0.166	-0.197219 *
CONSTANT	1	10.434316 *	CONSTANT	1	10.229456 *	CONSTANT	1	10.292414 *	CONSTANT	1	10.279417 *
SAMPLE SIZE	1033		SAMPLE SIZE	1633		SAMPLE SIZE	1171		SAMPLE SIZE	646	
ADJUSTED R-SQUARED	0.74000		ADJUSTED R-SQUARED	0.75854		ADJUSTED R-SQUARED	0.72583		ADJUSTED R-SQUARED	0.73784	
F STATISTIC	102.28		F STATISTIC	171.9		F STATISTIC	111.62		F STATISTIC	63.6	

WEST MIDLANDS				WEST MIDLANDS				WEST MIDLANDS				WEST MIDLANDS			
	WEIGHT	COEFF			WEIGHT	COEFF			WEIGHT	COEFF			WEIGHT	COEFF	
SDH	0.387	-0.254119 *	SDH	0.402	-0.236482 *	SDH	0.39	-0.234903 *	SDH	0.389	-0.300389 *	SDH	0.394	-0.251603 *	
TH	0.296	-0.406094 *	TH	0.301	-0.393574 *	TH	0.302	-0.406087 *	TH	0.263	-0.470758 *	TH	0.294	-0.414551 *	
DB	0.028	0.074137	DB	0.028	0.1134 *	DB	0.028	0.156919 *	DB	0.037	-0.065077	DB	0.03	0.08524 *	
SDB	0.014	-0.160305 *	SDB	0.01	-0.17594 *	SDB	0.012	-0.121191 *	SDB	0.014	-0.254497 *	SDB	0.012	-0.164894 *	
FB	0.054	-0.4589 *	FB	0.055	-0.379644 *	FB	0.053	-0.447965 *	FB	0.056	-0.4985 *	FB	0.054	-0.429915 *	
FC	0.005	-0.220374 *	FC	0.007	-0.405063 *	FC	0.006	-0.448441 *	FC	0.006	-0.498692 *	FC	0.006	-0.403226 *	
LH	0.21	0.023747	LH	0.201	0.011049	LH	0.181	0.03426	LH	0.203	-0.023575	LH	0.198	0.012748	
SGAR	0.547	-0.11939 *	SGAR	0.54	-0.126614 *	SGAR	0.544	-0.108921 *	SGAR	0.533	-0.108385 *	SGAR	0.542	-0.11585 *	
SPACE	0.117	-0.200252 *	SPACE	0.097	-0.202463 *	SPACE	0.106	-0.172556 *	SPACE	0.1	-0.21254 *	SPACE	0.104	-0.19512 *	
NOPARK	0.279	-0.243204 *	NOPARK	0.32	-0.268742 *	NOPARK	0.319	-0.257881 *	NOPARK	0.306	-0.238862 *	NOPARK	0.309	-0.255038 *	
AGE	40.203	-0.000005	AGE	43.112	0.0000724	AGE	45.324	0.0004915 *	AGE	42.047	-0.000632 *	AGE	42.948	0.0001298	
NOCH	0.296	-0.13341 *	NOCH	0.308	-0.097583 *	NOCH	0.311	-0.124569 *	NOCH	0.255	-0.114993 *	NOCH	0.298	-0.115226 *	
CHP	0.095	-0.073159 *	CHP	0.097	-0.062249 *	CHP	0.092	-0.083506 *	CHP	0.093	-0.064965 *	CHP	0.095	-0.072776 *	
SIZE	924.952	0.0004980 *	SIZE	918.699	0.0005268 *	SIZE	943.015	0.0004521 *	SIZE	970.578	0.0004376 *	SIZE	934.523	0.0004853 *	
BATH	1.035	0.066335	BATH	1.03	0.084819 *	BATH	1.031	0.131874 *	BATH	1.049	0.088214 *	BATH	1.034	0.096829 *	
A	0.018	0.014336	A	0.022	0.040972	A	0.016	0.0333	A	0.02	0.064812	A	0.019	0.038661	
C	0.201	0.02139	C	0.21	-0.02381	C	0.227	-0.004363	C	0.213	0.028042	C	0.213	-0.001053	
D	0.06	-0.092647 *	D	0.056	-0.166789 *	D	0.053	-0.156491 *	D	0.038	-0.191732 *	D	0.054	-0.15237 *	
E	0.071	-0.026887	E	0.1	-0.054436 *	E	0.08	-0.025749	E	0.087	-0.028851	E	0.087	-0.034707 *	
F	0.057	-0.043264	F	0.044	-0.126614 *	F	0.053	-0.03974	F	0.049	-0.031481	F	0.05	-0.066932 *	
G	0.02	-0.061247	G	0.02	-0.127925 *	G	0.034	-0.132092 *	G	0.033	-0.137491 *	G	0.026	-0.116252 *	
H	0.059	-0.158987 *	H	0.052	-0.210038 *	H	0.052	-0.233022 *	H	0.051	-0.170149 *	H	0.053	-0.199711 *	
I	0.016	-0.001994	I	0.031	0.006257	I	0.036	0.006606	I	0.033	0.041605	I	0.03	0.014587	
J	0.181	0.149296 *	J	0.162	0.086757 *	J	0.169	0.092487 *	J	0.186	0.1497 *	J	0.171	0.112109 *	
K	0.017	0.059698	K	0.019	0.160335 *	K	0.021	0.102031 *	K	0.019	0.165099 *	K	0.019	0.127666 *	
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	
P3	0.152	-0.131977 *	P3	0.156	-0.150893 *	P3	0.162	-0.128311 *	P3	0.169	-0.108826 *	P3	0.159	-0.133601 *	
P4	0.165	-0.207417 *	P4	0.168	-0.228084 *	P4	0.173	-0.213446 *	P4	0.168	-0.178417 *	P4	0.169	-0.210354 *	
P5	0.425	-0.096526 *	P5	0.426	-0.108832 *	P5	0.408	-0.068128 *	P5	0.418	-0.05053	P5	0.42	-0.084603 *	
P7	0.147	-0.003233	P7	0.14	-0.023161	P7	0.13	0.027091	P7	0.135	0.030772	P7	0.138	0.003479	
CONSTANT	1	10.167376 *	CONSTANT	1	10.173336 *	CONSTANT	1	10.153507 *	CONSTANT	1	10.307127 *	CONSTANT	1	10.182186 *	
SAMPLE SIZE	1102		SAMPLE SIZE	1912		SAMPLE SIZE	1442		SAMPLE SIZE	792		SAMPLE SIZE	5248		
ADJUSTED R-SQUARED	0.78085		ADJUSTED R-SQUARED	0.77012		ADJUSTED R-SQUARED	0.76856		ADJUSTED R-SQUARED	0.77355		ADJUSTED R-SQUARED	0.77107		
F STATISTIC	136.28		F STATISTIC	221.76		F STATISTIC	166.01		F STATISTIC	94.17		F STATISTIC	610.41		

EAST ANGLIA

	WEIGHT	COEFF
SDH	0.255	-0.236986 *
TH	0.289	-0.352637 *
DB	0.082	-0.022965
SDB	0.065	-0.174417 *
FB	0.034	-0.378459 *
FC	0.008	-0.461309 *
LH	0.05	0.016747
SGAR	0.559	-0.092353 *
SPACE	0.136	-0.160993 *
NOPARK	0.224	-0.196454 *
AGE	40.341	0.0004253
NOCH	0.228	-0.169232 *
CHP	0.121	-0.101302 *
SIZE	953.736	0.0004107 *
BATH	1.061	0.080187 *
A	0.073	-0.008776
C	0.301	-0.054216 *
D	0.063	-0.111641 *
E	0.059	-0.032504
F	0.015	-0.013869
G	0.006	0.015624
H	0.002	-0.630761 *
I	0.019	0.104711
J	0.157	0.04887
K	0.044	0.011807
P1	0	0
P2	0	0
P3	0	0
P4	0.169	-0.467189 *
P5	0.19	-0.443728 *
P7	0.607	-0.470073 *
CONSTANT	1	10.765016 *

EAST ANGLIA

	WEIGHT	COEFF
SDH	0.282	-0.173465 *
TH	0.308	-0.261798 *
DB	0.088	0.009734
SDB	0.045	-0.190855 *
FB	0.043	-0.263184 *
FC	0.009	-0.293797 *
LH	0.06	0.011903
SGAR	0.529	-0.104436 *
SPACE	0.116	-0.22911 *
NOPARK	0.309	-0.205694 *
AGE	44.403	0.0003715 *
NOCH	0.227	-0.114281 *
CHP	0.115	-0.05551 *
SIZE	931.439	0.0004358 *
BATH	1.036	0.116901 *
A	0.055	-0.009309
C	0.3	-0.075198 *
D	0.074	-0.135766 *
E	0.088	-0.115128 *
F	0.019	-0.10741 *
G	0.002	-0.546736 *
H	0.008	-0.387248 *
I	0.035	-0.031434
J	0.122	0.019923
K	0.03	-0.047032
P1	0	0
P2	0	0
P3	0.001	0.22129
P4	0.173	-0.422766 *
P5	0.213	-0.36527 *
P7	0.574	-0.453354 *
CONSTANT	1	10.711381 *

EAST ANGLIA

	WEIGHT	COEFF
SDH	0.265	-0.201318 *
TH	0.339	-0.30416 *
DB	0.087	-0.073093 *
SDB	0.03	-0.159701 *
FB	0.039	-0.594821 *
FC	0.008	-0.835526 *
LH	0.05	0.263947 *
SGAR	0.474	-0.122463 *
SPACE	0.142	-0.165616 *
NOPARK	0.313	-0.21081 *
AGE	51.217	0.0002935
NOCH	0.254	-0.126438 *
CHP	0.102	-0.059429 *
SIZE	966.789	0.0004752 *
BATH	1.058	0.065011
A	0.052	-0.02918
C	0.294	-0.035159
D	0.073	-0.141883 *
E	0.073	-0.081199 *
F	0.032	-0.041149
G	0.007	-0.280189 *
H	0.004	-0.525632 *
I	0.047	0.050769
J	0.154	0.053203 *
K	0.041	-0.018139
P1	0	0
P2	0	0
P3	0.001	-0.059541
P4	0.197	-0.510482 *
P5	0.192	-0.42253 *
P7	0.577	-0.517673 *
CONSTANT	1	10.842338 *

EAST ANGLIA

	WEIGHT	COEFF
SDH	0.238	-0.239409 *
TH	0.325	-0.322667 *
DB	0.112	-0.021265
SDB	0.03	-0.257961 *
FB	0.044	-0.451436 *
FC	0	0
LH	0.052	0.026144
SGAR	0.47	-0.039455
SPACE	0.158	-0.079016
NOPARK	0.311	-0.10357
AGE	47.992	0.0002865
NOCH	0.221	-0.086464 *
CHP	0.115	-0.056345
SIZE	936.367	0.0003718 *
BATH	1.041	0.181222 *
A	0.066	-0.049164
C	0.279	-0.056955
D	0.066	-0.064598
E	0.071	-0.020317
F	0.019	-0.065278
G	0.008	-0.223927
H	0	0
I	0.046	-0.020798
J	0.12	0.054881
K	0.052	-0.019352
P1	0	0
P2	0	0
P3	0	0
P4	0.205	-0.520099 *
P5	0.148	-0.311305 *
P7	0.615	-0.498831 *
CONSTANT	1	10.76067 *

EAST ANGLIA

	WEIGHT	COEFF
SDH	0.265	-0.206815 *
TH	0.316	-0.304939 *
DB	0.09	-0.017604
SDB	0.043	-0.198686 *
FB	0.04	-0.356151 *
FC	0.007	-0.460036 *
LH	0.054	0.034432
SGAR	0.511	-0.093531 *
SPACE	0.134	-0.165552 *
NOPARK	0.293	-0.177779 *
AGE	46.054	0.0003974 *
NOCH	0.234	-0.129928 *
CHP	0.112	-0.067577 *
SIZE	947.049	0.0004319 *
BATH	1.048	0.102631 *
A	0.06	-0.029875
C	0.295	-0.061547 *
D	0.07	-0.127468 *
E	0.075	-0.074408 *
F	0.022	-0.058456 *
G	0.005	-0.244939 *
H	0.004	-0.430622 *
I	0.037	0.026286
J	0.139	0.034595 *
K	0.04	-0.024866
P1	0	0
P2	0	0
P3	0.001	0.14858
P4	0.184	-0.469882 *
P5	0.193	-0.397635 *
P7	0.588	-0.478495 *
CONSTANT	1	10.764689 *

SAMPLE SIZE	522
ADJUSTED R-SQUARED	0.76251
F STATISTIC	60.74

SAMPLE SIZE	890
ADJUSTED R-SQUARED	0.71239
F STATISTIC	76.93

SAMPLE SIZE	725
ADJUSTED R-SQUARED	0.74662
F STATISTIC	74.56

SAMPLE SIZE	366
ADJUSTED R-SQUARED	0.70268
F STATISTIC	34.18

SAMPLE SIZE	2503
ADJUSTED R-SQUARED	0.71975
F STATISTIC	222.58

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.268	-0.22866 *
TH	0.367	-0.319308 *
DB	0.056	-0.041229 *
SDB	0.022	-0.163296 *
FB	0.088	-0.276582 *
FC	0.04	-0.362894 *
LH	0.138	-0.105228 *
SGAR	0.495	-0.142657 *
SPACE	0.107	-0.210464 *
NOPARK	0.357	-0.222871 *
AGE	42.503	0.0002892 *
NOCH	0.253	-0.108902 *
CHP	0.116	-0.058332 *
SIZE	899.744	0.0003947 *
BATH	1.032	0.061423 *
A	0.011	0.08755 *
C	0.239	-0.059865 *
D	0.033	-0.133815 *
E	0.101	-0.020366 *
F	0.021	-0.064225 *
G	0.003	0.062316 *
H	0.005	-0.253575 *
I	0.044	-0.007692 *
J	0.165	0.051776 *
K	0.09	0.004227 *
P1	0.002	0.302965 *
P2	0	0
P3	0.002	0.160926 *
P4	0.015	-0.196308 *
P5	0.501	-0.051828 *
P7	0.293	-0.104032 *
CONSTANT	1	10.649508 *
SAMPLE SIZE	2159	
ADJUSTED R-SQUARED	0.73679	
F STATISTIC	202.36	

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.268	-0.216032 *
TH	0.337	-0.303594 *
DB	0.06	-0.003831 *
SDB	0.027	-0.170375 *
FB	0.074	-0.222738 *
FC	0.047	-0.331771 *
LH	0.129	-0.117875 *
SGAR	0.489	-0.14609 *
SPACE	0.112	-0.195818 *
NOPARK	0.36	-0.241442 *
AGE	42.881	0.0002748 *
NOCH	0.231	-0.121903 *
CHP	0.119	-0.050505 *
SIZE	928.329	0.0003883 *
BATH	1.04	0.08804 *
A	0.016	0.076677 *
C	0.24	-0.045821 *
D	0.029	-0.092865 **
E	0.09	-0.050266 *
F	0.018	-0.113608 *
G	0.007	-0.068158 *
H	0.008	-0.025582 *
I	0.051	-0.027418 *
J	0.173	0.06398 *
K	0.101	0.024231 *
P1	0.001	0.791651 *
P2	0	0
P3	0.004	0.183206 *
P4	0.018	-0.178565 *
P5	0.485	-0.054569 *
P7	0.296	-0.104098 *
CONSTANT	1	10.654157 *
SAMPLE SIZE	3360	
ADJUSTED R-SQUARED	0.73878	
F STATISTIC	317.67	

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.26	-0.238499 *
TH	0.333	-0.356549 *
DB	0.065	-0.015753 *
SDB	0.031	-0.230682 *
FB	0.067	-0.338955 *
FC	0.057	-0.402544 *
LH	0.135	-0.106893 *
SGAR	0.486	-0.094396 *
SPACE	0.118	-0.145745 *
NOPARK	0.361	-0.21233 *
AGE	48.262	0.0005417 *
NOCH	0.234	-0.110987 *
CHP	0.105	-0.05613 *
SIZE	938.823	0.0003028 *
BATH	1.049	0.118918 *
A	0.017	0.142141 *
C	0.233	-0.056514 *
D	0.038	-0.11259 *
E	0.077	-0.063058 *
F	0.02	-0.121634 *
G	0.006	-0.06455 *
H	0.005	0.051299 *
I	0.055	-0.032718 *
J	0.177	0.038856 *
K	0.12	0.017221 *
P1	0	0.35657 *
P2	0	0
P3	0.001	0.147405 *
P4	0.032	-0.196402 *
P5	0.461	-0.06166 *
P7	0.293	-0.110983 *
CONSTANT	1	10.743742 *
SAMPLE SIZE	2657	
ADJUSTED R-SQUARED	0.70985	
F STATISTIC	217.6	

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.261	-0.238059 *
TH	0.339	-0.317946 *
DB	0.059	-0.000810 *
SDB	0.031	-0.194157 *
FB	0.062	-0.252337 *
FC	0.057	-0.361082 *
LH	0.126	-0.125573 *
SGAR	0.509	-0.104645 *
SPACE	0.091	-0.171577 *
NOPARK	0.359	-0.224739 *
AGE	45.338	0.0004437 *
NOCH	0.226	-0.096894 *
CHP	0.121	-0.045482 *
SIZE	951.606	0.0003809 *
BATH	1.049	0.13217 *
A	0.016	0.146469 *
C	0.239	-0.064701 *
D	0.039	-0.193913 *
E	0.084	-0.023504 *
F	0.02	-0.070609 *
G	0.006	-0.084867 *
H	0.006	-0.082134 *
I	0.049	-0.004329 *
J	0.187	0.066344 *
K	0.096	0.001811 *
P1	0.001	0.732654 *
P2	0	0
P3	0.001	0.432388 *
P4	0.033	-0.188323 *
P5	0.463	-0.062449 *
P7	0.312	-0.095292 *
CONSTANT	1	10.689414 *
SAMPLE SIZE	1398	
ADJUSTED R-SQUARED	0.73506	
F STATISTIC	130.19	

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.265	-0.231605 *
TH	0.343	-0.326646 *
DB	0.06	-0.014595 *
SDB	0.027	-0.186601 *
FB	0.073	-0.2748 *
FC	0.05	-0.357846 *
LH	0.132	-0.113603 *
SGAR	0.493	-0.119595 *
SPACE	0.109	-0.176283 *
NOPARK	0.359	-0.221379 *
AGE	44.648	0.0003948 *
NOCH	0.236	-0.114275 *
CHP	0.115	-0.053732 *
SIZE	928.194	0.0003680 *
BATH	1.042	0.098941 *
A	0.015	0.114089 *
C	0.238	-0.053769 *
D	0.034	-0.116889 *
E	0.088	-0.042941 *
F	0.02	-0.09416 *
G	0.005	-0.047047 *
H	0.006	-0.04308 *
I	0.05	-0.021504 *
J	0.174	0.05695 *
K	0.103	0.016856 *
P1	0.001	0.451817 *
P2	0	0
P3	0.002	0.180788 *
P4	0.024	-0.179824 *
P5	0.479	-0.057556 *
P7	0.297	-0.104526 *
CONSTANT	1	10.673814 *
SAMPLE SIZE	9574	
ADJUSTED R-SQUARED	0.71948	
F STATISTIC	819.44	

01-1986 ALL HOUSES		62-1986 ALL HOUSES		63-1986 ALL HOUSES		64-1986 ALL HOUSES		1986 ALL HOUSES	
OUTER METROPOLITAN		OUTER METROPOLITAN		OUTER METROPOLITAN		OUTER METROPOLITAN			
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.261 -0.239787 *	SDH	0.278 -0.22334 *	SDH	0.308 -0.219293 *	SDH	0.323 -0.220828 *	SDH	0.287 -0.221358 *
TH	0.344 -0.331899 *	TH	0.338 -0.331825 *	TH	0.304 -0.317986 *	TH	0.306 -0.335065 *	TH	0.327 -0.328938 *
DB	0.032 -0.017109	DB	0.03 -0.018441	DB	0.039 0.0002413	DB	0.046 -0.000935	DB	0.035 -0.001724
SDB	0.019 -0.208599 *	SDB	0.02 -0.197531 *	SDB	0.025 -0.203298 *	SDB	0.02 -0.208775 *	SDB	0.021 -0.197832 *
FB	0.142 -0.38437 *	FB	0.127 -0.336313 *	FB	0.103 -0.358904 *	FB	0.096 -0.380828 *	FB	0.12 -0.355464 *
FC	0.043 -0.452937 *	FC	0.036 -0.435139 *	FC	0.04 -0.438346 *	FC	0.033 -0.409593 *	FC	0.038 -0.430874 *
LH	0.192 0.005189	LH	0.171 -0.014722	LH	0.147 0.003906	LH	0.135 0.004181	LH	0.165 -0.008095
SGAR	0.476 -0.122231 *	SGAR	0.49 -0.088511 *	SGAR	0.507 -0.087964 *	SGAR	0.499 -0.110825 *	SGAR	0.492 -0.094462 *
SPACE	0.09 -0.170654 *	SPACE	0.083 -0.14149 *	SPACE	0.088 -0.151649 *	SPACE	0.102 -0.127594 *	SPACE	0.088 -0.139161 *
NOPARK	0.387 -0.183823 *	NOPARK	0.384 -0.163167 *	NOPARK	0.359 -0.164359 *	NOPARK	0.353 -0.161491 *	NOPARK	0.375 -0.162614 *
AGE	38.869 0.0001079	AGE	39.093 0.0003195 *	AGE	40.235 0.0002628 *	AGE	40.592 0.0000013	AGE	39.517 0.0002163 *
NOCH	0.182 -0.085943 *	NOCH	0.174 -0.080109 *	NOCH	0.177 -0.086315 *	NOCH	0.136 -0.100364 *	NOCH	0.172 -0.087468 *
CHP	0.118 -0.034855 *	CHP	0.113 -0.041674 *	CHP	0.092 -0.035876 *	CHP	0.112 -0.031671 *	CHP	0.109 -0.038765 *
SIZE	874.507 0.0004205 *	SIZE	892.389 0.0004517 *	SIZE	920.307 0.0004565 *	SIZE	934.13 0.0004759 *	SIZE	900.478 0.0004582 *
BATH	1.044 0.066077 *	BATH	1.038 0.078018 *	BATH	1.053 0.103336 *	BATH	1.046 0.035534	BATH	1.044 0.074974 *
A	0.004 0.084532	A	0.006 0.074561 *	A	0.005 0.12118 *	A	0.004 0.129992	A	0.005 0.093608 *
C	0.167 -0.012365	C	0.159 -0.023343 *	C	0.165 -0.018562	C	0.169 -0.045052 *	C	0.164 -0.021976 *
D	0.035 -0.104859 *	D	0.033 -0.101688 *	D	0.032 -0.094522 *	D	0.033 -0.098846 *	D	0.033 -0.099302 *
E	0.126 -0.030197 *	E	0.132 -0.027443 *	E	0.114 -0.000195	E	0.113 -0.054035 *	E	0.123 -0.027082 *
F	0.019 -0.048338 *	F	0.013 -0.024531	F	0.015 -0.07359 *	F	0.017 -0.070592 *	F	0.016 -0.052436 *
G	0.006 -0.212839 *	G	0.005 -0.088531 *	G	0.005 -0.102373 *	G	0.004 -0.104227	G	0.005 -0.12662 *
H	0.036 -0.05868 *	H	0.034 -0.1048 *	H	0.028 -0.104941 *	H	0.027 -0.122158 *	H	0.032 -0.099793 *
I	0.038 0.025764	I	0.041 -0.030541 *	I	0.041 0.002582	I	0.033 -0.024438	I	0.039 -0.008638
J	0.218 0.085043 *	J	0.21 0.067912 *	J	0.238 0.081723 *	J	0.23 0.073041 *	J	0.221 0.076989 *
K	0.035 0.014454	K	0.029 0.010516	K	0.036 0.047721 *	K	0.042 0.043586 *	K	0.034 0.030332 *
P1	0.001 0.187386 *	P1	0.001 0.174794 *	P1	0.002 0.382524 *	P1	0.001 0.372451 *	P1	0.001 0.272302 *
P2	0	P2	0	P2	0	P2	0	P2	0
P3	0.069 -0.138448 *	P3	0.058 -0.143582 *	P3	0.061 -0.173605 *	P3	0.062 -0.181126 *	P3	0.062 -0.154582 *
P4	0.007 -0.297746 *	P4	0.01 -0.203101 *	P4	0.013 -0.232588 *	P4	0.01 -0.275854 *	P4	0.01 -0.233182 *
P5	0.551 -0.141742 *	P5	0.553 -0.151421 *	P5	0.543 -0.157041 *	P5	0.519 -0.165621 *	P5	0.546 -0.15377 *
P7	0.039 -0.315826 *	P7	0.046 -0.331923 *	P7	0.045 -0.340441 *	P7	0.047 -0.343297 *	P7	0.044 -0.331692 *
CONSTANT	1 10.83856 *	CONSTANT	1 10.810296 *	CONSTANT	1 10.827911 *	CONSTANT	1 10.987625 *	CONSTANT	1 10.831659 *
SAMPLE SIZE	3037	SAMPLE SIZE	4900	SAMPLE SIZE	3163	SAMPLE SIZE	1658	SAMPLE SIZE	12758
ADJUSTED R-SQUARED	0.80275	ADJUSTED R-SQUARED	0.78898	ADJUSTED R-SQUARED	0.80005	ADJUSTED R-SQUARED	0.79597	ADJUSTED R-SQUARED	0.78508
F STATISTIC	412.85	F STATISTIC	611.57	F STATISTIC	422.74	F STATISTIC	216.48	F STATISTIC	1554.33

GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.185	-0.223508 *	SDH	0.21	-0.209427 *	SDH	0.213	-0.199102 *	SDH	0.231	-0.188074 *	SDH	0.208	-0.206998 *
TH	0.307	-0.317336 *	TH	0.32	-0.308303 *	TH	0.327	-0.274501 *	TH	0.342	-0.25667 *	TH	0.322	-0.294311 *
DB	0.008	-0.070262	DB	0.007	-0.03777	DB	0.011	0.018684	DB	0.012	0.002065	DB	0.009	-0.017807
SDB	0.006	-0.184613 *	SDB	0.007	-0.153268 *	SDB	0.009	-0.194675 *	SDB	0.012	-0.112351 *	SDB	0.008	-0.153426 *
FB	0.264	-0.362085 *	FB	0.223	-0.405959 *	FB	0.205	-0.384419 *	FB	0.187	-0.373969 *	FB	0.223	-0.386544 *
FC	0.196	-0.398439 *	FC	0.191	-0.443732 *	FC	0.191	-0.385358 *	FC	0.168	-0.373696 *	FC	0.189	-0.401591 *
LH	0.47	-0.062142 *	LH	0.421	0.009205	LH	0.4	0.01394	LH	0.36	0.003272	LH	0.419	-0.01484
SGAR	0.253	-0.015481	SGAR	0.27	-0.01667	SGAR	0.269	-0.023909	SGAR	0.302	-0.021787	SGAR	0.27	-0.022994
SPACE	0.056	-0.046468	SPACE	0.057	-0.076127 *	SPACE	0.067	-0.096267 *	SPACE	0.073	-0.073729	SPACE	0.061	-0.072903 *
NOPARK	0.678	-0.085719 *	NOPARK	0.66	-0.099544 *	NOPARK	0.647	-0.110454 *	NOPARK	0.606	-0.084827 *	NOPARK	0.653	-0.101421 *
AGE	62.458	0.0002033	AGE	61.984	0.0000955	AGE	61.505	-0.000093	AGE	60.24	-0.000344	AGE	61.726	-0.000055
NOCH	0.275	-0.106743 *	NOCH	0.254	-0.118107 *	NOCH	0.249	-0.100412 *	NOCH	0.225	-0.106707 *	NOCH	0.254	-0.112021 *
CHP	0.058	-0.079828 *	CHP	0.067	-0.074865 *	CHP	0.068	-0.029351 *	CHP	0.062	-0.08341 *	CHP	0.064	-0.063333 *
SIZE	830.987	0.0004749 *	SIZE	857.105	0.0004930 *	SIZE	865.321	0.0005193 *	SIZE	880.417	0.0005395 *	SIZE	856.379	0.0005034 *
BATH	1.02	0.116242 *	BATH	1.022	0.122919 *	BATH	1.025	0.183127 *	BATH	1.026	0.12807 *	BATH	1.023	0.144704 *
A	0	0	A	0	-0.277254	A	0	-0.174965	A	0	0	A	0	-0.235586
C	0.069	-0.013853	C	0.073	-0.018965	C	0.067	-0.042634 *	C	0.082	-0.020506	C	0.072	-0.019741 *
D	0.043	-0.051672 *	D	0.039	-0.065768 *	D	0.042	-0.056159 *	D	0.041	-0.073156 *	D	0.041	-0.057099 *
E	0.049	-0.021333	E	0.048	-0.009552	E	0.045	-0.054497 *	E	0.052	-0.060756 *	E	0.048	-0.031787 *
F	0.034	-0.023057	F	0.031	-0.084021 *	F	0.03	-0.054125 *	F	0.035	-0.039166	F	0.032	-0.054204 *
G	0.031	0.003655	G	0.023	-0.032213	G	0.027	-0.040306	G	0.028	-0.043543	G	0.026	-0.023486
H	0.202	-0.03737 *	H	0.22	-0.048808 *	H	0.215	-0.045095 *	H	0.201	-0.053102 *	H	0.212	-0.043849 *
I	0.183	0.106322 *	I	0.179	0.077945 *	I	0.161	0.080293 *	I	0.144	0.068574 *	I	0.17	0.082081 *
J	0.225	0.062691 *	J	0.219	0.051527 *	J	0.235	0.05959 *	J	0.259	0.046781 *	J	0.23	0.056878 *
K	0.077	0.060411 *	K	0.066	0.071359 *	K	0.077	0.076361 *	K	0.06	0.071612 *	K	0.07	0.072257 *
P1	0.207	0.110282 *	P1	0.194	0.131196 *	P1	0.183	0.128339 *	P1	0.164	0.156865 *	P1	0.19	0.126342 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.158	-0.07819 *	P3	0.156	-0.075432 *	P3	0.171	-0.07349 *	P3	0.15	-0.092818 *	P3	0.16	-0.077906 *
P4	0.043	-0.064648 *	P4	0.045	-0.057713 *	P4	0.039	-0.039609 *	P4	0.049	-0.019537	P4	0.044	-0.050636 *
P5	0.117	-0.056435 *	P5	0.095	-0.055886 *	P5	0.094	-0.038249 *	P5	0.114	-0.054291 *	P5	0.103	-0.054723 *
P7	0.001	-0.472126 *	P7	0.001	-0.453742 *	P7	0.001	-0.428611 *	P7	0.001	-0.144769	P7	0.001	-0.429657 *
CONSTANT	1	10.683549 *	CONSTANT	1	10.71628 *	CONSTANT	1	10.685816 *	CONSTANT	1	10.784836 *	CONSTANT	1	10.712288 *
SAMPLE SIZE	2874		SAMPLE SIZE	4517		SAMPLE SIZE	3120		SAMPLE SIZE	1739		SAMPLE SIZE	12250	
ADJUSTED R-SQUARED	0.67978		ADJUSTED R-SQUARED	0.71443		ADJUSTED R-SQUARED	0.70146		ADJUSTED R-SQUARED	0.71073		ADJUSTED R-SQUARED	0.68716	
F STATISTIC	211.31		F STATISTIC	377.59		F STATISTIC	245.28		F STATISTIC	148.25		F STATISTIC	897.84	

Q1 1986 ALL HOUSES			Q2 1986 ALL HOUSES			Q3 1986 ALL HOUSES			Q4 1986 ALL HOUSES			1986 ALL HOUSES		
SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST					
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.254	-0.20464 *	0.287	-0.231785 *	SDH	0.261	-0.203737 *	SDH	0.268	-0.176713 *	SDH	0.27	-0.207894 *	
TH	0.342	-0.302423 *	0.338	-0.32385 *	TH	0.362	-0.312058 *	TH	0.342	-0.307195 *	TH	0.346	-0.308986 *	
DB	0.075	-0.006544	0.069	-0.018383	DB	0.069	0.040183 *	DB	0.088	0.009052	DB	0.073	0.008311	
SDB	0.023	-0.181081 *	0.024	-0.200786 *	SDB	0.022	-0.193536 *	SDB	0.036	-0.121866 *	SDB	0.025	-0.170933 *	
FB	0.052	-0.270837 *	0.063	-0.365054 *	FB	0.068	-0.331692 *	FB	0.048	-0.336958 *	FB	0.06	-0.322306 *	
FC	0.049	-0.327485 *	0.051	-0.405052 *	FC	0.05	-0.361208 *	FC	0.046	-0.367676 *	FC	0.049	-0.362823 *	
LH	0.11	-0.043088	0.127	0.011671	LH	0.129	-0.00868	LH	0.1	0.034288	LH	0.12	-0.005348	
SGAR	0.521	-0.051121	0.517	-0.129014 *	SGAR	0.503	-0.126914 *	SGAR	0.561	-0.053026	SGAR	0.52	-0.099135 *	
SPACE	0.132	-0.0946 *	0.128	-0.205079 *	SPACE	0.13	-0.182618 *	SPACE	0.097	-0.079093	SPACE	0.125	-0.159936 *	
NOPARK	0.307	-0.142346 *	0.326	-0.235106 *	NOPARK	0.335	-0.211865 *	NOPARK	0.307	-0.123247 *	NOPARK	0.322	-0.192461 *	
AGE	46.327	0.0000350	46.547	0.0004541 *	AGE	48.635	0.0001017	AGE	47.998	-0.000143	AGE	47.276	0.0001864 *	
NOCH	0.311	-0.115512 *	0.269	-0.095223 *	NOCH	0.313	-0.10403 *	NOCH	0.278	-0.147969 *	NOCH	0.292	-0.112158 *	
CHP	0.14	-0.071578 *	0.147	-0.06609 *	CHP	0.114	-0.061041 *	CHP	0.118	-0.075186 *	CHP	0.132	-0.071773 *	
SIZE	939.044	0.0003971 *	925.61	0.0003515 *	SIZE	923.104	0.0003645 *	SIZE	954.446	0.0003937 *	SIZE	931.81	0.0003745 *	
BATH	1.05	0.158763 *	1.054	0.14174 *	BATH	1.036	0.167187 *	BATH	1.044	0.168545 *	BATH	1.047	0.15345 *	
A	0.04	-0.001907	0.049	0.002606	A	0.037	-0.005002	A	0.045	0.009225	A	0.043	0.002026	
C	0.296	-0.046824 *	0.296	-0.040066 *	C	0.305	-0.033362 *	C	0.302	-0.01487	C	0.299	-0.034368 *	
D	0.015	-0.230584 *	0.024	-0.130527 *	D	0.024	-0.176222 *	D	0.029	-0.18419 *	D	0.023	-0.15843 *	
E	0.082	-0.025173	0.061	-0.041654 *	E	0.078	-0.036722 *	E	0.075	-0.009567	E	0.072	-0.028891 *	
F	0.023	-0.077558 *	0.027	-0.068872 *	F	0.025	-0.134662 *	F	0.023	-0.006827	F	0.025	-0.079386 *	
G	0.004	-0.065106	0.006	-0.097333 *	G	0.002	-0.007649	G	0.005	-0.089359	G	0.004	-0.085251 *	
H	0.003	-0.250638 *	0.004	-0.313843 *	H	0.006	-0.286604 *	H	0.003	-0.221912 *	H	0.004	-0.280269 *	
I	0.05	0.005711	0.054	-0.012814	I	0.055	0.066279 *	I	0.042	0.014523	I	0.052	0.019353	
J	0.165	0.058982 *	0.139	0.075516 *	J	0.156	0.054468 *	J	0.157	0.105821 *	J	0.152	0.070645 *	
K	0.081	0.090095 *	0.087	0.094053 *	K	0.081	0.049182 *	K	0.088	0.116249 *	K	0.084	0.084111 *	
P1	0.024	0.142085 *	0.02	0.055075	P1	0.018	0.166823 *	P1	0.016	0.037275	P1	0.02	0.099052 *	
P2	0	0	0	0	P2	0	0	P2	0	0	P2	0	0	
P3	0.001	-0.565839 *	0.002	-0.296292 *	P3	0.001	-0.155539	P3	0.002	0.048112	P3	0.002	-0.209442 *	
P4	0.071	-0.169842 *	0.072	-0.152884 *	P4	0.065	-0.124005 *	P4	0.058	-0.161157 *	P4	0.068	-0.15158 *	
P5	0.155	-0.046723 *	0.174	-0.057915 *	P5	0.185	-0.022346	P5	0.188	-0.039159	P5	0.175	-0.039079 *	
P7	0.69	-0.019839	0.678	-0.010316	P7	0.666	0.030655	P7	0.688	-0.032548	P7	0.679	-0.002031	
CONSTANT	1	10.287689 *	1	10.449817 *	CONSTANT	1	10.405854 *	CONSTANT	1	10.372424 *	CONSTANT	1	10.384151 *	
SAMPLE SIZE	1367		2309		SAMPLE SIZE	1733		SAMPLE SIZE	862		SAMPLE SIZE	6271		
ADJUSTED R-SQUARED	0.75487		0.73979		ADJUSTED R-SQUARED	0.72643		ADJUSTED R-SQUARED	0.71562		ADJUSTED R-SQUARED	0.72712		
F STATISTIC	141.22		219.72		F STATISTIC	154.31		F STATISTIC	73.22		F STATISTIC	557.91		

Q1 1986		Q2 1986		Q3 1986		Q4 1986		1986			
ALL HOUSES		ALL HOUSES		ALL HOUSES		ALL HOUSES		ALL HOUSES			
WALES		WALES		WALES		WALES					
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF		
SDH	0.323	-0.242447 *	0.312	-0.200933 *	0.315	-0.245334 *	0.329	-0.100641 *	SDH	0.318	-0.214509 *
TH	0.398	-0.339888 *	0.415	-0.341699 *	0.427	-0.374048 *	0.356	-0.222747 *	TH	0.406	-0.338532 *
DB	0.06	-0.055973	0.054	-0.038529	0.066	0.014121	0.052	0.120203	DB	0.059	-0.012842
SDB	0.023	-0.201325 *	0.037	-0.227203 *	0.027	-0.129086 *	0.03	0.111998	SDB	0.03	-0.173622 *
FB	0.019	-0.414797 *	0.026	-0.427673 *	0.019	-0.395717 *	0.008	-0.248254	FB	0.02	-0.389255 *
FC	0.003	-0.389774 *	0.005	-0.312385 *	0.007	-0.4601 *	0.003	0.241566	FC	0.005	-0.34017 *
LH	0.166	0.031744	0.155	0.047729 *	0.135	0.013267	0.14	-0.010303	LH	0.15	0.025462
SGAR	0.382	-0.137317 *	0.397	-0.096992	0.35	-0.207877 *	0.419	-0.123353	SGAR	0.383	-0.146309 *
SPACE	0.184	-0.212759 *	0.204	-0.192866 *	0.194	-0.289468 *	0.156	-0.252449 *	SPACE	0.19	-0.235236 *
NOPARK	0.41	-0.228879 *	0.376	-0.181588 *	0.425	-0.321376 *	0.384	-0.295681 *	NOPARK	0.399	-0.253019 *
AGE	51.376	-0.002071 *	48.329	-0.001002 *	52.815	-0.001043 *	47.792	-0.00127 *	AGE	50.254	-0.001294 *
NOCH	0.268	-0.109493 *	0.251	-0.145233 *	0.282	-0.116006 *	0.225	-0.135189 *	NOCH	0.26	-0.131086 *
CHP	0.066	-0.002977	0.061	-0.064163 *	0.069	-0.038145	0.096	-0.133769 *	CHP	0.069	-0.054748 *
SIZE	980.208	0.0004843 *	955.419	0.0004569 *	981.222	0.0004387 *	1018.114	0.0005074 *	SIZE	977.419	0.0004600 *
BATH	1.016	0.036194	1.02	0.134665 *	1.022	-0.030841	1.03	0.099378	BATH	1.021	0.065972 *
A	0.034	-0.001106	0.026	0.048796	0.028	-0.027825	0.027	-0.039506	A	0.029	0.0004709
C	0.281	-0.027758	0.295	-0.043189	0.294	-0.011972	0.301	-0.037118	C	0.292	-0.026435
D	0.11	-0.102126 *	0.109	-0.12274 *	0.125	-0.139506 *	0.09	-0.136181 *	D	0.111	-0.129816
E	0.098	-0.066182	0.092	0.016554	0.089	-0.012218	0.112	-0.018137	E	0.095	-0.01845 *
F	0.047	-0.119973 *	0.037	-0.053508	0.028	-0.002788	0.049	-0.146333 *	F	0.039	-0.079434 *
G	0.011	-0.146252	0.012	-0.097333	0.016	-0.056264	0.011	-0.16319	G	0.013	-0.102646 *
H	0.002	0.013928	0.001	0.783956 *	0.004	0.013664	0.003	-0.25382	H	0.002	0.104821
I	0.042	-0.029375	0.054	-0.025163	0.035	-0.086211	0.022	0.227419 *	I	0.041	-0.025785
J	0.155	0.093996 *	0.152	0.120291 *	0.148	0.108924 *	0.162	0.097951 *	J	0.153	0.107054 *
K	0.029	0.121102 *	0.029	0.071289	0.049	0.055069	0.038	0.114259	K	0.036	0.076597 *
P1	0	0	0	0	0	0	0	0	P1	0	0
P2	0	0	0	0	0	0	0	0	P2	0	0
P3	0.044	-0.23709 *	0.041	-0.211731 *	0.049	-0.23012 *	0.041	-0.262614 *	P3	0.044	-0.23022 *
P4	0.235	-0.182098 *	0.268	-0.188397 *	0.243	-0.207951 *	0.192	-0.193713 *	P4	0.242	-0.195248 *
P5	0.274	-0.191013 *	0.239	-0.134632 *	0.271	-0.188052 *	0.277	-0.073908	P5	0.262	-0.158694 *
P7	0.224	-0.147256 *	0.23	-0.140845 *	0.23	-0.214449 *	0.279	-0.124004 *	P7	0.236	-0.161612 *
CONSTANT	1	10.32827 *	1	10.17491 *	1	10.532468 *	1	10.181978 *	CONSTANT	1	10.322251 *
SAMPLE SIZE	620		882		742		365		SAMPLE SIZE	2609	
ADJUSTED R-SQUARED	0.71860		0.69279		0.68322		0.69063		ADJUSTED R-SQUARED	0.69259	
F STATISTIC	55.51		69.51		56.11		29.02		F STATISTIC	203.62	

Q1 1986	ALL HOUSES	Q2 1986	ALL HOUSES	Q3 1986	ALL HOUSES	Q4 1986	ALL HOUSES	1986	ALL HOUSES
SCOTLAND		SCOTLAND		SCOTLAND		SCOTLAND			
SDH	0.182 -0.102774 *	SDH	0.214 -0.132121 *	SDH	0.198 -0.121914 *	SDH	0.178 -0.139671 *	SDH	0.177 -0.124453 *
TH	0.148 -0.190278 *	TH	0.126 -0.177582 *	TH	0.151 -0.170675 *	TH	0.157 -0.20006 *	TH	0.143 -0.184281 *
DB	0.083 0.006332	DB	0.073 -0.015479	DB	0.094 0.018706	DB	0.107 0.007753	DB	0.086 0.005158
SDB	0.055 -0.082057 *	SDB	0.044 -0.102969 *	SDB	0.057 -0.075166 *	SDB	0.055 -0.106488 *	SDB	0.052 -0.093132 *
FB	0.426 -0.287007 *	FB	0.406 -0.238373 *	FB	0.369 -0.251502 *	FB	0.372 -0.309111 *	FB	0.395 -0.267265 *
FC	0.009 -0.274584 *	FC	0.007 -0.133094 *	FC	0.012 -0.269508 *	FC	0.014 -0.27371 *	FC	0.01 -0.232009 *
LH	0	LH	0.001 0.183814	LH	0.001 -0.24671	LH	0	LH	0.001 -0.048213
SGAR	0.32 -0.085113 *	SGAR	0.347 -0.01876	SGAR	0.334 -0.066604 *	SGAR	0.355 -0.099271	SGAR	0.338 -0.05839 *
SPACE	0.143 -0.136302 *	SPACE	0.137 -0.080088 *	SPACE	0.15 -0.10946 *	SPACE	0.155 -0.164887 *	SPACE	0.145 -0.11191 *
NOPARK	0.518 -0.155768 *	NOPARK	0.488 -0.101686 *	NOPARK	0.485 -0.166023 *	NOPARK	0.47 -0.155487 *	NOPARK	0.492 -0.140183 *
AGE	49.886 -0.001378 *	AGE	48.554 -0.001802 *	AGE	51.204 -0.001078 *	AGE	51.304 -0.001143 *	AGE	50.028 -0.001351 *
NOCH	0.356 -0.106526 *	NOCH	0.34 -0.111015 *	NOCH	0.34 -0.104158 *	NOCH	0.338 -0.107979 *	NOCH	0.343 -0.10842 *
CHP	0.06 -0.084847 *	CHP	0.064 -0.064457 *	CHP	0.072 -0.072176 *	CHP	0.064 -0.049151	CHP	0.066 -0.066831 *
SIZE	871.081 0.0004477 *	SIZE	890.665 0.0005122 *	SIZE	902.669 0.0004989 *	SIZE	911.64 0.0004587 *	SIZE	892.72 0.0004848 *
BATH	1.031 0.061432 *	BATH	1.041 0.060211 *	BATH	1.036 0.022231	BATH	1.037 0.059351	BATH	1.037 0.047798 *
A	0.016 -0.079813	A	0.021 -0.016129	A	0.018 -0.069388	A	0.021 -0.038287	A	0.019 -0.046244 *
C	0.095 -0.040142	C	0.079 -0.031617	C	0.094 -0.033413	C	0.094 -0.076213 *	C	0.089 -0.04013 *
D	0.063 -0.025779	D	0.055 -0.049305 *	D	0.049 -0.080284 *	D	0.058 -0.045916	D	0.056 -0.052348 *
E	0.134 -0.023721	E	0.142 -0.048027 *	E	0.139 -0.068687 *	E	0.145 -0.070358 *	E	0.14 -0.052025 *
F	0.063 -0.032189	F	0.058 -0.022844	F	0.058 -0.062824 *	F	0.053 -0.08461 *	F	0.058 -0.044312 *
G	0.056 -0.020255	G	0.061 -0.080881 *	G	0.056 -0.04996 *	G	0.054 -0.131567 *	G	0.057 -0.063205 *
H	0.003 0.227375 *	H	0.004 0.100355	H	0.004 0.046215	H	0.004 -0.011402	H	0.004 0.087414 *
I	0.037 0.19458 *	I	0.045 0.160707 *	I	0.037 0.114312 *	I	0.037 0.182062 *	I	0.04 0.157411 *
J	0.128 0.154987 *	J	0.129 0.144072 *	J	0.134 0.124624 *	J	0.168 0.093195 *	J	0.136 0.131688 *
K	0.109 0.07814 *	K	0.1 0.071707 *	K	0.117 0.045999 *	K	0.111 0.078072 *	K	0.109 0.067242 *
P1	0.052 0.028227	P1	0.053 0.008522	P1	0.053 0.008693	P1	0.045 0.045774	P1	0.052 0.016102
P2	0.826 -0.190896 *	P2	0.801 -0.187342 *	P2	0.817 -0.190532 *	P2	0.821 -0.142932 *	P2	0.814 -0.185349 *
P3	0.002 -0.314867 *	P3	0	P3	0.002 -0.407126 *	P3	0.001 -0.866921 *	P3	0.001 -0.448227 *
P4	0.001 -0.399057 *	P4	0.001 -0.411109 *	P4	0	P4	0	P4	0.001 -0.393452 *
P5	0.015 -0.190689 *	P5	0.02 -0.116258 *	P5	0.015 -0.185178 *	P5	0.023 -0.018286	P5	0.018 -0.132485 *
P7	0.001 0.188494	P7	0.001 -0.327208 *	P7	0.001 -0.546295 *	P7	0	P7	0.001 -0.233586 *
CONSTANT	1 10.326028 *	CONSTANT	1 10.252978 *	CONSTANT	1 10.346201 *	CONSTANT	1 10.358763 *	CONSTANT	1 10.316067 *
SAMPLE SIZE	1280	SAMPLE SIZE	1892	SAMPLE SIZE	1665	SAMPLE SIZE	794	SAMPLE SIZE	5631
ADJUSTED R-SQUARED	0.75533	ADJUSTED R-SQUARED	0.78752	ADJUSTED R-SQUARED	0.77596	ADJUSTED R-SQUARED	0.77224	ADJUSTED R-SQUARED	0.77336
F STATISTIC	132.61	F STATISTIC	234.63	F STATISTIC	190.92	F STATISTIC	97.03	F STATISTIC	620.72

Q1 1986	ALL HOUSES	Q2 1986	ALL HOUSES	Q3 1986	ALL HOUSES	Q4 1986	ALL HOUSES	1986	ALL HOUSES	
NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND				
	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.3	-0.12136 *	0.3	-0.231842 *	0.293	-0.212663 *	0.233	-0.155914 *	0.289	-0.194859 *
TH	0.291	-0.348488 *	0.277	-0.437999 *	0.276	-0.418709 *	0.316	-0.339419 *	0.285	-0.399889 *
DB	0.191	0.014933	0.217	-0.058759 *	0.215	-0.032048	0.193	-0.058186	0.207	-0.033983 *
SDB	0.103	-0.126603 *	0.083	-0.217214 *	0.088	-0.202213 *	0.123	-0.180578 *	0.094	-0.189658 *
FB	0.015	0.096746	0.014	-0.078967	0.015	0.08733	0.023	0.022579	0.016	0.025908
FC	0.002	-0.16403	0.002	-0.162689	0	0	0	0	0.001	-0.149024
LH	0.72	0.019288	0.766	0.077064 *	0.744	0.048981 *	0.744	0.047063	0.746	0.052419 *
SGAR	0.357	-0.119905 *	0.416	-0.045928	0.432	-0.121556 *	0.371	0.004847	0.402	-0.082192 *
SPACE	0.272	-0.241341 *	0.261	-0.14674 *	0.245	-0.219435 *	0.241	-0.090912	0.256	-0.185881 *
NOPARK	0.348	-0.286671 *	0.3	-0.203342 *	0.296	-0.254388 *	0.363	-0.189355 *	0.318	-0.242478 *
AGE	29.718	-0.00173 *	29.08	-0.001905 *	30.091	-0.001856 *	28.977	-0.002942 *	29.505	-0.001947 *
NOCH	0.22	-0.087664 *	0.211	-0.128522 *	0.206	-0.123568 *	0.203	-0.163881 *	0.21	-0.120592 *
CHP	0.166	-0.046085 *	0.189	-0.022784	0.212	-0.030936	0.208	-0.017722	0.193	-0.028934 *
SIZE	969.448	0.0004555 *	1014.27	0.0005125 *	1012.018	0.0006056 *	1007.912	0.0006207 *	1002.846	0.0005446 *
BATH	1.022	0.087393	1.034	0.025151	1.027	-0.023124	1.025	0.107078	1.028	0.029519
CONSTANT	1	9.969708 *	1	9.968443 *	1	10.004826 *	1	9.741544 *	1	9.957846 *
SAMPLE SIZE	650		1028		866		399		2943	
ADJUSTED R-SQUARED	0.72828		0.75136		0.73513		0.72991		0.73725	
F STATISTIC	116.97		207.9		172.48		77.83		551.33	

TABLE E2: NEW HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

ALTERNATIVE WEIGHTS	NEW HOUSES NORTH INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	109.994	111.327	104.828
Q2	100.000	109.431	108.722	109.526
Q3	100.000	106.442	104.353	103.663
Q4	100.000	111.538	109.059	106.589
1986	100.000	109.318	108.543	106.737

ALTERNATIVE WEIGHTS	NEW HOUSES YORKSHIRE & HUMBERSIDE INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	99.007	101.826	101.915
Q2	100.000	101.510	101.695	103.192
Q3	100.000	99.330	99.151	96.806
Q4	100.000	97.620	102.256	104.308
1986	100.000	99.714	101.082	101.129

ALTERNATIVE WEIGHTS	NEW HOUSES NORTH WEST INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	102.095	106.130	105.792
Q2	100.000	103.934	106.361	106.828
Q3	100.000	106.082	103.324	107.645
Q4	100.000	104.901	106.385	108.226
1986	100.000	104.250	105.497	107.054

ALTERNATIVE WEIGHTS	NEW HOUSES EAST MIDLANDS INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	103.705	108.289	112.656
Q2	100.000	99.918	102.107	108.359
Q3	100.000	99.625	100.851	107.002
Q4	100.000	100.877	101.670	106.966
1986	100.000	100.685	102.736	108.456

ALTERNATIVE WEIGHTS	NEW HOUSES WEST MIDLANDS INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	103.721	108.977	108.769
Q2	100.000	102.694	106.887	106.570
Q3	100.000	100.341	103.426	105.158
Q4	100.000	101.024	102.921	105.429
1986	100.000	102.099	105.919	106.565

ALTERNATIVE NEW HOUSES EAST ANGLIA
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	99.458	101.973	105.541
Q2	100.000	99.635	100.265	107.974
Q3	100.000	98.053	99.721	106.243
Q4	100.000	98.714	99.696	107.647
1986	100.000	99.013	100.401	106.931

ALTERNATIVE NEW HOUSES OUTER SOUTH EAST
WEIGHTS INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.969	106.789	110.610
Q2	100.000	102.560	106.571	109.954
Q3	100.000	101.748	106.552	110.162
Q4	100.000	101.460	106.158	108.658
1986	100.000	102.281	106.540	109.943

ALTERNATIVE NEW HOUSES OUTER METROPOLITAN
WEIGHTS INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	104.982	109.556	116.047
Q2	100.000	103.536	108.199	113.632
Q3	100.000	102.623	107.248	113.790
Q4	100.000	102.607	107.41	113.534
1986	100.000	103.584	108.240	114.294

ALTERNATIVE NEW HOUSES GREATER LONDON
WEIGHTS INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	100.463	107.121	107.965
Q2	100.000	100.970	107.543	108.910
Q3	100.000	101.637	108.400	109.088
Q4	100.000	102.245	107.900	110.102
1986	100.000	101.178	107.690	108.874

ALTERNATIVE NEW HOUSES SOUTH WEST
WEIGHTS INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.889	106.560	113.414
Q2	100.000	104.169	106.623	113.490
Q3	100.000	104.054	106.660	113.552
Q4	100.000	104.189	106.646	113.012
1986	100.000	103.860	106.633	113.421

		NEW HOUSES WALES			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	100.605	107.607	104.979	
Q2	100.000	100.790	107.832	104.696	
Q3	100.000	99.885	105.646	102.610	
Q4	100.000	100.907	107.265	103.393	
1986	100.000	100.558	107.116	103.945	

		NEW HOUSES SCOTLAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.660	103.544	109.281	
Q2	100.000	102.650	102.754	107.811	
Q3	100.000	102.961	103.162	108.689	
Q4	100.000	102.882	103.025	107.594	
1986	100.000	102.993	103.079	108.337	

		NEW HOUSES NORTHERN IRELAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.801	104.211	101.974	
Q2	100.000	102.838	104.647	102.177	
Q3	100.000	102.729	104.616	102.087	
Q4	100.000	102.526	104.539	101.577	
1986	100.000	102.751	104.514	102.007	

NORTHERN			NORTHERN			NORTHERN			NORTHERN			NORTHERN		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF
SDH	0.229	-0.263632 *	SDH	0.158	-0.200734 *	SDH	0.214	-0.242358 *	SDH	0.077	-0.510284	SDH	0.171	-0.260988 *
TH	0.057	-0.277172	TH	0.053	-0.089944	TH	0.036	-0.374306	TH	0.192	-0.17783	TH	0.075	-0.195256 *
DB	0.086	0.206008 *	DB	0.07	0.109824	DB	0.214	-0.04831	DB	0.154	0.117667	DB	0.116	0.077817
SDB	0.143	-0.223795 *	SDB	0.053	0.044996	SDB	0	0	SDB	0.077	-0.127178	SDB	0.068	-0.17284 *
FB	0	0	FB	0.018	0.255466	FB	0.036	0	FB	0.115	-0.231993	FB	0.034	-0.097794
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.314	-0.016498	LH	0.158	0.090562	LH	0.214	0.098116	LH	0.308	0.018174	LH	0.233	0.033772
SGAR	0.629	-0.19707	SGAR	0.702	-0.021744	SGAR	0.821	-0.12556	SGAR	0.538	-0.056356	SGAR	0.678	-0.08418
SPACE	0.2	-0.297461 *	SPACE	0.14	-0.167796	SPACE	0.071	-0.217308	SPACE	0.154	-0.080623	SPACE	0.144	-0.177989 *
NOPARK	0.086	-0.340753 *	NOPARK	0.053	-0.151343	NOPARK	0.036	-0.062231	NOPARK	0.269	-0.039317	NOPARK	0.096	-0.157783
NOCH	0.114	-0.05828	NOCH	0.035	-0.108986	NOCH	0.143	-0.019449	NOCH	0.115	-0.034014	NOCH	0.089	-0.104721
CHP	0.029	0.038397	CHP	0	0	CHP	0	0	CHP	0.038	-0.101024	CHP	0.014	-0.064215
SIZE	929.257	0.0001762	SIZE	1009.214	0.0006607 *	SIZE	976.641	0.0002518	SIZE	877.654	0.0008960 *	SIZE	960.371	0.0004707 *
BATH	1.229	0.107204	BATH	1.263	0.111303	BATH	1.214	0.037017	BATH	1.115	0.01167	BATH	1.219	0.038691
SITEVAL	7385.714	0.0000085	SITEVAL	8179.737	-0.000001	SITEVAL	7956	0.0000318 *	SITEVAL	6695.538	0.0000083	SITEVAL	7682.171	0.0000085
CONSTANT	1	10.409258 *	CONSTANT	1	9.888491 *	CONSTANT	1	10.227025 *	CONSTANT	1	9.783531 *	CONSTANT	1	10.155666 *

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
SD	35	0.83603	14.33
DB	57	0.72730	12.49
TH	28	0.86763	17.09
DB	26	0.71338	5.44
FB	146	0.77416	36.50

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Q1 1986 NEW HOUSES

YORKSHIRE & HUMBERSIDE

	WEIGHT	COEFF
SDH	0.207	-0.147727
TH	0.073	-0.247962 *
DB	0.183	0.037648
SDB	0.073	-0.042914
FB	0.085	-0.118776
FC	0	0
LH	0.122	0.231726 *
SGAR	0.585	-0.258502 *
SPACE	0.195	-0.198622
NOPARK	0.171	-0.201766
NOCH	0.244	-0.222002 *
CHP	0.012	-0.353512
SIZE	876.751	0.0004880 *
BATH	1.098	0.081781
SITEVAL	8385.366	0.0000060
CONSTANT	1	10.150161 *

Q2 1986 NEW HOUSES

YORKSHIRE & HUMBERSIDE

	WEIGHT	COEFF
SDH	0.139	-0.253295 *
TH	0.074	-0.30741 *
DB	0.241	-0.058941
SDB	0.074	-0.18942 *
FB	0.019	-0.578103 *
FC	0	0
LH	0.037	0.249909
SGAR	0.657	0.019135
SPACE	0.13	0.052436
NOPARK	0.12	0.034601
NOCH	0.12	-0.26347 *
CHP	0	0
SIZE	916.349	0.0005761 *
BATH	1.139	0.042072
SITEVAL	8682.87	0.0000075
CONSTANT	1	9.939459 *

Q3 1986 NEW HOUSES

YORKSHIRE & HUMBERSIDE

	WEIGHT	COEFF
SDH	0.2	-0.2306 *
TH	0.06	-0.267821 *
DB	0.2	0.064486
SDB	0.02	-0.303013 *
FB	0.02	0.309002
FC	0	0
LH	0.09	-0.013307
SGAR	0.49	-0.132144 *
SPACE	0.25	-0.178696 *
NOPARK	0.06	-0.144902
NOCH	0.13	-0.188475 *
CHP	0	0
SIZE	963.301	0.0005043 *
BATH	1.18	0.096061
SITEVAL	8581	0.0000109 *
CONSTANT	1	10.023137 *

Q4 1986 NEW HOUSES

YORKSHIRE & HUMBERSIDE

	WEIGHT	COEFF
SDH	0.255	-0.070778
TH	0.085	-0.016326
DB	0.085	0.015678
SDB	0.021	0.005168
FB	0.064	0.210075
FC	0	0
LH	0.064	-0.263639
SGAR	0.532	-0.07913
SPACE	0.128	-0.243819
NOPARK	0.17	-0.187818
NOCH	0.191	-0.082521
CHP	0	0
SIZE	934.234	0.0004427 *
BATH	1.255	0.108257
SITEVAL	9039.362	0.0000241 *
CONSTANT	1	9.891498 *

1986

NEW HOUSES

	WEIGHT	COEFF
SDH	0.19	-0.186884 *
TH	0.071	-0.261816 *
DB	0.193	0.019629
SDB	0.05	-0.141422 *
FB	0.042	-0.041963
FC	0	0
LH	0.077	0.053378
SGAR	0.573	-0.102208 *
SPACE	0.181	-0.150588 *
NOPARK	0.122	-0.117086 *
NOCH	0.163	-0.165588 *
CHP	0.003	-0.015311
SIZE	923.141	0.0005236 *
BATH	1.157	0.106759 *
SITEVAL	8629.97	0.0000084 *
CONSTANT	1	9.984062 *

ADJUSTED R-SQUARED	SAMPLE SIZE	F STATISTIC
0.72067	82	15.93

ADJUSTED R-SQUARED	SAMPLE SIZE	F STATISTIC
0.74145	108	24.6

ADJUSTED R-SQUARED	SAMPLE SIZE	F STATISTIC
0.79397	100	30.35

ADJUSTED R-SQUARED	SAMPLE SIZE	F STATISTIC
0.8672	47	24.11

ADJUSTED R-SQUARED	SAMPLE SIZE	F STATISTIC
0.7602	337	77.06

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	NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.271	-0.136336 *	SDH	0.199	-0.14846 *	SDH	0.222	-0.085946 *	SDH	0.175	-0.096043 *	SDH	0.218	-0.123663 *	
TH	0.071	-0.351903 *	TH	0.13	-0.129421 *	TH	0.084	-0.137192 *	TH	0.113	-0.069913	TH	0.102	-0.170814 *	
DB	0.157	0.052239	DB	0.111	-0.017105	DB	0.156	0.091403 *	DB	0.093	0.092547 *	DB	0.131	0.049668 *	
SDB	0.029	-0.057309	SDB	0.074	-0.184912 *	SDB	0.036	-0.084974	SDB	0.072	-0.054244	SDB	0.053	-0.125795 *	
FB	0.036	-0.294356 *	FB	0.023	-0.260589 *	FB	0.012	-0.18887	FB	0.041	0.167868 *	FB	0.026	-0.231625 *	
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0	
LH	0.279	0.048587	LH	0.306	-0.012492	LH	0.246	-0.006132	LH	0.206	-0.052813	LH	0.268	-0.005153	
SGAR	0.4	-0.040911	SGAR	0.412	-0.085966 *	SGAR	0.431	-0.067029	SGAR	0.454	-0.053909	SGAR	0.421	-0.099213 *	
SPACE	0.307	-0.170924 *	SPACE	0.269	-0.211101 *	SPACE	0.305	-0.164318 *	SPACE	0.278	-0.191211 *	SPACE	0.289	-0.231697 *	
NOPARK	0.164	-0.218706 *	NOPARK	0.185	-0.200809 *	NOPARK	0.12	-0.109555	NOPARK	0.206	-0.198117 *	NOPARK	0.166	-0.226249 *	
NOCH	0.257	-0.075545 *	NOCH	0.162	-0.115302 *	NOCH	0.192	-0.102718 *	NOCH	0.165	-0.10666 *	NOCH	0.192	-0.121218 *	
CHP	0.029	0.007723	CHP	0.005	-0.065831	CHP	0.024	0.077461	CHP	0.041	-0.166512 *	CHP	0.021	-0.015134	
SIZE	903.866	0.0004922 *	SIZE	890.955	0.0003723 *	SIZE	913.38	0.0008294 *	SIZE	877.353	0.0007053 *	SIZE	897.783	0.0006042 *	
BATH	1.243	0.144956 *	BATH	1.236	0.154361 *	BATH	1.21	0.026519	BATH	1.186	0.002083	BATH	1.223	0.106585 *	
SITEVAL	7532.143	0.0000105 *	SITEVAL	7540.648	0.0000228 *	SITEVAL	10368.15	0.0000002	SITEVAL	8189.784	0.0000158 *	SITEVAL	8401.887	0.0000023 *	
CONSTANT	1	9.92239 *	CONSTANT	1	10.004277 *	CONSTANT	1	9.874124 *	CONSTANT	1	9.918876 *	CONSTANT	1	10.019961 *	

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
	140	0.89377	84.54	216	0.85189	89.33	167	0.83629	61.57	97	0.91806	77.83	620	0.82951	216.13

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EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.281	-0.084005	SDH	0.206	-0.132178 *	SDH	0.115	-0.143551 *	SDH	0.171	-0.207058 *	SDH	0.189	-0.155696 *
TH	0.119	-0.199972 *	TH	0.093	-0.227282 *	TH	0.07	0.00714	TH	0.05	-0.158181 *	TH	0.083	-0.200995 *
DB	0.148	-0.048241	DB	0.132	0.025622	DB	0.13	-0.043265	DB	0.121	-0.02902	DB	0.133	-0.0136
SDB	0.015	-0.21396	SDB	0.023	-0.133355	SDB	0.035	-0.2058 *	SDB	0.036	-0.330484 *	SDB	0.027	-0.220841 *
FB	0.03	0.769348 *	FB	0.035	0.169763	FB	0.04	-0.111656	FB	0.036	0	FB	0.036	0.299951 *
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.096	-0.447879 *	LH	0.066	-0.248776 *	LH	0.06	0.003553	LH	0.036	-0.105525	LH	0.064	-0.344287 *
SGAR	0.437	-0.07286	SGAR	0.498	-0.105675 *	SGAR	0.56	-0.172989 *	SGAR	0.586	-0.1586 *	SGAR	0.52	-0.134595 *
SPACE	0.237	-0.126852	SPACE	0.237	-0.241202 *	SPACE	0.17	-0.323852 *	SPACE	0.107	-0.22334 *	SPACE	0.194	-0.264949 *
NOPARK	0.148	-0.223954 *	NOPARK	0.097	-0.203598 *	NOPARK	0.095	-0.336907 *	NOPARK	0.107	-0.321621 *	NOPARK	0.108	-0.290798 *
NOCH	0.163	0.016784	NOCH	0.183	-0.086696 *	NOCH	0.105	-0.152201 *	NOCH	0.079	-0.015899	NOCH	0.138	-0.057602 *
CHP	0	0	CHP	0.016	-0.148903	CHP	0.015	-0.052353	CHP	0.007	-0.324814 *	CHP	0.011	-0.158881 *
SIZE	897.218	0.0005026 *	SIZE	936.223	0.0004316 *	SIZE	966.745	0.0003600 *	SIZE	970.532	0.0004031 *	SIZE	943.931	0.0004373 *
BATH	1.156	0.00743	BATH	1.175	0.099853 *	BATH	1.2	0.144307 *	BATH	1.2	0.048485	BATH	1.183	0.092043 *
SITEVAL	7874.815	0.0000382 *	SITEVAL	9102.724	0.0000190 *	SITEVAL	10070.75	0.0000118 *	SITEVAL	9684.286	0.0000199 *	SITEVAL	9251.981	0.0000166 *
CONSTANT	1	9.819941 *	CONSTANT	1	10.022733 *	CONSTANT	1	10.185951 *	CONSTANT	1	10.223872 *	CONSTANT	1	10.093117 *
Q SAMPLE SIZE	135		SAMPLE SIZE	257		SAMPLE SIZE	200		SAMPLE SIZE	140		SAMPLE SIZE	732	
ADJUSTED R-SQUARED	0.87136		ADJUSTED R-SQUARED	0.88541		ADJUSTED R-SQUARED	0.80938		ADJUSTED R-SQUARED	0.8699		ADJUSTED R-SQUARED	0.8466	
F STATISTIC	70.82		F STATISTIC	142.29		F STATISTIC	61.35		F STATISTIC	72.49		F STATISTIC	289.20	

Q

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Q1 1986 NEW HOUSES

Q2 1986 NEW HOUSES

Q3 1986 NEW HOUSES

Q4 1986 NEW HOUSES

1986 NEW HOUSES

WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.271	-0.36836 *	SDH	0.217	-0.238809 *	SDH	0.203	-0.195842 *	SDH	0.203	-0.130039 *	SDH	0.224	-0.288525 *
TH	0.101	-0.194585 *	TH	0.069	-0.214336 *	TH	0.093	-0.113385 *	TH	0.053	-0.253295 *	TH	0.08	-0.209418 *
DB	0.014	0.128163	DB	0.015	-0.047731	DB	0.044	0.093673	DB	0.008	0.31221 *	DB	0.021	0.06642
SDB	0.005	-0.145114	SDB	0.015	-0.083196	SDB	0.013	0.119618	SDB	0	0	SDB	0.01	0.002936
FB	0.018	-0.291845 *	FB	0.045	-0.156065 *	FB	0.022	-0.17822	FB	0	0	FB	0.026	-0.20131 *
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.257	-0.173938 *	LH	0.193	-0.054571 *	LH	0.167	0.004985	LH	0.143	-0.046341	LH	0.195	-0.095754 *
SGAR	0.61	-0.046942	SGAR	0.593	-0.14492 *	SGAR	0.568	-0.073213	SGAR	0.541	-0.132593 *	SGAR	0.584	-0.124362 *
SPACE	0.115	0.025673	SPACE	0.123	-0.198903 *	SPACE	0.088	-0.186151 *	SPACE	0.128	-0.236955 *	SPACE	0.113	-0.13238 *
NOPARK	0.106	0.075835	NOPARK	0.13	-0.21999 *	NOPARK	0.185	-0.142016 *	NOPARK	0.09	-0.24331 *	NOPARK	0.132	-0.123951 *
NOCH	0.128	-0.036178	NOCH	0.169	-0.066091 *	NOCH	0.154	-0.073433	NOCH	0.128	-0.100466 *	NOCH	0.149	-0.062398 *
CHP	0.009	-0.061879	CHP	0.003	-0.178393	CHP	0	0	CHP	0	0	CHP	0.003	-0.104556
SIZE	968.048	0.0005483 *	SIZE	944.881	0.0003313 *	SIZE	951.858	0.0007040 *	SIZE	1014.613	0.0004185 *	SIZE	962.29	0.0005198 *
BATH	1.165	0.074702	BATH	1.19	0.105945 *	BATH	1.238	0.097456 *	BATH	1.256	0.046585	BATH	1.205	0.086288 *
SITEVAL	10451.37	0.0000216 *	SITEVAL	9915.663	0.0000181 *	SITEVAL	11140.749	0.0000034 *	SITEVAL	12058.647	0.0000249 *	SITEVAL	10662.802	0.0000112 *
CONSTANT	1	9.841641 *	CONSTANT	1	10.145678 *	CONSTANT	1	9.904757 *	CONSTANT	1	10.073025 *	CONSTANT	1	10.05029 *

U	SAMPLE SIZE	218	SAMPLE SIZE	332	SAMPLE SIZE	227	SAMPLE SIZE	133	SAMPLE SIZE	910
N	ADJUSTED R-SQUARED	0.80879	ADJUSTED R-SQUARED	0.84088	ADJUSTED R-SQUARED	0.79933	ADJUSTED R-SQUARED	0.89967	ADJUSTED R-SQUARED	0.8068
	F STATISTIC	66.56	F STATISTIC	125.95	F STATISTIC	70.25	F STATISTIC	108.61	F STATISTIC	272.14

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EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.138	-0.108618 *	SDH	0.19	-0.189485 *	SDH	0.183	-0.175188 *	SDH	0.168	-0.123737 *	SDH	0.172	-0.146765 *
TH	0.11	0.07271	TH	0.165	-0.164309 *	TH	0.198	-0.118855	TH	0.147	-0.126688	TH	0.158	-0.09638 *
DB	0.064	-0.002773	DB	0.082	-0.020703	DB	0.084	-0.036439	DB	0.095	0.033381	DB	0.081	-0.005336
SDB	0.018	0.027458	SDB	0.019	-0.202142	SDB	0.031	-0.123204	SDB	0.021	-0.153322	SDB	0.022	-0.104011 *
FB	0.046	0.390022 *	FB	0.082	-0.078148	FB	0.046	0.073121	FB	0.074	0	FB	0.063	0.200288 *
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.028	-0.337512 *	LH	0.076	0.125776	LH	0.038	-0.102416	LH	0.074	0.263102 *	LH	0.055	-0.083333
SGAR	0.578	-0.083369	SGAR	0.684	-0.065616	SGAR	0.557	-0.069396	SGAR	0.6	-0.004332	SGAR	0.611	-0.054995 *
SPACE	0.128	-0.220313 *	SPACE	0.108	-0.236283 *	SPACE	0.16	-0.151969 *	SPACE	0.147	-0.15926	SPACE	0.134	-0.181576 *
NOPARK	0.083	-0.256389 *	NOPARK	0.127	-0.144653	NOPARK	0.107	-0.188351 *	NOPARK	0.126	-0.107294	NOPARK	0.112	-0.159324 *
NOCH	0.138	-0.176536 *	NOCH	0.209	-0.046179	NOCH	0.252	-0.06688	NOCH	0.158	-0.027298	NOCH	0.195	-0.081444 *
CHP	0.009	0.083945	CHP	0.038	0.083589	CHP	0.015	-0.061811	CHP	0.021	0.024446	CHP	0.022	0.05555
SIZE	1016.852	0.0003903 *	SIZE	886.599	0.0003559 *	SIZE	930.811	0.0004234 *	SIZE	959.245	0.0003713 *	SIZE	941.144	0.0004052 *
BATH	1.22	0.007334	BATH	1.12	0.098196	BATH	1.191	0.087822	BATH	1.179	0.065037	BATH	1.172	0.069615 *
SITEVAL	10331.65	0.0000244 *	SITEVAL	9928.797	0.0000184 *	SITEVAL	11661.336	0.0000153 *	SITEVAL	11830.526	0.0000244 *	SITEVAL	10844.696	0.0000197 *
CONSTANT	1	10.132844 *	CONSTANT	1	10.129371 *	CONSTANT	1	10.121799 *	CONSTANT	1	10.075841 *	CONSTANT	1	10.092015 *

SAMPLE SIZE	109		SAMPLE SIZE	158		SAMPLE SIZE	131		SAMPLE SIZE	95		SAMPLE SIZE	493	
ADJUSTED R-SQUARED	0.84489		ADJUSTED R-SQUARED	0.73965		ADJUSTED R-SQUARED	0.82906		ADJUSTED R-SQUARED	0.82721		ADJUSTED R-SQUARED	0.80559	
F STATISTIC	43.02		F STATISTIC	32.86		F STATISTIC	46.04		F STATISTIC	35.62		F STATISTIC	146.63	

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OUTER SOUTH EAST OUTER SOUTH EAST OUTER SOUTH EAST OUTER SOUTH EAST OUTER SOUTH EAST

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.21	-0.166415 *	0.161	-0.167471 *	0.153	-0.18611 *	0.167	-0.091831 *	0.167	-0.091831 *
TH	0.228	-0.167885 *	0.265	-0.161191 *	0.247	-0.200572 *	0.191	-0.064928	0.191	-0.064928
DB	0.021	0.031251	0.027	-0.011024	0.047	0.010066	0.048	0.029874	0.048	0.029874
SDB	0.006	-0.037729	0.011	-0.154616 *	0.01	-0.076737	0.005	0.14536	0.005	0.14536
FB	0.099	0.064703	0.08	0.036503	0.06	-0.183429	0.086	-0.324861 *	0.086	-0.324861 *
FC	0	0	0	0	0	0	0	0	0	0
LH	0.102	-0.143913 *	0.077	-0.115143	0.065	0.091472	0.077	0.334053 *	0.077	0.334053 *
SGAR	0.515	-0.085614 *	0.563	-0.09391 *	0.597	-0.053532 *	0.579	-0.04171	0.579	-0.04171
SPACE	0.156	-0.194192 *	0.159	-0.186984 *	0.122	-0.163725 *	0.1	-0.210903 *	0.1	-0.210903 *
NOPARK	0.168	-0.150378 *	0.168	-0.166887 *	0.132	-0.11977 *	0.172	-0.223981 *	0.172	-0.223981 *
NOCH	0.138	-0.058756 *	0.106	-0.112929 *	0.07	-0.079076 *	0.096	-0.056112	0.096	-0.056112
CHP	0.024	-0.129786 *	0.013	-0.113942	0.031	-0.062621	0.005	-0.022403	0.005	-0.022403
SIZE	906.772	0.0003170 *	905.968	0.0003801 *	930.156	0.0003683 *	949.543	0.0004850 *	949.543	0.0004850 *
BATH	1.195	0.110219 *	1.174	0.085231 *	1.213	0.098251 *	1.177	0.089717 *	1.177	0.089717 *
SITEVAL	13766.85	0.0000144 *	14622.686	0.0000086 *	16394.665	0.0000120 *	16783.77	0.0000102 *	16783.77	0.0000102 *
CONSTANT	1	10.334915 *	1	10.428946 *	1	10.389099 *	1	10.304249 *	1	10.304249 *

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.171	-0.164879 *	0.153	-0.18611 *	0.167	-0.091831 *	0.167	-0.091831 *	0.171	-0.164879 *
TH	0.241	-0.162343 *	0.247	-0.200572 *	0.191	-0.064928	0.191	-0.064928	0.241	-0.162343 *
DB	0.034	0.014869	0.047	0.010066	0.048	0.029874	0.048	0.029874	0.034	0.014869
SDB	0.009	-0.09735 *	0.01	-0.076737	0.005	0.14536	0.005	0.14536	0.009	-0.09735 *
FB	0.08	-0.049692	0.06	-0.183429	0.086	-0.324861 *	0.086	-0.324861 *	0.08	-0.049692
FC	0	0	0	0	0	0	0	0	0	0
LH	0.079	-0.018631	0.065	0.091472	0.077	0.334053 *	0.077	0.334053 *	0.079	-0.018631
SGAR	0.563	-0.066704 *	0.597	-0.053532 *	0.579	-0.04171	0.579	-0.04171	0.563	-0.066704 *
SPACE	0.14	-0.179179 *	0.122	-0.163725 *	0.1	-0.210903 *	0.1	-0.210903 *	0.14	-0.179179 *
NOPARK	0.159	-0.146445 *	0.132	-0.11977 *	0.172	-0.223981 *	0.172	-0.223981 *	0.159	-0.146445 *
NOCH	0.102	-0.088092 *	0.07	-0.079076 *	0.096	-0.056112	0.096	-0.056112	0.102	-0.088092 *
CHP	0.019	-0.096906 *	0.031	-0.062621	0.005	-0.022403	0.005	-0.022403	0.019	-0.096906 *
SIZE	918.638	0.0003725 *	930.156	0.0003683 *	949.543	0.0004850 *	949.543	0.0004850 *	918.638	0.0003725 *
BATH	1.189	0.098217 *	1.213	0.098251 *	1.177	0.089717 *	1.177	0.089717 *	1.189	0.098217 *
SITEVAL	15197.622	0.0000116 *	16394.665	0.0000120 *	16783.77	0.0000102 *	16783.77	0.0000102 *	15197.622	0.0000116 *
CONSTANT	1	10.365666 *	1	10.389099 *	1	10.304249 *	1	10.304249 *	1	10.365666 *

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
Q1	334	0.8859	185.67
Q2	547	0.79667	153.81
Q3	385	0.86291	173.64
Q4	209	0.86068	92.78
1986	1475	0.84134	559.32

Q1 1986 NEW HOUSES

Q2 1986 NEW HOUSES

Q3 1986 NEW HOUSES

Q4 1986 NEW HOUSES

1986 NEW HOUSES

OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.124	-0.127386 *	SDH	0.119	-0.069255 *	SDH	0.119	-0.069255 *	SDH	0.108	-0.052758	SDH	0.108	-0.052758
TH	0.264	-0.144913 *	TH	0.236	-0.085443 *	TH	0.236	-0.085443 *	TH	0.233	-0.070778 *	TH	0.233	-0.070778 *
DB	0.016	-0.018521	DB	0.021	-0.05521	DB	0.021	-0.05521	DB	0.018	0.074129	DB	0.018	0.074129
SDB	0.003	-0.042998	SDB	0.005	-0.029219	SDB	0.005	-0.029219	SDB	0.004	-0.231595	SDB	0.004	-0.231595
FB	0.2	0.08964	FB	0.231	0.017186	FB	0.231	0.017186	FB	0.179	0.316293 *	FB	0.179	0.316293 *
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.202	-0.10734	LH	0.231	-0.082062	LH	0.231	-0.082062	LH	0.188	-0.35601 *	LH	0.188	-0.35601 *
SGAR	0.435	-0.066405 *	SGAR	0.427	-0.05627	SGAR	0.427	-0.05627	SGAR	0.453	-0.018357	SGAR	0.453	-0.018357
SPACE	0.16	-0.219343 *	SPACE	0.153	-0.211977 *	SPACE	0.153	-0.211977 *	SPACE	0.179	-0.136628 *	SPACE	0.179	-0.136628 *
NOPARK	0.281	-0.153238 *	NOPARK	0.308	-0.162814 *	NOPARK	0.308	-0.162814 *	NOPARK	0.229	-0.093203	NOPARK	0.229	-0.093203
NOCH	0.107	-0.046558 *	NOCH	0.111	-0.05999 *	NOCH	0.111	-0.05999 *	NOCH	0.072	-0.115934 *	NOCH	0.072	-0.115934 *
CHP	0.067	-0.016976	CHP	0.067	-0.033252	CHP	0.067	-0.033252	CHP	0.085	-0.03811	CHP	0.085	-0.03811
SIZE	0.067	0.0004645 *	SIZE	844.722	0.0004888 *	SIZE	844.722	0.0004888 *	SIZE	887.217	0.0004175 *	SIZE	887.217	0.0004175 *
BATH	0.067	0.061878 *	BATH	1.199	0.029335	BATH	1.199	0.029335	BATH	1.166	0.019378	BATH	1.166	0.019378
SITEVAL	837.551	0.0000110 *	SITEVAL	17737.528	0.0000086 *	SITEVAL	17737.528	0.0000086 *	SITEVAL	19366.063	0.0000108 *	SITEVAL	19366.063	0.0000108 *
CONSTANT	1	10.436033 *	CONSTANT	1	10.528163 *	CONSTANT	1	10.528163 *	CONSTANT	1	10.595516 *	CONSTANT	1	10.595516 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
463	0.88474	254.32	702	0.87204	342.24	386	0.88037	203.37	223	0.88808	126.83	223	0.88808	851.53

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	GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.047	-0.16578		0.053	-0.10219		0.072	-0.098511		0.039	-0.013528	
TH	0.273	-0.181183 *		0.272	0.032647		0.261	0.019637		0.243	0.019297	
DB	0.013	-0.16435		0	0		0.006	0.140353		0.01	0.182082	
SDB	0	0		0.004	0.090131		0	0		0	0	
FB	0.573	-0.130647		0.593	-0.128576		0.589	-0.191125		0.524	-0.149285	
FC	0	0		0	0		0	0		0	0	
LH	0.6	-0.028264		0.605	0.188107 *		0.606	0.238982 *		0.544	0.225856	
SGAR	0.207	0.460162 *		0.181	-0.07878		0.194	0.036006		0.223	-0.152876	
SPACE	0.227	0.433709 *		0.222	-0.169577		0.2	-0.223928		0.194	-0.297085 *	
NOPARK	0.553	0.408326 *		0.576	-0.206223 *		0.578	-0.133403		0.524	-0.293998 *	
NOCH	0.193	-0.109279 *		0.177	-0.072275 *		0.172	-0.17257 *		0.155	-0.06463	
CHP	0.127	0.071459		0.074	-0.018372		0.089	-0.016182		0.087	-0.040971	
SIZE	619.367	0.0009024 *		602.044	0.0007151 *		640.937	0.0005468 *		705.309	0.0004224 *	
BATH	1.08	-0.053636		1.058	0.087541		1.106	0.173614 *		1.126	-0.022184	
SITEVAL	7855	0.0000016		7397.531	0.0000052 *		8459.444	0.0000040 *		12092.097	0.0000118 *	
CONSTANT	1	10.043726 *		1	10.381196 *		1	10.440612 *		1	10.781645 *	

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
SDH	150	0.73919	33.48
TH	243	0.8106	80.67
DB	180	0.78566	51.47
SDB	103	0.86333	50.56
FB	103	0.86333	50.56
FC	103	0.86333	50.56
LH	103	0.86333	50.56
SGAR	103	0.86333	50.56
SPACE	103	0.86333	50.56
NOPARK	103	0.86333	50.56
NOCH	103	0.86333	50.56
CHP	103	0.86333	50.56
SIZE	103	0.86333	50.56
BATH	103	0.86333	50.56
SITEVAL	103	0.86333	50.56
CONSTANT	103	0.86333	50.56

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
SDH	676	0.7871	179.25
TH	676	0.7871	179.25
DB	676	0.7871	179.25
SDB	676	0.7871	179.25
FB	676	0.7871	179.25
FC	676	0.7871	179.25
LH	676	0.7871	179.25
SGAR	676	0.7871	179.25
SPACE	676	0.7871	179.25
NOPARK	676	0.7871	179.25
NOCH	676	0.7871	179.25
CHP	676	0.7871	179.25
SIZE	676	0.7871	179.25
BATH	676	0.7871	179.25
SITEVAL	676	0.7871	179.25
CONSTANT	676	0.7871	179.25

Q1-1986 NEW HOUSES

Q2-1986 NEW HOUSES

Q3-1986 NEW HOUSES

Q4-1986 NEW HOUSES

1986 NEW HOUSES

SOUTH WEST		SOUTH WEST		SOUTH WEST		SOUTH WEST		SOUTH WEST	
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.188 -0.149827 *	SDH	0.245 -0.15234 *	SDH	0.236 -0.131103 *	SDH	0.239 -0.151563 *	SDH	0.229 -0.142329 *
TH	0.235 -0.195259 *	TH	0.232 -0.158246 *	TH	0.212 -0.102552 *	TH	0.202 -0.080323	TH	0.223 -0.140264 *
DB	0.073 -0.007824	DB	0.054 -0.058612	DB	0.063 0.043045	DB	0.067 -0.040159	DB	0.063 0.028851
SDB	0.017 -0.224986 *	SDB	0.019 -0.125774	SDB	0.031 -0.0765	SDB	0.025 -0.191283 *	SDB	0.023 -0.117518 *
FB	0.06 -0.174381	FB	0.03 -0.179071 *	FB	0.049 0.005582	FB	0.037 0.137991	FB	0.043 -0.059848
FC	0	FC	0	FC	0	FC	0	FC	0
LH	0.056 0.027124	LH	0.03 -0.012544	LH	0.045 0.040981	LH	0.025 0.198478	LH	0.039 0.016657
SGAR	0.65 -0.062607	SGAR	0.604 -0.079278 *	SGAR	0.573 -0.044718	SGAR	0.589 -0.134236 *	SGAR	0.603 -0.083544 *
SPACE	0.115 -0.153287 *	SPACE	0.162 -0.091099 *	SPACE	0.16 -0.128622 *	SPACE	0.129 -0.258575 *	SPACE	0.146 -0.149641 *
NOPARK	0.158 -0.171852 *	NOPARK	0.14 -0.149664 *	NOPARK	0.177 -0.147501 *	NOPARK	0.166 -0.279611 *	NOPARK	0.158 -0.176142 *
NOCH	0.214 -0.092194 *	NOCH	0.191 -0.088542 *	NOCH	0.247 -0.099125 *	NOCH	0.202 -0.170293 *	NOCH	0.213 -0.107672 *
CHP	0.056 -0.020347	CHP	0.032 -0.207552 *	CHP	0.038 -0.073681	CHP	0.031 -0.291695 *	CHP	0.039 -0.118879 *
SIZE	875.392 0.0003851 *	SIZE	911.955 0.0004666 *	SIZE	897.828 0.0005209 *	SIZE	903.417 0.0004068 *	SIZE	898.682 0.0004452 *
BATH	1.179 0.094184 *	BATH	1.199 0.12729 *	BATH	1.174 0.134845 *	BATH	1.245 0.050009	BATH	1.195 0.118596 *
SITEVAL	8993.803 0.0000120 *	SITEVAL	10780.323 0.0000127 *	SITEVAL	11080.903 0.0000115 *	SITEVAL	10519.939 0.0000152 *	SITEVAL	10426.231 0.0000125 *
CONSTANT	1 10.228349 *	CONSTANT	1 10.138236 *	CONSTANT	1 10.072612 *	CONSTANT	1 10.412732 *	CO	1 10.187288 *

97

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
234	0.85666	100.46	371	0.83837	138.08	288	0.81836	93.36
1056	0.82814	364.14	163	0.86672	76.25	163	0.86672	76.25

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Q1 1986 NEW HOUSES

MALES

	WEIGHT	COEFF
SDH	0.206	-0.198439 *
TH	0.134	-0.190052
DB	0.082	-0.060755
SDB	0	0
FB	0.216	0.110976
FC	0	0
LH	0.289	0.041306
SGAR	0.412	-0.057746
SPACE	0.309	-0.194341
NOPARK	0.216	-0.282301
NOCH	0.124	-0.00681
CHP	0.01	0.050106
SIZE	873.932	0.0001656
BATH	1.113	0.179971 *
SITEVAL	7087.629	0.0000304 *
CONSTANT	1	10.029746 *

SD	SAMPLE SIZE	97
AD	JUSTED R-SQUARED	0.70047
F	STATISTIC	18.27

Q2 1986 NEW HOUSES

MALES

	WEIGHT	COEFF
SDH	0.194	-0.223371 *
TH	0.174	-0.195646 *
DB	0.071	-0.062096
SDB	0.032	-0.149932
FB	0.161	0.074779
FC	0	0
LH	0.206	0.055514
SGAR	0.439	-0.03884
SPACE	0.206	-0.207927 *
NOPARK	0.29	-0.195503 *
NOCH	0.135	0.047445
CHP	0.019	0.114509
SIZE	894.916	0.0004728 *
BATH	1.123	0.006575
SITEVAL	7795.161	0.0000184 *
CONSTANT	1	10.025295 *

SD	SAMPLE SIZE	155
AD	JUSTED R-SQUARED	0.80493
F	STATISTIC	46.39

Q3 1986 NEW HOUSES

MALES

	WEIGHT	COEFF
SDH	0.178	-0.200894 *
TH	0.144	-0.252704 *
DB	0.136	-0.140588 *
SDB	0.076	-0.173748 *
FB	0.144	0.131482
FC	0	0
LH	0.195	0.007668
SGAR	0.475	-0.023391
SPACE	0.186	-0.153242
NOPARK	0.28	-0.148161
NOCH	0.169	-0.013987
CHP	0.017	-0.140107
SIZE	849.385	0.0003520 *
BATH	1.127	0.074184
SITEVAL	7001.695	0.0000302 *
CONSTANT	1	10.026575 *

SD	SAMPLE SIZE	188
AD	JUSTED R-SQUARED	0.76998
F	STATISTIC	28.98

Q4 1986 NEW HOUSES

MALES

	WEIGHT	COEFF
SDH	0.278	-0.183142 *
TH	0.103	-0.122494
DB	0.072	-0.109841
SDB	0.031	-0.211548
FB	0.144	0.039177
FC	0	0
LH	0.227	0.102317
SGAR	0.485	-0.240818 *
SPACE	0.196	-0.332283 *
NOPARK	0.289	-0.340812 *
NOCH	0.186	-0.037237
CHP	0.052	0.027369
SIZE	890.975	0.0002814 *
BATH	1.144	0.071013
SITEVAL	7725.876	0.0000253 *
CONSTANT	1	10.258838 *

SD	SAMPLE SIZE	97
AD	JUSTED R-SQUARED	0.82756
F	STATISTIC	33.91

1986 NEW HOUSES

MALES

	WEIGHT	COEFF
SDH	0.21	-0.19799 *
TH	0.143	-0.213345 *
DB	0.09	-0.075698 *
SDB	0.036	-0.169344 *
FB	0.165	0.064574
FC	0	0
LH	0.225	0.051794
SGAR	0.452	-0.082218 *
SPACE	0.221	-0.223089 *
NOPARK	0.272	-0.227931 *
NOCH	0.152	0.004254
CHP	0.024	0.036898
SIZE	878.234	0.0003108 *
BATH	1.126	0.072408 *
SITEVAL	7433.319	0.0000238 *
CONSTANT	1	10.112814 *

SD	SAMPLE SIZE	467
AD	JUSTED R-SQUARED	0.77694
F	STATISTIC	116.94

Q1 1986 NEW HOUSES

SCOTLAND

	WEIGHT	COEFF
SDH	0.22	-0.117313 *
TH	0.174	-0.180028 *
DB	0.138	-0.0946 *
SDB	0.032	-0.171795 *
FB	0.248	-0.155831 *
FC	0	0
LH	0	0
SGAR	0.197	-0.128962
SPACE	0.362	-0.285021 *
NOPARK	0.417	-0.293567 *
NOCH	0.248	-0.091333 *
CHP	0.032	-0.186153 *
SIZE	778.003	0.0004226 *
BATH	1.069	0.045635
SITEVAL	6244.294	0.0000048 *
CONSTANT	1	10.398263 *

10 SAMPLE SIZE 218
 10 ADJUSTED R-SQUARED 0.70338

F STATISTIC 40.58

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Q2 1986 NEW HOUSES

SCOTLAND

	WEIGHT	COEFF
SDH	0.187	-0.104615 *
TH	0.184	-0.150772 *
DB	0.146	-0.098207 *
SDB	0.041	-0.172734 *
FB	0.258	-0.081751 *
FC	0	0
LH	0	0
SGAR	0.212	-0.013048
SPACE	0.286	-0.111222 *
NOPARK	0.451	-0.139984 *
NOCH	0.261	-0.100694 *
CHP	0.019	-0.064566
SIZE	790.012	0.0004692 *
BATH	1.085	0.083315 *
SITEVAL	5701.099	0.0000114 *
CONSTANT	1	10.139342 *

SAMPLE SIZE 364
 ADJUSTED R-SQUARED 0.76285

F STATISTIC 90.82

Q3 1986 NEW HOUSES

SCOTLAND

	WEIGHT	COEFF
SDH	0.151	-0.148266 *
TH	0.214	-0.139947 *
DB	0.194	-0.074728 *
SDB	0.052	-0.159955 *
FB	0.226	-0.099247 *
FC	0	0
LH	0	0
SGAR	0.27	0.058485
SPACE	0.302	-0.080954
NOPARK	0.381	-0.090226 *
NOCH	0.246	-0.073042 *
CHP	0.02	-0.121647
SIZE	828.049	0.0004250 *
BATH	1.099	0.006324
SITEVAL	6283.476	0.0000101 *
CONSTANT	1	10.220128 *

SAMPLE SIZE 252
 ADJUSTED R-SQUARED 0.76297

F STATISTIC 63.15

Q4 1986 NEW HOUSES

SCOTLAND

	WEIGHT	COEFF
SDH	0.145	-0.008908
TH	0.174	-0.020572
DB	0.188	-0.056785
SDB	0.043	-0.062191
FB	0.239	0.078611
FC	0	0
LH	0	0
SGAR	0.333	0.127628
SPACE	0.297	0.083547
NOPARK	0.333	0.039099
NOCH	0.196	-0.042358
CHP	0.036	-0.142586 *
SIZE	836.548	0.0006515 *
BATH	1.094	0.066911
SITEVAL	5951.087	0.0000149 *
CONSTANT	1	9.768176 *

SAMPLE SIZE 138
 ADJUSTED R-SQUARED 0.7508

F STATISTIC 32.75

1986 NEW HOUSES

SCOTLAND

	WEIGHT	COEFF
SDH	0.179	-0.111956 *
TH	0.188	-0.131083 *
DB	0.163	-0.088347 *
SDB	0.042	-0.151125 *
FB	0.245	-0.089215 *
FC	0	0
LH	0	0
SGAR	0.241	-0.005718
SPACE	0.309	-0.124596 *
NOPARK	0.408	-0.153063 *
NOCH	0.245	-0.084636 *
CHP	0.025	-0.121688 *
SIZE	803.787	0.0004819 *
BATH	1.086	0.049964 *
SITEVAL	6009.405	0.0000076 *
CONSTANT	1	10.188819 *

SAMPLE SIZE 972
 ADJUSTED R-SQUARED 0.74477

F STATISTIC 218.96

Q1 1986 NEW HOUSES

Q2 1986 NEW HOUSES

Q3 1986 NEW HOUSES

Q4 1986 NEW HOUSES

1986 NEW HOUSES

NORTHERN IRELAND		WEIGHT	COEFF
SDH	0.295	-0.076987	
TH	0.029	-0.03736	
DB	0.335	-0.084804 *	
SDB	0.197	-0.093855 *	
FB	0.035	0.20762 *	
FC	0	0	
LH	0.607	0.063375 *	
SGAR	0.283	-0.112117 *	
SPACE	0.52	-0.285885 *	
NOPARK	0.156	-0.31603 *	
NOCH	0.087	0.015586	
CHP	0.22	-0.072939 *	
SIZE	1038.256	0.0002855 *	
BATH	1.029	0.317635 *	
SITEVAL	4654.335	0.0000301 *	
CONSTANT	1	9.770919 *	

NORTHERN IRELAND		WEIGHT	COEFF
SDH	0.27	-0.148357 *	
TH	0.032	-0.126483 *	
DB	0.391	-0.054835 *	
SDB	0.109	-0.128561 *	
FB	0.032	0.135234 *	
FC	0	0	
LH	0.637	0.079271 *	
SGAR	0.435	-0.050659	
SPACE	0.399	-0.228996 *	
NOPARK	0.137	-0.261815 *	
NOCH	0.105	-0.006272	
CHP	0.226	-0.020755	
SIZE	1139.642	0.0003616 *	
BATH	1.077	0.008511	
SITEVAL	5324.355	0.0000289 *	
CONSTANT	1	9.991558 *	

NORTHERN IRELAND		WEIGHT	COEFF
SDH	0.235	-0.098825 *	
TH	0.055	-0.12402	
DB	0.4	0.008669 *	
SDB	0.13	-0.134152 *	
FB	0.03	0.226186 *	
FC	0	0	
LH	0.655	0.101057 *	
SGAR	0.38	-0.129557	
SPACE	0.415	-0.271661 *	
NOPARK	0.17	-0.206586 *	
NOCH	0.09	-0.016722	
CHP	0.27	-0.046702	
SIZE	1102.664	0.0004031 *	
BATH	1.08	0.038541	
SITEVAL	5056.25	0.0000337 *	
CONSTANT	1	9.90028 *	

NORTHERN IRELAND		WEIGHT	COEFF
SDH	0.165	-0.157093 *	
TH	0.104	-0.139394	
DB	0.365	-0.078909	
SDB	0.165	-0.177567 *	
FB	0.052	0.079438	
FC	0	0	
LH	0.687	0.064715	
SGAR	0.374	0.032466	
SPACE	0.357	-0.079307	
NOPARK	0.226	-0.091351	
NOCH	0.096	-0.066028	
CHP	0.261	-0.002366	
SIZE	1053.723	0.0003980 *	
BATH	1.061	-0.007269	
SITEVAL	5202.609	0.0000372 *	
CONSTANT	1	9.828395 *	

NORTHERN IRELAND		WEIGHT	COEFF
SDH	0.25	-0.119035 *	
TH	0.049	-0.105676 *	
DB	0.376	-0.04069 *	
SDB	0.144	-0.130434 *	
FB	0.035	0.163115 *	
FC	0	0	
LH	0.643	0.080658 *	
SGAR	0.375	-0.050149	
SPACE	0.425	-0.207337 *	
NOPARK	0.164	-0.207868 *	
NOCH	0.095	-0.014098	
CHP	0.242	-0.030268 *	
SIZE	1092.338	0.0003650 *	
BATH	1.064	0.059508 *	
SITEVAL	5074.986	0.0000316 *	
CONSTANT	1	9.886357 *	

SAMPLE SIZE	173
ADJUSTED R-SQUARED	0.74271
F STATISTIC	36.46

SAMPLE SIZE	248
ADJUSTED R-SQUARED	0.83282
F STATISTIC	88.89

SAMPLE SIZE	200
ADJUSTED R-SQUARED	0.73968
F STATISTIC	41.39

SAMPLE SIZE	115
ADJUSTED R-SQUARED	0.77189
F STATISTIC	28.55

SAMPLE SIZE	736
ADJUSTED R-SQUARED	0.78018
F STATISTIC	187.34

TABLE E3: MODERN (POST-1970) HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

ALTERNATIVE WEIGHTS		POST-1970 NORTH INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.658	97.850	104.340	
Q2	100.000	103.971	99.424	107.973	
Q3	100.000	100.158	98.302	107.289	
Q4	100.000	105.057	100.033	104.979	
1986	100.000	102.800	98.898	106.515	

ALTERNATIVE WEIGHTS		POST-1970 YORKSHIRE & HUMBERSIDE INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.752	105.027	105.976	
Q2	100.000	103.141	103.890	106.386	
Q3	100.000	103.261	104.030	106.701	
Q4	100.000	101.584	103.373	104.600	
1986	100.000	103.149	104.207	106.165	

ALTERNATIVE WEIGHTS		POST-1970 NORTH WEST INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.007	105.324	104.572	
Q2	100.000	103.308	105.679	106.675	
Q3	100.000	103.914	105.477	107.516	
Q4	100.000	103.562	105.608	106.566	
1986	100.000	103.445	105.519	106.448	

ALTERNATIVE WEIGHTS		POST-1970 EAST MIDLANDS INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.840	106.782	112.390	
Q2	100.000	105.931	106.804	113.245	
Q3	100.000	105.798	107.151	112.333	
Q4	100.000	105.324	106.697	113.039	
1986	100.000	105.595	106.904	112.821	

ALTERNATIVE WEIGHTS		POST-1970 WEST MIDLANDS INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.122	105.179	107.790	
Q2	100.000	102.784	105.516	108.710	
Q3	100.000	102.974	105.717	108.886	
Q4	100.000	101.599	103.765	107.372	
1986	100.000	102.505	105.178	108.382	

		POST-1970 EAST ANGLIA INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	106.955	109.921	114.895
	Q2	100.000	106.641	110.049	116.639
	Q3	100.000	108.546	111.378	117.828
	Q4	100.000	105.592	110.477	115.254
	1986	100.000	107.005	110.372	116.248

		POST-1970 OUTER SOUTH EAST INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	102.861	108.336	113.665
	Q2	100.000	103.053	108.499	113.562
	Q3	100.000	103.015	108.270	113.593
	Q4	100.000	103.274	107.574	113.117
	1986	100.000	103.020	108.276	113.496

		POST-1970 OUTER METROPOLITAN INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	104.305	110.939	117.286
	Q2	100.000	104.674	111.374	117.745
	Q3	100.000	104.651	111.565	117.816
	Q4	100.000	104.896	111.743	118.650
	1986	100.000	104.599	111.346	117.761

		POST-1970 GREATER LONDON INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	103.576	111.826	121.343
	Q2	100.000	102.097	110.745	121.158
	Q3	100.000	103.410	110.986	120.382
	Q4	100.000	102.991	110.839	122.259
	1986	100.000	103.118	110.986	120.913

		POST-1970 SOUTH WEST INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	102.533	106.187	111.383
	Q2	100.000	101.729	105.276	110.063
	Q3	100.000	101.568	104.917	110.384
	Q4	100.000	102.424	105.731	109.645
	1986	100.000	101.871	105.402	110.298

		POST-1970 WALES			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.999	104.385	109.608	
Q2	100.000	104.126	103.135	108.872	
Q3	100.000	104.165	103.325	109.747	
Q4	100.000	102.530	101.487	105.088	
1986	100.000	103.592	103.142	108.591	

		POST-1970 SCOTLAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.885	104.172	105.278	
Q2	100.000	103.345	103.735	104.903	
Q3	100.000	103.711	103.552	105.983	
Q4	100.000	103.264	103.296	104.895	
1986	100.000	103.494	103.702	105.213	

		POST-1970 NORTHERN IRELAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.876	106.432	109.324	
Q2	100.000	104.736	104.900	108.494	
Q3	100.000	104.099	104.749	108.779	
Q4	100.000	106.431	107.782	107.146	
1986	100.000	104.787	105.504	108.571	

	Q1 1986 POST-1970 NORTH	Q2 1986 POST-1970 NORTH	Q3 1986 POST-1970 NORTH	Q4 1986 POST-1970 NORTHERN	1986 NORTH	POST-1970
SDH	0.386	0.367	0.304	0.304	0.388	0.356
TH	0.129	0.192	0.163	0.163	0.184	0.169
DB	0.086	0.05	0.109	0.109	0.061	0.076
SDB	0.1	0	0.054	0.054	0.041	0.042
FB	0.071	0.067	0.065	0.065	0.082	0.069
FC	0	0	0	0	0	0
LH	0.271	0.208	0.228	0.228	0.327	0.245
SGAR	0.7	0.692	0.685	0.685	0.592	0.677
SPACE	0.129	0.133	0.087	0.087	0.082	0.112
NOPARK	0.071	0.117	0.152	0.152	0.286	0.142
AGE	9.529	9.233	10.065	10.065	9.531	9.571
NOCH	0.2	0.058	0.098	0.098	0.061	0.1
CHP	0.129	0.1	0.174	0.174	0.122	0.13
SIZE	899.436	925.334	963.765	963.765	904.241	927.416
BATH	0.986	1.05	1.087	1.087	1.041	1.045
A	0.014	0	0.011	0.011	0.041	0.021
C	0.114	0.05	0.076	0.076	0.061	0.073
D	0	0.017	0.022	0.022	0	0.012
E	0.057	0.067	0.13	0.13	0.041	0.079
F	0.086	0.117	0.109	0.109	0.061	0.1
G	0.014	0.033	0.011	0.011	0.061	0.027
H	0	0.008	0	0	0	0.003
I	0	0.017	0	0	0.041	0.012
J	0.071	0.1	0.043	0.043	0.061	0.073
K	0.014	0	0.033	0.033	0	0.012
P1	0	0	0	0	0	0
P2	0.014	0.008	0	0	0	0.006
P3	0.114	0.075	0.065	0.065	0.102	0.085
P4	0.486	0.433	0.522	0.522	0.367	0.459
P5	0.286	0.408	0.315	0.315	0.388	0.353
P7	0.086	0.067	0.098	0.098	0.122	0.088
CONSTANT	1	1	1	1	1	1
WEIGHT	0.386	0.367	0.304	0.304	0.388	0.356
COEFF	-0.160308	-0.199539	-0.246084	-0.246084	-0.233574	-0.205524
ADJUSTED R-SQUARED	0.87746	0.87033	0.86881	0.86881	0.94839	0.87504
F STATISTIC	20.76	30.58	25.11	25.11	36.28	80.69
SAMPLE SIZE	70	120	92	92	49	331
ADJUSTED R-SQUARED	0.87746	0.87033	0.86881	0.86881	0.94839	0.87504
F STATISTIC	20.76	30.58	25.11	25.11	36.28	80.69

YORKSHIRE & HUMBERSIDE

YORKS & HUMBER WEIGHT COEFF

YORKS & HUMBER WEIGHTS COEFF

YORKS & HUMBER WEIGHT COEFF

YORKS & HUMBER COEFF

SDH	0.341	-0.220991 *	0.35	-0.21445 *	0.302	-0.267744 *	0.263	-0.223552 *	0.322	-0.234671 *
TH	0.17	-0.247636 *	0.126	-0.334236 *	0.174	-0.261548 *	0.1	-0.318991 *	0.149	-0.276121 *
DB	0.085	0.061789	0.104	0.064895	0.093	0.057178	0.1	-0.089626	0.095	0.04651
SDB	0.051	-0.134147 *	0.06	-0.200711 *	0.064	-0.170978 *	0.088	-0.291563 *	0.062	-0.180199 *
FB	0.068	-0.444714 *	0.033	-0.447186 *	0.122	-0.527518 *	0.063	-0.591439 *	0.072	-0.496386 *
FC	0	0	0	0	0	0	0	0	0	0
LH	0.153	-0.003046	0.109	0.035372	0.174	0.082367	0.113	0.03061	0.141	0.020985
SGAR	0.625	-0.168485 *	0.71	-0.079947 *	0.64	-0.065913	0.663	-0.258807 *	0.66	-0.151539 *
SPACE	0.205	-0.223949 *	0.148	-0.176782 *	0.174	-0.21361 *	0.088	-0.44661 *	0.164	-0.270163 *
NOPARK	0.131	-0.203513 *	0.077	-0.149508 *	0.151	-0.265822 *	0.125	-0.372878 *	0.119	-0.258038 *
AGE	9.028	-0.010527 *	9.317	-0.005048	9.64	-0.006727	9.438	-0.003829	9.34	-0.004767 *
NOCH	0.256	-0.088376 *	0.251	-0.071387 *	0.209	-0.046152	0.175	-0.030752	0.231	-0.061866 *
CHP	0.057	-0.123007 *	0.033	-0.043609	0.076	-0.047424	0.063	-0.038111	0.056	-0.06521 *
SIZE	865.543	0.00064205 *	930.988	0.00048354 *	860.671	0.00054658 *	976.624	0.00031244 *	898.317	0.00050385 *
BATH	1.051	-0.00261	1.06	0.140931 *	1.041	-0.00879	1.05	0.233684 *	1.051	0.097356 *
A	0.017	-0.047233	0.033	0.087516	0.041	-0.033702	0.063	0.041254	0.034	0.015381
C	0.278	-0.021391	0.191	0.049674	0.192	0.043815	0.175	-0.095599	0.214	-0.013572
D	0.028	-0.11021	0.016	0.070098	0.058	-0.070888	0	0	0.029	-0.064466
E	0.034	0.018848	0.115	-0.009346	0.047	-0.082552	0.063	-0.20668 *	0.065	-0.051242
F	0.04	-0.084884	0.082	0.003576	0.058	-0.074996	0.1	-0.067105	0.065	-0.060389 *
G	0.023	0.046519	0.022	-0.126704	0.017	-0.083895	0.05	-0.111035	0.025	-0.03866
H	0	0	0	0	0	0	0.013	-0.183395	0.002	-0.09387
I	0.006	0.381388 *	0	0	0.029	0.216296 *	0.013	-0.089305	0.011	0.191889 *
J	0.182	0.018636	0.137	0.034024	0.116	0.041122	0.113	-0.115234	0.141	0.013478
K	0.023	0.09954	0.016	0.291876 *	0.006	-0.032509	0.013	0.221621	0.015	0.133783 *
P1	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0
P3	0.08	-0.030214	0.066	-0.178721 *	0.087	-0.053137	0.088	-0.136088	0.079	-0.094564 *
P4	0.335	-0.160499 *	0.383	-0.225291 *	0.424	-0.189228 *	0.238	-0.24859 *	0.362	-0.202343 *
P5	0.199	-0.099078	0.153	-0.203895 *	0.14	-0.140041 *	0.163	-0.241822 *	0.164	-0.164078 *
P7	0.318	-0.116938	0.246	-0.123526	0.233	-0.086457	0.425	-0.201102 *	0.286	-0.121025 *
CONSTANT	1	10.213135 *	1	10.141714 *	1	10.253413 *	1	10.535236 *	1	10.246202 *
SAMPLE SIZE	176		183		172		80		611	
ADJUSTED R-SQUARED	0.82706		0.85355		0.84844		0.80953		0.83792	
F STATISTIC	32.00		41.80		36.45		13.44		113.63	

NORTH WEST

	WEIGHT	COEFF
SDH	0.359	-0.208999 *
TH	0.169	-0.310658 *
DB	0.052	0.020269
SDB	0.048	-0.216311 *
FB	0.074	-0.399006 *
FC	0	0
LH	0.468	0.010331
SGAR	0.515	-0.057039
SPACE	0.177	-0.147694 *
NOPARK	0.229	-0.156102 *
AGE	9.641	-0.009102 *
NOCH	0.225	-0.119126 *
CHP	0.052	0.005394
SIZE	885.527	0.00063959 *
BATH	1.061	0.15312 *
A	0.009	-0.201445
C	0.156	-0.008497
D	0.043	0.012409
E	0.052	-0.11389 *
F	0.048	-0.072108
G	0.043	-0.034329
H	0.013	-0.197809
I	0.022	0.051553
J	0.113	0.057527
K	0.009	-0.07057
P1	0	0
P2	0	0
P3	0.143	-0.168711 *
P4	0.212	-0.169627 *
P5	0.416	-0.145377 *
P7	0.061	-0.035136
CONSTANT	1	9.983517 *

SAMPLE SIZE	231
ADJUSTED R-SQUARED	0.87341
F STATISTIC	57.68

NORTH WEST

	WEIGHT	COEFF
SDH	0.386	-0.214587 *
TH	0.153	-0.279413 *
DB	0.053	0.060559
SDB	0.024	-0.105794
FB	0.116	-0.351884 *
FC	0.003	-0.229593
LH	0.511	0.002654
SGAR	0.548	-0.081191
SPACE	0.19	-0.177271 *
NOPARK	0.19	-0.182239 *
AGE	9.474	-0.009781 *
NOCH	0.19	-0.123479 *
CHP	0.053	-0.143358 *
SIZE	867.437	0.00064778 *
BATH	1.056	0.07928
A	0.013	-0.148918
C	0.159	-0.081964 *
D	0.032	-0.039277
E	0.085	-0.036771
F	0.045	-0.117963 *
G	0.019	-0.065803
H	0.011	-0.111886
I	0.032	-0.04978
J	0.153	0.05796
K	0.016	0.086317
P1	0	0
P2	0	0
P3	0.138	-0.207017 *
P4	0.198	-0.231982 *
P5	0.399	-0.190493 *
P7	0.077	-0.080189
CONSTANT	1	10.165212 *

SAMPLE SIZE	378
ADJUSTED R-SQUARED	0.82495
F STATISTIC	62.26

NORTH WEST

	WEIGHTS	COEFF
SDH	0.394	-0.30472 *
TH	0.114	-0.388185 *
DB	0.076	-0.03654
SDB	0.032	-0.203418 *
FB	0.079	-0.482289 *
FC	0	0
LH	0.444	0.014706
SGAR	0.527	-0.190452 *
SPACE	0.222	-0.32051 *
NOPARK	0.178	-0.311635 *
AGE	9.317	-0.005749 *
NOCH	0.219	-0.063961 *
CHP	0.054	-0.096248 *
SIZE	908.252	0.00043643 *
BATH	1.067	0.080128
A	0.013	0.133824
C	0.137	0.026476
D	0.025	-0.007598
E	0.098	-0.047921
F	0.038	-0.085196
G	0.029	-0.112785
H	0.006	0.044127
I	0.025	0.024996
J	0.203	0.088765 *
K	0.022	0.236339 *
P1	0	0
P2	0	0
P3	0.121	-0.147308 *
P4	0.181	-0.217732 *
P5	0.394	-0.14224 *
P7	0.067	-0.12337 *
CONSTANT	1	10.437432 *

SAMPLE SIZE	315
ADJUSTED R-SQUARED	0.82555
F STATISTIC	54.07

NORTH WEST

	WEIGHT	COEFF
SDH	0.378	-0.139726 *
TH	0.147	-0.300235 *
DB	0.083	0.038593
SDB	0.026	-0.148926
FB	0.109	-0.259718 *
FC	0	0
LH	0.481	0.029347
SGAR	0.519	-0.151972 *
SPACE	0.173	-0.296648 *
NOPARK	0.212	-0.297828 *
AGE	10.147	-0.010421 *
NOCH	0.167	-0.076136
CHP	0.051	0.025112
SIZE	894.02	0.00067690 *
BATH	1.051	-0.055021
A	0.013	-0.085648
C	0.16	0.010577
D	0.026	-0.097797
E	0.038	0.016689
F	0.064	-0.074707
G	0.032	-0.095369
H	0.013	-0.055327
I	0.026	0.061248
J	0.141	0.180864 *
K	0.038	0.088047
P1	0	0
P2	0	0
P3	0.096	-0.310716 *
P4	0.218	-0.257814 *
P5	0.397	-0.192763 *
P7	0.09	-0.193891 *
CONSTANT	1	10.323374 *

SAMPLE SIZE	156
ADJUSTED R-SQUARED	0.83681
F STATISTIC	29.39

NORTH WEST

	WEIGHT	COEFF
SDH	0.381	-0.228628 *
TH	0.144	-0.306714 *
DB	0.064	0.01973
SDB	0.031	-0.181165 *
FB	0.095	-0.376541 *
FC	0.001	-0.226247
LH	0.478	0.011591
SGAR	0.531	-0.116367 *
SPACE	0.194	-0.230265 *
NOPARK	0.198	-0.237914 *
AGE	9.561	-0.008458 *
NOCH	0.203	-0.095691 *
CHP	0.053	-0.077133 *
SIZE	887.051	0.00059287 *
BATH	1.059	0.07012 *
A	0.012	-0.060195
C	0.152	-0.023808
D	0.031	-0.030265
E	0.075	-0.036456
F	0.046	-0.094216 *
G	0.029	-0.080024 *
H	0.01	-0.110232 *
I	0.027	0.001876
J	0.157	0.09145 *
K	0.019	0.134372 *
P1	0	0
P2	0	0
P3	0.128	-0.195642 *
P4	0.199	-0.206486 *
P5	0.401	-0.159714 *
P7	0.072	-0.097884 *
CONSTANT	1	10.22026 *

SAMPLE SIZE	1080
ADJUSTED R-SQUARED	0.83463
F STATISTIC	188.78

EAST MIDLANDS

WEIGHT COEFF

SDH	0.312	-0.169304 *
TH	0.229	-0.312793 *
DB	0.073	-0.031982
SDB	0.033	-0.168928 *
FB	0.027	-0.411566 *
FC	0.003	0.115935
LH	0.05	-0.051589
SGAR	0.608	-0.151853 *
SPACE	0.189	-0.250467 *
NOPARK	0.123	-0.242561 *
AGE	9.425	-0.01039 *
NOCH	0.123	-0.070075 *
CHP	0.076	-0.013981
SIZE	889.478	0.00059456 *
BATH	1.047	0.080794
A	0.023	-0.052303
C	0.213	0.038483
D	0.01	-0.066719
E	0.13	-0.051258
F	0.04	-0.014246
G	0.013	-0.047305
H	0.01	0.146932
I	0.003	0.29321
J	0.116	0.061121
K	0.027	0.098239
P1	0	0
P2	0	0
P3	0.093	-0.402187 *
P4	0.239	-0.403777 *
P5	0.452	-0.301127 *
P7	0.206	-0.458056 *
CONSTANT	1	10.403761 *

SAMPLE SIZE 301

ADJUSTED R-SQUARED 0.81279

F STATISTIC 45.91

EAST MIDLANDS

WEIGHT COEFF

SDH	0.336	-0.191597 *
TH	0.188	-0.323899 *
DB	0.099	0.018141
SDB	0.04	-0.04224
FB	0.034	-0.31438 *
FC	0	0
LH	0.053	-0.209734 *
SGAR	0.643	-0.139455 *
SPACE	0.165	-0.254972 *
NOPARK	0.129	-0.22361 *
AGE	9.334	-0.004836 *
NOCH	0.123	-0.087433 *
CHP	0.068	-0.032871
SIZE	863.396	0.00051396 *
BATH	1.044	0.055438
A	0.047	-0.016233
C	0.18	0.036257
D	0.015	0.068944
E	0.133	0.014622
F	0.027	0.011741
G	0.015	0.054196
H	0.013	0.125448
I	0.011	0.268517 *
J	0.123	0.101177 *
K	0.011	-0.009912
P1	0.002	0.593182 *
P2	0	0
P3	0.085	-0.255883 *
P4	0.207	-0.25629 *
P5	0.465	-0.126972 *
P7	0.222	-0.194187 *
CONSTANT	1	10.302762 *

SAMPLE SIZE 473

ADJUSTED R-SQUARED 0.78066

F STATISTIC 58.93

EAST MIDLANDS

WEIGHT COEFF

SDH	0.317	-0.165928 *
TH	0.176	-0.327635 *
DB	0.107	-0.01091
SDB	0.023	-0.021948
FB	0.035	0.204736 *
FC	0	0
LH	0.061	-0.471221 *
SGAR	0.631	-0.104968 *
SPACE	0.179	-0.181829 *
NOPARK	0.141	-0.208566 *
AGE	9.548	-0.003269
NOCH	0.13	-0.054716
CHP	0.089	0.017294
SIZE	885.334	0.00069016 *
BATH	1.032	0.055134
A	0.043	-0.093121
C	0.216	0.009319
D	0.017	0.016506
E	0.156	0.037433
F	0.032	0.111195
G	0.02	0.070452
H	0.012	0.097388
I	0.009	-0.111631
J	0.104	0.086451 *
K	0.02	-0.01058
P1	0	0
P2	0	0
P3	0.084	-0.315383 *
P4	0.207	-0.260123 *
P5	0.441	-0.16052 *
P7	0.248	-0.250563 *
CONSTANT	1	10.136066 *

SAMPLE SIZE 347

ADJUSTED R-SQUARED 0.77856

F STATISTIC 44.45

EAST MIDLANDS

WEIGHT COEFF

SDH	0.33	-0.165621 *
TH	0.176	-0.341901 *
DB	0.099	-0.047376
SDB	0.027	-0.198041 *
FB	0.022	-0.213559
FC	0	0
LH	0.049	-0.175698 *
SGAR	0.648	-0.260943 *
SPACE	0.165	-0.369466 *
NOPARK	0.104	-0.261404 *
AGE	9.736	-0.007711
NOCH	0.082	-0.0769
CHP	0.06	-0.090597
SIZE	896.991	0.00035487 *
BATH	1.044	0.20687 *
A	0.022	-0.006162
C	0.214	0.018971
D	0.011	0.115501
E	0.148	0.003502
F	0.027	-0.027191
G	0	0
H	0.011	0.150144
I	0.005	-0.479194 *
J	0.121	0.140634 *
K	0.022	-0.042224
P1	0	0
P2	0	0
P3	0.06	-0.340603 *
P4	0.209	-0.203256
P5	0.516	-0.048457
P7	0.203	-0.19116
CONSTANT	1	10.451193 *

SAMPLE SIZE 182

ADJUSTED R-SQUARED 0.74785

F STATISTIC 20.88

EAST MIDLANDS

WEIGHT COEFF

SDH	0.325	-0.174691 *
TH	0.193	-0.334266 *
DB	0.095	-0.011631
SDB	0.032	-0.09858 *
FB	0.031	-0.178878 *
FC	0.001	0.354734
LH	0.054	-0.227574 *
SGAR	0.632	-0.158886 *
SPACE	0.174	-0.262024 *
NOPARK	0.127	-0.246638 *
AGE	9.468	-0.005214 *
NOCH	0.119	-0.061009 *
CHP	0.074	-0.018043
SIZE	879.956	0.00054623 *
BATH	1.041	0.082125 *
A	0.037	-0.031627
C	0.202	0.02227
D	0.014	0.04344
E	0.14	0.009928
F	0.031	0.023851
G	0.014	0.044883
H	0.012	0.129894 *
I	0.008	0.051314
J	0.116	0.091706 *
K	0.018	0.013589
P1	0.001	0.546388 *
P2	0	0
P3	0.083	-0.309707 *
P4	0.215	-0.274093 *
P5	0.463	-0.153394 *
P7	0.223	-0.255232 *
CONSTANT	1	10.303417 *

SAMPLE SIZE 1303

ADJUSTED R-SQUARED 0.76304

F STATISTIC 140.76

WEST MIDLANDS

WEST MIDLANDS

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	WEIGHT COEFF		WEIGHT COEFF		WEIGHT COEFF		WEIGHT COEFF		WEIGHT COEFF		
SDH	0.37	-0.207719 *	0.344	-0.18382 *	0.357	-0.203306 *	0.274	-0.211305 *	0.342	-0.202869 *	
TH	0.175	-0.315223 *	0.157	-0.310615 *	0.176	-0.251401 *	0.149	-0.323393 *	0.165	-0.303532 *	
DB	0.017	0.079956	0.024	0.127964 *	0.023	0.277098 *	0.048	0.087875	0.026	0.14428 *	
SDB	0.02	-0.150817	0.018	-0.109084	0.017	-0.123291	0.014	-0.155063	0.018	-0.13127 *	
FB	0.074	-0.382994 *	0.111	-0.348347 *	0.089	-0.366784 *	0.072	-0.321655 *	0.092	-0.359715 *	
FC	0	0	0.004	-0.450347 *	0	0	0.01	-0.40748 *	0.003	-0.333437 *	
LH	0.391	0.039155	0.368	-0.015827	0.343	0.030449	0.317	-0.045613	0.359	0.004634	
SGAR	0.63	-0.133372 *	0.658	-0.078599	0.66	-0.092552	0.625	-0.089273	0.647	-0.099953 *	
SPACE	0.178	-0.21105 *	0.111	-0.150845 *	0.153	-0.216248 *	0.13	-0.255484 *	0.139	-0.198146 *	
NOPARK	0.121	-0.228841 *	0.179	-0.201419 *	0.153	-0.230422 *	0.144	-0.219311 *	0.154	-0.226876 *	
AGE	9.003	-0.009176 *	9.541	-0.008757 *	9.49	-0.008579 *	9.505	-0.013093 *	9.404	-0.009183 *	
NOCH	0.239	-0.124041 *	0.266	-0.07287 *	0.228	-0.079911 *	0.159	-0.069644	0.234	-0.08922 *	
CHP	0.088	-0.042783	0.103	-0.076922 *	0.089	-0.163701 *	0.091	-0.034903	0.094	-0.081634 *	
SIZE	838.641	0.00065838 *	834.185	0.00063510 *	858.766	0.00054055 *	935.915	0.00063283 *	857.073	0.00061175 *	
BATH	1.034	0.091125	1.054	0.064341	1.049	0.119836 *	1.096	0.116301 *	1.055	0.103873 *	
A	0.013	-0.09006	0.026	0.130942 *	0.009	-0.133124	0.029	-0.176773	0.019	-0.011688	
C	0.131	-0.014388	0.137	0.026761	0.135	0.013493	0.12	0.042981	0.133	0.01431	
D	0.034	-0.02249	0.022	-0.021128	0.012	-0.089448	0.014	-0.044643	0.021	-0.043392	
E	0.101	-0.030818	0.147	-0.063695 *	0.11	-0.062102	0.125	0.06015	0.124	-0.035848 *	
F	0.047	-0.10552 *	0.024	-0.101698	0.04	-0.038689	0.038	-0.082832	0.035	-0.072756 *	
G	0.037	-0.070002	0.028	-0.024499	0.052	-0.135847 *	0.063	-0.148369 *	0.041	-0.094559 *	
H	0.01	-0.026577	0.01	-0.120878	0.017	-0.117653	0.014	0.083558	0.013	-0.064164	
I	0.01	-0.134892	0.02	-0.004274	0.037	-0.013793	0.024	0.121073	0.023	-0.004795	
J	0.114	0.116681 *	0.083	0.046062	0.11	0.037448	0.144	0.154211 *	0.106	0.088065 *	
K	0.003	0.141909	0.014	0.373559 *	0.017	0.132213	0.024	0.099997	0.014	0.218427 *	
P1	0	0	0	0	0	0	0	0	0		
P2	0	0	0	0	0	0	0	0	0		
P3	0.074	-0.162724 *	0.068	-0.193286 *	0.086	-0.137229 *	0.091	-0.102157	0.077	-0.16955 *	
P4	0.152	-0.243416 *	0.121	-0.275283 *	0.147	-0.203172 *	0.135	-0.110006	0.137	-0.228268 *	
P5	0.556	-0.164982 *	0.537	-0.19653 *	0.527	-0.133533 *	0.529	-0.023781	0.537	-0.149328 *	
P7	0.145	-0.059219	0.175	-0.142203 *	0.159	-0.040958	0.163	0.045514	0.162	-0.071417 *	
CONSTANT	1	10.119932 *	1	10.171055 *	1	10.177441 *	CONSTANT	1	10.08294 *	1	10.146122 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
297	0.83493	54.47	503	0.80915	74.39	347	0.77783	44.26
208	0.84551	40.07	347	0.77783	44.26	347	0.77783	44.26
1355	0.81349	204.64	347	0.77783	44.26	347	0.77783	44.26

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.23	-0.228447 *
TH	0.358	-0.277984 *
DB	0.022	-0.056256
SDB	0.018	-0.228742 *
FB	0.145	-0.327918 *
FC	0.003	-0.317583 *
LH	0.152	-0.031371
SGAR	0.635	-0.092947 *
SPACE	0.124	-0.179724 *
NOPARK	0.198	-0.1154 *
AGE	8.483	-0.00405 *
NOCH	0.185	-0.064033 *
CHP	0.125	-0.056247 *
SIZE	817.481	0.00045752 *
BATH	1.036	0.072954 *
A	0.007	0.109491
C	0.152	0.007126
D	0.006	-0.002038
E	0.139	-0.030231
F	0.012	0.029916
G	0	0
H	0	0
I	0.015	-0.006444
J	0.136	0.05406 *
K	0.052	0.05516 *
P1	0	0
P2	0	0
P3	0.001	0.163258
P4	0.009	-0.214479 *
P5	0.638	-0.088271 *
P7	0.249	-0.145144 *
CONSTANT	1	10.576552 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
671	0.80367	102.58
1079	0.79802	147.86
1079	0.78164	93.33
749	0.76525	52.43
427	0.77771	353.87

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.222	-0.163306 *
TH	0.316	-0.242319 *
DB	0.036	0.045706
SDB	0.015	-0.160067 *
FB	0.124	-0.246438 *
FC	0.008	-0.207277 *
LH	0.136	-0.10962 *
SGAR	0.641	-0.147752 *
SPACE	0.127	-0.211573 *
NOPARK	0.178	-0.215272 *
AGE	8.71	-0.005827 *
NOCH	0.163	-0.086053 *
CHP	0.111	-0.080894 *
SIZE	869.323	0.00036634 *
BATH	1.065	0.110609 *
A	0.011	0.11312 *
C	0.14	-0.012334
D	0.017	-0.004248
E	0.103	-0.04745 *
F	0.008	-0.099895
G	0.005	0.080943
H	0.003	0.167795
I	0.021	0.113625 *
J	0.14	0.004455
K	0.068	0.062524 *
P1	0	0
P2	0	0
P3	0.001	0.056352
P4	0.016	-0.175048 *
P5	0.668	-0.131883 *
P7	0.226	-0.160553 *
CONSTANT	1	10.784288 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
749	0.78164	93.33
427	0.76525	52.43

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.251	-0.179195 *
TH	0.319	-0.256887 *
DB	0.026	0.0683
SDB	0.012	-0.152776
FB	0.108	-0.163541 *
FC	0.007	-0.238272
LH	0.115	-0.123712
SGAR	0.665	-0.113947 *
SPACE	0.075	-0.120383 *
NOPARK	0.19	-0.172971 *
AGE	8.754	-0.003184
NOCH	0.157	-0.068395 *
CHP	0.15	-0.045836
SIZE	907.748	0.00048787 *
BATH	1.047	0.161468 *
A	0.016	-0.091933
C	0.159	-0.031379
D	0.012	-0.091222
E	0.098	0.008799
F	0.012	0.037051
G	0.005	-0.05904
H	0	0
I	0.019	-0.068851
J	0.173	0.043879
K	0.044	-0.018956
P1	0	0
P2	0	0
P3	0	0
P4	0.014	-0.192802 *
P5	0.623	-0.084264 *
P7	0.269	-0.127763 *
CONSTANT	1	10.566174 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
427	0.76525	52.43
2926	0.77771	353.87

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.241	-0.179332 *
TH	0.329	-0.249514 *
DB	0.027	0.00044907
SDB	0.013	-0.16156 *
FB	0.124	-0.218951 *
FC	0.005	-0.216425 *
LH	0.133	-0.096247 *
SGAR	0.636	-0.1435 *
SPACE	0.119	-0.212199 *
NOPARK	0.19	-0.185803 *
AGE	8.537	-0.005361 *
NOCH	0.166	-0.071906 *
CHP	0.118	-0.058149 *
SIZE	856.718	0.00045867 *
BATH	1.049	0.107156 *
A	0.01	0.050168
C	0.146	-0.006737
D	0.013	0.017908
E	0.119	-0.046328 *
F	0.01	-0.042865
G	0.003	0.032535
H	0.001	0.12899
I	0.021	0.020715
J	0.146	0.038896 *
K	0.052	0.044278 *
P1	0	0
P2	0	0
P3	0.002	0.161297 *
P4	0.011	-0.14792 *
P5	0.641	-0.091875 *
P7	0.243	-0.125825 *
CONSTANT	1	10.626129 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
2926	0.77771	353.87

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	COEFF	WEIGHT	COEFF	WEIGHTS	COEFF	WEIGHT	COEFF	WEIGHT	COEFF					
SDH	0.17	-0.173398 *	SDH	0.177	-0.153735 *	SDH	0.189	-0.141624 *	SDH	0.215	-0.164671 *	SDH	0.182	-0.154457 *
TH	0.383	-0.232573 *	TH	0.342	-0.234417 *	TH	0.311	-0.201014 *	TH	0.331	-0.260329 *	TH	0.344	-0.232837 *
DB	0.011	-0.0679	DB	0.016	-0.06789 *	DB	0.016	-0.083222	DB	0.025	-0.043835	DB	0.016	-0.054894 *
SDB	0.004	-0.114517	SDB	0.005	-0.196367 *	SDB	0.017	-0.097401 *	SDB	0.002	-0.285993	SDB	0.007	-0.13158 *
FB	0.239	-0.253985 *	FB	0.229	-0.211747 *	FB	0.209	-0.206954 *	FB	0.174	-0.435683 *	FB	0.22	-0.244868 *
FC	0.003	-0.270339 *	FC	0.003	-0.41708 *	FC	0.004	-0.287649 *	FC	0.002	-0.301207	FC	0.003	-0.337913 *
LH	0.247	-0.03154	LH	0.235	-0.053727	LH	0.221	-0.019167	LH	0.185	0.14159	LH	0.229	-0.020361
SGAR	0.526	-0.088298 *	SGAR	0.552	-0.120016 *	SGAR	0.594	-0.089471 *	SGAR	0.572	-0.092935 *	SGAR	0.557	-0.099058 *
SPACE	0.117	-0.151534 *	SPACE	0.099	-0.188914 *	SPACE	0.094	-0.166837 *	SPACE	0.106	-0.124252 *	SPACE	0.103	-0.160303 *
NOPARK	0.299	-0.123863 *	NOPARK	0.291	-0.17052 *	NOPARK	0.242	-0.148767 *	NOPARK	0.259	-0.107085 *	NOPARK	0.278	-0.143485 *
AGE	8.146	-0.006807 *	AGE	8.653	-0.006456 *	AGE	8.734	-0.007972 *	AGE	8.935	-0.007251 *	AGE	8.578	-0.006838 *
NOCH	0.144	-0.036456 *	NOCH	0.134	-0.028757 *	NOCH	0.137	-0.047186 *	NOCH	0.097	-0.093784 *	NOCH	0.133	-0.043148 *
CHP	0.146	-0.008871	CHP	0.137	-0.022297	CHP	0.098	-0.028817	CHP	0.113	-0.030286	CHP	0.128	-0.025239 *
SIZE	787.988	0.00053508 *	SIZE	820.61	0.00056330 *	SIZE	850.99	0.00063416 *	SIZE	873.158	0.00055411 *	SIZE	825.59	0.00058762 *
BATH	1.075	0.064329 *	BATH	1.058	0.071224 *	BATH	1.069	0.093873 *	BATH	1.081	0.024375	BATH	1.067	0.060331 *
A	0.004	0.052428	A	0.005	-0.063204	A	0.008	0.050962	A	0.009	0.171426 *	A	0.006	0.050703
C	0.101	0.011699	C	0.106	-0.024575	C	0.098	-0.008296	C	0.095	-0.035418	C	0.101	-0.013504
D	0.013	-0.026419	D	0.014	-0.011659	D	0.006	0.021118	D	0.019	-0.073758	D	0.012	-0.015866
E	0.157	-0.040383 *	E	0.16	-0.036043 *	E	0.132	0.026019	E	0.141	-0.056799 *	E	0.15	-0.027258 *
F	0.016	0.023858	F	0.016	0.032279	F	0.015	0.002394	F	0.014	0.163344 *	F	0.015	0.03408
G	0.002	-0.049905	G	0.003	-0.076318	G	0.001	-0.0431	G	0.002	-0.057172	G	0.002	-0.06203
H	0.018	-0.009438	H	0.008	-0.031045	H	0.005	-0.036504	H	0.023	0.007464	H	0.012	-0.007108
I	0.025	0.053131	I	0.025	0.064057 *	I	0.029	0.103846 *	I	0.019	-0.109679	I	0.025	0.053065 *
J	0.156	0.064983 *	J	0.136	0.030228 *	J	0.178	0.057064 *	J	0.144	0.056866 *	J	0.152	0.049063 *
K	0.02	0.099795 *	K	0.016	0.028876	K	0.025	0.060734	K	0.032	0.033885	K	0.021	0.066038 *
P1	0.001	0.257503	P1	0	0	P1	0.001	0.219058	P1	0	0	P1	0.001	0.230543 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.057	-0.084589 *	P3	0.046	-0.119202 *	P3	0.044	-0.151639 *	P3	0.051	-0.200695 *	P3	0.049	-0.134439 *
P4	0.004	-0.305925 *	P4	0.011	-0.269261 *	P4	0.01	-0.200204 *	P4	0.014	-0.329193 *	P4	0.009	-0.249248 *
P5	0.656	-0.119717 *	P5	0.654	-0.152018 *	P5	0.655	-0.137081 *	P5	0.613	-0.155262 *	P5	0.65	-0.143677 *
P7	0.022	-0.236075 *	P7	0.023	-0.335894 *	P7	0.013	-0.286594 *	P7	0.019	-0.349657 *	P7	0.02	-0.324979 *
CONSTANT	1	10.666673 *	CONSTANT	1	10.741838 *	CONSTANT	1	10.661865 *	CONSTANT	1	10.918574 *	CONSTANT	1	10.721625 *
SAMPLE SIZE	912		SAMPLE SIZE	1458		SAMPLE SIZE	827		SAMPLE SIZE	432		SAMPLE SIZE	3629	
ADJUSTED R-SQUARED	0.8229		ADJUSTED R-SQUARED	0.8363		ADJUSTED R-SQUARED	0.85057		ADJUSTED R-SQUARED	0.82725		ADJUSTED R-SQUARED	0.82026	
F STATISTIC	142.1		F STATISTIC	257.66		F STATISTIC	157.72		F STATISTIC	72.17		F STATISTIC	552.89	

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WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
COEFF	COEFF	COEFF	COEFF	COEFF
SDH	0.076	-0.352394 *	0.087	-0.263146 *
TH	0.222	-0.365054 *	0.278	-0.331418 *
DB	0	0	0.003	0.125562
SDB	0.004	-0.567242 *	0	0
FB	0.662	-0.56614 *	0.537	-0.558284 *
FC	0.007	-0.782117 *	0.028	-0.65941 *
LH	0.684	0.048987	0.576	0.122795
SGAR	0.36	0.066938	0.398	0.017497
SPACE	0.149	0.011717	0.139	-0.017047
NOPARK	0.469	0.039723	0.442	-0.011994
AGE	7.447	-0.004471	8.28	-0.004746 *
NOCH	0.28	-0.0529 *	0.172	-0.140469 *
CHP	0.098	-0.031625	0.136	-0.10482 *
SIZE	639.378	0.00048598 *	720.311	0.00039595 *
BATH	1.025	0.071945	1.051	0.200089 *
A	0	0	0	0
C	0.084	-0.007448	0.067	0.005781
D	0.011	-0.009965	0.013	0.034152
E	0.102	-0.031	0.105	-0.063723
F	0.036	0.126243 *	0.023	-0.076525
G	0.069	0.02947	0.046	-0.036767
H	0.109	-0.043983	0.098	-0.027356
I	0.135	0.084504	0.149	0.073322 *
J	0.218	0.016831	0.206	0.030199
K	0.12	-0.021768	0.103	0.025349
P1	0.091	0.062455	0.093	0.088148 *
P2	0	0	0	0
P3	0.12	-0.103838 *	0.09	-0.094103 *
P4	0.025	-0.10602	0.036	-0.0701
P5	0.189	-0.074122 *	0.167	-0.075644 *
P7	0.004	-0.206141	0.005	-0.412413 *
CONSTANT	1	10.784404 *	1	10.748536 *
SAMPLE SIZE	275		389	
ADJUSTED R-SQUARED	0.68656		0.75559	
F STATISTIC	22.43		43.84	
SAMPLE SIZE	161		290	
ADJUSTED R-SQUARED	0.78774		0.79887	
F STATISTIC	22.21		41.99	
SAMPLE SIZE	1115		161	
ADJUSTED R-SQUARED	0.73616		0.78774	
F STATISTIC	108.18		22.21	

WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
COEFF	COEFF	COEFF	COEFF	COEFF
SDH	0.081	-0.34818 *	0.081	-0.34818 *
TH	0.317	-0.33865 *	0.317	-0.33865 *
DB	0	0	0	0
SDB	0.006	-0.610425 *	0.006	-0.610425 *
FB	0.516	-0.354561 *	0.516	-0.354561 *
FC	0.025	-0.409267 *	0.025	-0.409267 *
LH	0.547	-0.038808	0.547	-0.038808
SGAR	0.391	0.091534	0.391	0.091534
SPACE	0.18	0.062698	0.18	0.062698
NOPARK	0.404	0.055629	0.404	0.055629
AGE	8.553	-0.010791 *	8.553	-0.010791 *
NOCH	0.205	-0.097602 *	0.205	-0.097602 *
CHP	0.118	-0.116068 *	0.118	-0.116068 *
SIZE	716.453	0.00066483 *	716.453	0.00066483 *
BATH	1.062	0.194172 *	1.062	0.194172 *
A	0	0	0	0
C	0.062	0.059513	0.062	0.059513
D	0.006	0.008956	0.006	0.008956
E	0.087	-0.099526	0.087	-0.099526
F	0.025	-0.032708	0.025	-0.032708
G	0.081	-0.039612	0.081	-0.039612
H	0.056	-0.031556	0.056	-0.031556
I	0.13	-0.007326	0.13	-0.007326
J	0.304	0.044872	0.304	0.044872
K	0.112	0.068319	0.112	0.068319
P1	0.068	0.048514	0.068	0.048514
P2	0	0	0	0
P3	0.093	-0.034119	0.093	-0.034119
P4	0.043	-0.012439	0.043	-0.012439
P5	0.186	-0.063097	0.186	-0.063097
P7	0.006	-0.342121	0.006	-0.342121
CONSTANT	1	10.682639 *	1	10.682639 *
SAMPLE SIZE	161		161	
ADJUSTED R-SQUARED	0.78774		0.78774	
F STATISTIC	22.21		22.21	
SAMPLE SIZE	1115		1115	
ADJUSTED R-SQUARED	0.73616		0.73616	
F STATISTIC	108.18		108.18	

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	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF					
SDH	0.249	-0.214468 *	SDH	0.266	-0.195722 *	SDH	0.248	-0.170219 *	SDH	0.269	-0.193938 *
TH	0.315	-0.292183 *	TH	0.35	-0.237407 *	TH	0.319	-0.252995 *	TH	0.332	-0.252232 *
DB	0.05	-0.023419	DB	0.045	0.032529	DB	0.059	-0.01628	DB	0.043	0.019088
SDB	0.03	-0.164633 *	SDB	0.028	-0.188412 *	SDB	0.025	-0.159136 *	SDB	0.029	-0.16038 *
FB	0.107	-0.460029 *	FB	0.121	-0.322028 *	FB	0.132	-0.30466 *	FB	0.118	-0.321911 *
FC	0	0	FC	0.003	-0.237563	FC	0.004	-0.379406 *	FC	0.002	-0.328231 *
LH	0.119	0.048991	LH	0.134	0.00094686	LH	0.138	-0.002068	LH	0.127	-0.009939
SGAR	0.674	-0.089091 *	SGAR	0.668	-0.141943 *	SGAR	0.668	-0.142759 *	SGAR	0.676	-0.113265 *
SPACE	0.114	-0.155371 *	SPACE	0.134	-0.19858 *	SPACE	0.132	-0.18808 *	SPACE	0.125	-0.171421 *
NOPARK	0.155	-0.158312 *	NOPARK	0.17	-0.215666 *	NOPARK	0.159	-0.185461 *	NOPARK	0.16	-0.177002 *
AGE	8.386	-0.007056 *	AGE	8.29	-0.005017 *	AGE	8.166	-0.00765 *	AGE	8.374	-0.005775 *
NOCH	0.265	-0.114032 *	NOCH	0.234	-0.087461 *	NOCH	0.3	-0.056987 *	NOCH	0.255	-0.087681 *
CHP	0.148	-0.081435 *	CHP	0.155	-0.049115 *	CHP	0.121	-0.052141 *	CHP	0.144	-0.063024 *
SIZE	852.742	0.00035522 *	SIZE	812.137	0.00048234 *	SIZE	793.824	0.00056756 *	SIZE	820.517	0.00046442 *
BATH	1.062	0.134457 *	BATH	1.043	0.165924 *	BATH	1.029	0.138598 *	BATH	1.046	0.13725 *
A	0.032	-0.070427	A	0.054	-0.026244	A	0.046	-0.070893 *	A	0.047	-0.040003 *
C	0.167	-0.008438	C	0.172	-0.006645	C	0.189	-0.046559 *	C	0.179	-0.016287
D	0.002	-0.386779 *	D	0.004	-0.1187	D	0.004	-0.056111	D	0.004	-0.128489 *
E	0.121	-0.001511	E	0.084	0.016809	E	0.1	-0.044479	E	0.099	-0.002137
F	0.025	-0.09334	F	0.029	-0.086863 *	F	0.025	-0.10178 *	F	0.025	-0.084951 *
G	0.002	-0.114903	G	0.005	-0.029187	G	0.002	0.131999	G	0.003	0.002359
H	0	0	H	0	0	H	0	0	H	0	0
I	0.018	0.155121 *	I	0.018	0.09777 *	I	0.016	0.131905 *	I	0.019	0.08743 *
J	0.13	0.035494	J	0.105	0.05684 *	J	0.121	0.024322	J	0.116	0.054615 *
K	0.041	0.230627 *	K	0.054	0.138342 *	K	0.052	0.040266	K	0.049	0.129789 *
P1	0.014	0.264065 *	P1	0.004	0.061465	P1	0.011	0.219058 *	P1	0.008	0.202885 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0	0	P3	0.001	-0.415802 *	P3	0.002	0.621449 *	P3	0.001	0.054504
P4	0.041	-0.044457	P4	0.02	-0.091346	P4	0.025	0.001926	P4	0.026	-0.06248 *
P5	0.208	-0.021288	P5	0.229	-0.006853	P5	0.205	0.061646	P5	0.214	-0.010814
P7	0.676	0.030866	P7	0.707	0.038201	P7	0.714	0.11705 *	P7	0.703	0.032513
CONSTANT	1	10.405223 *	CONSTANT	1	10.269085 *	CONSTANT	1	10.213824 *	CONSTANT	1	10.317225 *

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
SDH	438	0.7736	57.51	560	0.77464	67.26	254	0.76614	31.7	2013	0.75827	218.63
TH												
DB												
SDB												
FB												
FC												
LH												
SGAR												
SPACE												
NOPARK												
AGE												
NOCH												
CHP												
SIZE												
BATH												
A												
C												
D												
E												
F												
G												
H												
I												
J												
K												
P1												
P2												
P3												
P4												
P5												
P7												
CONSTANT												

WALES

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	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF	WEIGHT COEFF
SDH	0.431	0.409	0.371	0.324	0.389	0.324	0.389
TH	0.153	0.191	0.198	0.176	0.182	0.176	0.182
DB	0.066	0.053	0.066	0.066	0.064	0.083	0.064
SDB	0.036	0.044	0.054	0.046	0.046	0.046	0.046
FB	0.022	0.049	0.042	0.042	0.033	0	0.033
FC	0	0	0	0	0	0	0
LH	0.226	0.218	0.234	0.241	0.228	0.241	0.228
SGAR	0.504	0.564	0.551	0.574	0.549	0.574	0.549
SPACE	0.263	0.182	0.21	0.157	0.203	0.157	0.203
NOPARK	0.168	0.222	0.18	0.213	0.198	0.213	0.198
AGE	8.832	8.978	9.222	9.87	9.162	9.87	9.162
NOCH	0.168	0.218	0.186	0.074	0.174	0.074	0.174
CHP	0.051	0.053	0.054	0.12	0.064	0.12	0.064
SIZE	877.693	863.121	887.805	957.648	888.753	957.648	888.753
BATH	1.007	1.022	1.018	1.019	1.017	1.019	1.017
A	0.08	0.036	0.018	0.028	0.039	0.028	0.039
C	0.139	0.173	0.186	0.167	0.168	0.167	0.168
D	0.029	0.04	0.042	0.037	0.038	0.037	0.038
E	0.109	0.133	0.108	0.176	0.129	0.176	0.129
F	0.066	0.036	0.03	0.019	0.038	0.019	0.038
G	0.007	0.013	0.006	0.009	0.009	0.009	0.009
H	0	0	0	0	0	0	0
I	0.036	0.053	0.018	0.019	0.035	0.019	0.035
J	0.168	0.164	0.18	0.167	0.17	0.167	0.17
K	0	0.018	0.024	0.028	0.017	0.028	0.017
P1	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0
P3	0.029	0.022	0.018	0.009	0.02	0.009	0.02
P4	0.219	0.218	0.228	0.13	0.206	0.13	0.206
P5	0.409	0.333	0.347	0.389	0.363	0.389	0.363
P7	0.226	0.249	0.222	0.231	0.234	0.231	0.234
CONSTANT	1	1	1	1	1	1	1
SAMPLE SIZE	137	225	167	108	637	108	637
ADJUSTED R-SQUARED	0.79673	0.73862	0.75669	0.69128	0.74932	0.69128	0.74932
F STATISTIC	21.5	24.44	20.12	10.22	71.41	10.22	71.41

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WEIGHT COEFF		WEIGHT COEFF		WEIGHT COEFF		WEIGHT COEFF		WEIGHT COEFF						
SDH	0.292	-0.140356 *	SDH	0.342	-0.133619 *	SDH	0.303	-0.119002 *	SDH	0.256	-0.12673 *	SDH	0.307	-0.127682 *
TH	0.183	-0.251268 *	TH	0.145	-0.169394 *	TH	0.139	-0.192306 *	TH	0.167	-0.197234 *	TH	0.155	-0.202981 *
DB	0.109	0.009931	DB	0.101	-0.043811	DB	0.104	0.037075	DB	0.141	0.009562	DB	0.11	0.003136
SDB	0.079	-0.158342 *	SDB	0.06	-0.111351 *	SDB	0.081	-0.109587 *	SDB	0.081	-0.114224 *	SDB	0.073	-0.120037 *
FB	0.202	-0.361108 *	FB	0.163	-0.233025 *	FB	0.173	-0.223056 *	FB	0.145	-0.244543 *	FB	0.172	-0.2638 *
FC	0.003	-0.463638 *	FC	0.002	-0.12386	FC	0.005	-0.380155 *	FC	0.004	0.117553	FC	0.003	-0.235416 *
LH	0	0	LH	0	0	LH	0.002	-0.40394 *	LH	0	0	LH	0.001	-0.35302 *
SGAR	0.508	-0.133084 *	SGAR	0.506	-0.077537 *	SGAR	0.45	-0.083615 *	SGAR	0.509	-0.218591 *	SGAR	0.492	-0.108874 *
SPACE	0.172	-0.19401 *	SPACE	0.216	-0.127705 *	SPACE	0.24	-0.141388 *	SPACE	0.231	-0.261678 *	SPACE	0.215	-0.16081 *
NOPARK	0.295	-0.211575 *	NOPARK	0.239	-0.162152 *	NOPARK	0.261	-0.19504 *	NOPARK	0.226	-0.294276 *	NOPARK	0.256	-0.1949 *
AGE	8.727	-0.007795 *	AGE	9.011	-0.004626 *	AGE	8.568	-0.005788 *	AGE	9.265	-0.006991 *	AGE	8.863	-0.005941 *
NOCH	0.18	-0.107974 *	NOCH	0.159	-0.102414 *	NOCH	0.171	-0.070557 *	NOCH	0.15	-0.094795 *	NOCH	0.166	-0.089165 *
CHP	0.085	-0.050797	CHP	0.085	-0.098853 *	CHP	0.076	-0.073971 *	CHP	0.098	-0.016275	CHP	0.084	-0.067605 *
SIZE	817.168	0.00041216 *	SIZE	845.151	0.00054410 *	SIZE	854.883	0.00050648 *	SIZE	860.897	0.00052562 *	SIZE	843.685	0.00049824 *
BATH	1.022	0.042191	BATH	1.046	-0.005204	BATH	1.042	0.116675 *	BATH	1.068	0.084287	BATH	1.043	0.066415 *
A	0.008	-0.125238	A	0.007	-0.039309	A	0.016	-0.038896	A	0.017	0.014706	A	0.011	-0.02317
C	0.046	-0.013886	C	0.027	-0.0597	C	0.046	-0.042365	C	0.047	-0.069994	C	0.039	-0.038323
D	0.014	0.096325	D	0.018	0.027859	D	0.014	-0.0809	D	0.03	-0.090852	D	0.018	-0.008505
E	0.148	0.008631	E	0.12	0.00185	E	0.125	-0.0481	E	0.175	-0.083172 *	E	0.136	-0.025877 *
F	0.03	-0.006258	F	0.028	0.002614	F	0.039	0.030588	F	0.021	-0.088303	F	0.031	-0.006575
G	0.044	0.051286	G	0.073	-0.053265 *	G	0.053	-0.036113	G	0.06	-0.090696 *	G	0.059	-0.034291 *
H	0	0	H	0.005	0.157296	H	0.005	0.204794	H	0	0	H	0.003	0.182189 *
I	0.014	0.235221 *	I	0.004	0.124099	I	0.002	0.316679	I	0.004	0.199318	I	0.006	0.195077 *
J	0.044	0.111716 *	J	0.044	0.163842 *	J	0.042	0.093958 *	J	0.06	-0.006657	J	0.046	0.101283 *
K	0.022	0.201142 *	K	0.011	0.043669	K	0.018	0.182512 *	K	0.013	0.12412	K	0.016	0.138986 *
P1	0.016	0.091382	P1	0.011	-0.019693	P1	0.014	0.08571	P1	0.013	0.066581	P1	0.013	0.04826
P2	0.858	-0.13177 *	P2	0.844	-0.133406 *	P2	0.894	-0.125109 *	P2	0.915	-0.047744	P2	0.871	-0.125804 *
P3	0	0	P3	0	0	P3	0.002	-0.59352 *	P3	0	0	P3	0.001	-0.553045 *
P4	0	0	P4	0.002	-0.305374	P4	0	0	P4	0	0	P4	0.001	-0.344857 *
P5	0.036	-0.136575 *	P5	0.041	-0.097062 *	P5	0.028	-0.042748	P5	0.017	-0.072872	P5	0.033	-0.091779 *
P7	0	0	P7	0	0	P7	0	0	P7	0	0	P7	0	0
CONSTANT	1	10.442139 *	CONSTANT	1	10.311137 *	CONSTANT	1	10.220324 *	CONSTANT	1	10.340719 *	CONSTANT	1	10.307948 *
SAMPLE SIZE	366		SAMPLE SIZE	565		SAMPLE SIZE	433		SAMPLE SIZE	234		SAMPLE SIZE	1598	
ADJUSTED R-SQUARED	0.74332		ADJUSTED R-SQUARED	0.80313		ADJUSTED R-SQUARED	0.77709		ADJUSTED R-SQUARED	0.82661		ADJUSTED R-SQUARED	0.782	
F STATISTIC	41.65		F STATISTIC	83.17		F STATISTIC	52.93		F STATISTIC	43.72		F STATISTIC	191.96	

NORTHERN IRELAND

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NORTHERN IRELAND

NORTHERN IRELAND

	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF
SDH	0.336	-0.217685 *	SDH	0.306	-0.286762 *	SDH	0.308	-0.244601 *	SDH	0.216	0.037652	SDH	0.301	-0.229515 *
TH	0.129	-0.450797 *	TH	0.088	-0.550647 *	TH	0.097	-0.328609 *	TH	0.095	0.038302	TH	0.1	-0.384672 *
DB	0.241	0.001752	DB	0.315	-0.086106 *	DB	0.276	-0.040869	DB	0.243	0.257082 *	DB	0.279	-0.028041
SDB	0.19	-0.224987 *	SDB	0.162	-0.254582 *	SDB	0.157	-0.178808 *	SDB	0.311	0.025365	SDB	0.184	-0.198549 *
FB	0.034	-0.024201	FB	0.019	-0.148557	FB	0.027	0.020737	FB	0.041	0.285976	FB	0.027	-0.0322312
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.733	0.106592 *	LH	0.745	0.081341 *	LH	0.773	-0.011442	LH	0.689	0.112723 *	LH	0.745	0.064197 *
SGAR	0.448	-0.098122	SGAR	0.509	-0.089605	SGAR	0.573	-0.122906	SGAR	0.432	0.141917	SGAR	0.508	-0.091702 *
SPACE	0.31	-0.207489 *	SPACE	0.315	-0.17602 *	SPACE	0.249	-0.234791 *	SPACE	0.297	0.04751	SPACE	0.291	-0.201474 *
NOPARK	0.216	-0.230627 *	NOPARK	0.134	-0.106594	NOPARK	0.124	-0.182504 *	NOPARK	0.243	-0.075001	NOPARK	0.161	-0.196882 *
AGE	8.216	-0.004822	AGE	8.269	-0.004883	AGE	7.649	-0.007242 *	AGE	8.284	-0.007546	AGE	8.066	-0.007329 *
NOCH	0.052	-0.049298	NOCH	0.102	0.03987	NOCH	0.07	0.007844	NOCH	0.068	-0.046046	NOCH	0.078	0.02404
CHP	0.181	-0.047892	CHP	0.208	0.028021	CHP	0.195	-0.061949 *	CHP	0.216	0.024974	CHP	0.2	-0.016213
SIZE	962.814	0.00056385 *	SIZE	993.22	0.00054835 *	SIZE	1024.89	0.00054776 *	SIZE	959.648	0.00079189 *	SIZE	992.963	0.00057191 *
BATH	1.026	-0.005203	BATH	1.028	0.026916	BATH	1.032	-0.017871	BATH	1.014	0.352932	BATH	1.027	0.020631 *
CONSTANT	1	9.930662 *	CONSTANT	1	9.987633 *	CONSTANT	1	10.129889 *	CONSTANT	1	8.948598 *	CONSTANT	1	9.966201 *

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
SDH	116	0.76417	27.62
TH	183	0.74798	46.58
DB	172	0.78913	50.18
SDB	80	0.73404	15.39
FB	591	0.75212	128.87

TABLE E4: OLDER (PRE-1971) HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

**OLDER HOUSES (PRE-1971)
NORTH
INDEX NUMBERS 1986**

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	107.562	102.654	105.683
Q2	100.000	104.534	101.142	106.250
Q3	100.000	105.595	102.589	106.218
Q4	100.000	105.039	102.143	105.481
1986	100.000	105.654	102.129	106.001

**YORKSHIRE & HUMBERSIDE
INDEX NUMBERS 1986**

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	103.626	104.146	106.205
Q2	100.000	104.008	104.995	107.454
Q3	100.000	104.473	104.801	106.748
Q4	100.000	104.332	104.691	106.226
1986	100.000	104.145	104.720	106.857

**NORTH WEST
INDEX NUMBERS 1986**

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	102.034	104.814	104.863
Q2	100.000	102.026	104.512	104.250
Q3	100.000	102.098	104.878	104.175
Q4	100.000	102.044	104.657	104.992
1986	100.000	102.036	104.672	104.364

**EAST MIDLANDS
INDEX NUMBERS 1986**

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	102.566	104.525	107.659
Q2	100.000	103.136	105.066	108.213
Q3	100.000	102.297	104.250	107.603
Q4	100.000	101.556	103.605	107.293
1986	100.000	102.516	104.452	107.640

**WEST MIDLANDS
INDEX NUMBERS 1986**

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	102.452	104.529	107.302
Q2	100.000	102.089	104.380	106.736
Q3	100.000	102.049	105.794	106.528
Q4	100.000	102.324	104.358	108.259
1986	100.000	102.182	104.348	106.846

EAST ANGLIA
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	106.278	110.158	114.336
Q2	100.000	107.405	110.717	116.194
Q3	100.000	106.448	110.237	115.031
Q4	100.000	106.613	109.806	113.351
1986	100.000	106.737	110.169	115.090

OUTER SOUTH EAST
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	103.782	108.451	114.345
Q2	100.000	103.752	108.608	114.500
Q3	100.000	103.675	108.527	114.352
Q4	100.000	103.634	108.556	114.383
1986	100.000	103.696	108.547	114.361

OUTER METROPOLITAN
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	101.142	106.795	113.044
Q2	100.000	104.346	110.257	116.701
Q3	100.000	104.548	110.431	117.064
Q4	100.000	104.552	110.445	119.490
1986	100.000	104.442	110.307	116.860

GREATER LONDON
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	107.268	115.293	122.778
Q2	100.000	102.168	112.661	120.055
Q3	100.000	104.831	112.719	119.931
Q4	100.000	104.877	112.639	125.362
1986	100.000	104.857	112.685	120.016

SOUTH WEST
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	104.518	109.293	112.285
Q2	100.000	104.128	108.929	112.642
Q3	100.000	104.117	108.543	112.136
Q4	100.000	104.271	108.625	112.299
1986	100.000	104.152	108.805	112.285

WALES
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	104.721	105.080	108.829
Q2	100.000	104.250	105.064	110.437
Q3	100.000	105.206	104.568	110.244
Q4	100.000	105.472	105.157	109.682
1986	100.000	104.789	104.957	109.880

SCOTLAND
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	102.358	104.023	103.041
Q2	100.000	102.434	103.869	103.219
Q3	100.000	102.273	104.031	103.130
Q4	100.000	102.638	104.082	103.108
1986	100.000	102.393	103.969	103.188

NORTHERN IRELAND
INDEX NUMBERS 1986

ALTERNATIVE
WEIGHTS

	Q1	Q2	Q3	Q4
Q1	100.000	99.681	101.327	97.669
Q2	100.000	100.316	102.082	98.806
Q3	100.000	99.874	102.039	98.390
Q4	100.000	100.628	102.644	98.958
1986	100.000	100.127	101.996	98.459

Q1 1986 OLDER HOUSES			Q2 1986 OLDER HOUSES			Q3 1986 OLDER HOUSES			Q4 1986 OLDER HOUSES			Q4 1986 OLDER HOUSES			Q4 1986 OLDER HOUSES		
NORTHERN			NORTHERN			NORTHERN			NORTHERN			NORTHERN			NORTHERN		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.387	-0.318660 *	SDH	0.307	-0.153875 *	SDH	0.31	-0.306220 *	SDH	0.281	-0.328455 *	SDH	0.323	-0.280424 *	SDH	0.323	-0.280424 *
TH	0.47	-0.495946 *	TH	0.486	-0.390343 *	TH	0.445	-0.551289 *	TH	0.509	-0.511607 *	TH	0.473	-0.499240 *	TH	0.473	-0.499240 *
DB	0.034	0.077582	DB	0.046	0.042559	DB	0.036	-0.127777	DB	0.035	0.465149 *	DB	0.038	-0.013782	DB	0.038	-0.013782
SDB	0.045	-0.312224 *	SDB	0.037	-0.094495	SDB	0.054	-0.130808	SDB	0.041	-0.155252	SDB	0.045	-0.185322 *	SDB	0.045	-0.185322 *
FB	0.03	-0.718351 *	FB	0.04	-0.609872 *	FB	0.048	-0.534964 *	FB	0.047	-0.403178 *	FB	0.041	-0.590107 *	FB	0.041	-0.590107 *
FC	0.008	-0.267152	FC	0.006	-0.396985 *	FC	0.018	-0.399718 *	FC	0.018	-0.624046 *	FC	0.012	-0.412707 *	FC	0.012	-0.412707 *
LH	0.117	0.040771	LH	0.161	0.042419	LH	0.149	-0.048158	LH	0.123	-0.053816	LH	0.141	-0.003031	LH	0.141	-0.003031
SGAR	0.455	-0.143314	SGAR	0.428	-0.043452	SGAR	0.433	-0.280990 *	SGAR	0.421	-0.207979	SGAR	0.435	-0.133921 *	SGAR	0.435	-0.133921 *
SPACE	0.12	-0.250237 *	SPACE	0.17	-0.081207	SPACE	0.113	-0.445597 *	SPACE	0.135	-0.185285	SPACE	0.136	-0.230826 *	SPACE	0.136	-0.230826 *
NOPARK	0.387	-0.282912 *	NOPARK	0.388	-0.146491	NOPARK	0.433	-0.456078 *	NOPARK	0.415	-0.318083 *	NOPARK	0.405	-0.282494 *	NOPARK	0.405	-0.282494 *
AGE	63.763	-0.001545 *	AGE	63.67	-0.001083 *	AGE	66.504	0.000326	AGE	66.368	0.000501	AGE	64.952	-0.000179	AGE	64.952	-0.000179
NOCH	0.259	-0.163335 *	NOCH	0.247	-0.097820 *	NOCH	0.251	-0.139586 *	NOCH	0.281	-0.226250 *	NOCH	0.256	-0.155292 *	NOCH	0.256	-0.155292 *
CHP	0.177	-0.026550	CHP	0.098	-0.038973	CHP	0.113	-0.089905 *	CHP	0.105	-0.119044	CHP	0.122	-0.083561 *	CHP	0.122	-0.083561 *
SIZE	1073.80	0.000412 *	SIZE	984.36	0.000570 *	SIZE	1033.28	0.000422 *	SIZE	998.382	0.000597 *	SIZE	1022.37	0.000442 *	SIZE	1022.37	0.000442 *
BATH	1.019	-0.075928	BATH	1.014	0.003543	BATH	1.021	-0.054886	BATH	1.012	-0.696111 *	BATH	1.017	-0.065929	BATH	1.017	-0.065929
A	0.015	-0.216214	A	0.014	0.124365	A	0.021	-0.023649	A	0.018	0.167699	A	0.017	-0.060600	A	0.017	-0.060600
C	0.278	-0.025255	C	0.307	-0.133922 *	C	0.301	-0.035136	C	0.24	-0.146730 *	C	0.288	-0.086871 *	C	0.288	-0.086871 *
D	0.071	-0.104947	D	0.103	-0.188931 *	D	0.096	-0.197232 *	D	0.105	-0.229857 *	D	0.094	-0.180897 *	D	0.094	-0.180897 *
E	0.071	-0.123314	E	0.098	-0.235355 *	E	0.072	-0.135073 *	E	0.058	-0.087984	E	0.078	-0.155565 *	E	0.078	-0.155565 *
F	0.09	-0.156183 *	F	0.069	-0.190829 *	F	0.072	-0.093503	F	0.094	-0.199010 *	F	0.079	-0.162598 *	F	0.079	-0.162598 *
G	0.023	-0.264848 *	G	0.017	-0.222014 *	G	0.015	-0.036843	G	0.029	-0.417980 *	G	0.02	-0.223659 *	G	0.02	-0.223659 *
H	0.008	-0.576591 *	H	0	0	H	0	0	H	0	0	H	0.002	-0.631778 *	H	0.002	-0.631778 *
I	0.041	-0.025518	I	0.034	0.086995	I	0.03	0.073583	I	0.041	0.116712	I	0.036	0.065866	I	0.036	0.065866
J	0.211	0.114849 *	J	0.144	0.034866	J	0.179	0.059532	J	0.216	0.109913	J	0.181	0.069571 *	J	0.181	0.069571 *
K	0.03	0.069604	K	0.023	0.224132 *	K	0.033	0.041706	K	0.035	0.166816	K	0.029	0.095456 *	K	0.029	0.095456 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0.003	-0.035682	P2	0.006	0.558395	P2	0.002	0.224877	P2	0.002	0.224877
P3	0.173	-0.220483	P3	0.187	-0.144010	P3	0.17	-0.199637 *	P3	0.205	0.123370	P3	0.181	-0.140074 *	P3	0.181	-0.140074 *
P4	0.579	-0.262456 *	P4	0.58	-0.154215	P4	0.57	-0.203639 *	P4	0.561	0.090200	P4	0.574	-0.151294 *	P4	0.574	-0.151294 *
P5	0.132	-0.339064 *	P5	0.144	-0.199191	P5	0.152	-0.241338 *	P5	0.105	0.100334	P5	0.138	-0.193773 *	P5	0.138	-0.193773 *
P7	0.083	0.120073	P7	0.069	0.179708	P7	0.078	-0.005227	P7	0.076	-0.092991	P7	0.076	0.069939	P7	0.076	0.069939
CONSTANT	1	10.685191 *	CONSTANT	1	10.165253 *	CONSTANT	1	10.704149 *	CONSTANT	1	10.831444 *	CONSTANT	1	10.506899 *	CONSTANT	1	10.506899 *
SAMPLE SIZE	266		SAMPLE SIZE	348		SAMPLE SIZE	335		SAMPLE SIZE	171		SAMPLE SIZE	1120		SAMPLE SIZE	1120	
ADJUSTED R-SQUARED	0.71455		ADJUSTED R-SQUARED	0.71478		ADJUSTED R-SQUARED	0.75563		ADJUSTED R-SQUARED	0.73947		ADJUSTED R-SQUARED	0.72667		ADJUSTED R-SQUARED	0.72667	
F STATISTIC	23.87		F STATISTIC	37.75		F STATISTIC	36.61		F STATISTIC	17.64		F STATISTIC	100.17		F STATISTIC	100.17	

YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.296	-0.261924 *	SDH	0.359	-0.297621 *	SDH	0.342	-0.287760 *	SDH	0.375	-0.183570 *	SDH	0.343	-0.268523 *	
TH	0.539	-0.435490 *	TH	0.497	-0.509982 *	TH	0.515	-0.483070 *	TH	0.491	-0.447807 *	TH	0.51	-0.479975 *	
DB	0.047	0.008835	DB	0.028	0.033399	DB	0.022	0.010247	DB	0.024	0.061722	DB	0.029	0.029465	
SDB	0.031	-0.087823	SDB	0.029	-0.197017 *	SDB	0.023	-0.169024 *	SDB	0.024	-0.038300	SDB	0.027	-0.147236 *	
FB	0	0	FB	0.005	-0.177096	FB	0.01	-0.489703 *	FB	0.011	-0.459354 *	FB	0.006	-0.403845 *	
FC	0	0	FC	0.005	-0.486603 *	FC	0.001	-0.127353	FC	0	0	FC	0.002	-0.327235 *	
LH	0.116	0.058265	LH	0.079	0.056601	LH	0.094	0.020407	LH	0.115	-0.024188	LH	0.097	0.029489	
SGAR	0.375	-0.138150 *	SGAR	0.396	-0.067583	SGAR	0.365	-0.002657	SGAR	0.399	-0.075492	SGAR	0.383	-0.065374 *	
SPACE	0.114	-0.274807 *	SPACE	0.145	-0.197279 *	SPACE	0.105	-0.079997	SPACE	0.099	-0.121336	SPACE	0.119	-0.174169 *	
NOPARK	0.482	-0.277591 *	NOPARK	0.429	-0.236204 *	NOPARK	0.506	-0.186113 *	NOPARK	0.469	-0.218206 *	NOPARK	0.47	-0.228499 *	
AGE	63.884	0.000014	AGE	65.382	0.001195 *	AGE	68.261	0.000746 *	AGE	67.791	0.000875 *	AGE	66.332	0.000824 *	
NOCH	0.427	-0.110454 *	NOCH	0.399	-0.123185 *	NOCH	0.441	-0.145746 *	NOCH	0.383	-0.148056 *	NOCH	0.415	-0.128125 *	
CHP	0.071	-0.060988	CHP	0.071	-0.117902 *	CHP	0.088	-0.056483	CHP	0.086	-0.109151 *	CHP	0.078	-0.082859 *	
SIZE	929.034	0.000530 *	SIZE	941.802	0.000449 *	SIZE	910.824	0.000397 *	SIZE	905.913	0.000478 *	SIZE	924.176	0.000450 *	
BATH	1.018	0.079274	BATH	1.014	-0.076764	BATH	1.012	0.080751	BATH	1.021	-0.073232	BATH	1.015	0.011351	
A	0.024	0.095679	A	0.01	0.087160	A	0.012	-0.013580	A	0.019	-0.214569 *	A	0.014	-0.016048	
C	0.322	-0.049242	C	0.339	-0.015299	C	0.312	-0.021742	C	0.282	-0.039893	C	0.318	-0.030662 *	
D	0.112	-0.121932 *	D	0.065	-0.109034 *	D	0.077	-0.166833 *	D	0.075	-0.065199	D	0.08	-0.125840 *	
E	0.055	-0.114591 *	E	0.062	-0.052317	E	0.065	-0.116799 *	E	0.029	-0.083629	E	0.057	-0.099691 *	
F	0.051	-0.173319 *	F	0.074	-0.143177 *	F	0.081	-0.137393 *	F	0.078	-0.145938 *	F	0.072	-0.147904 *	
G	0.024	-0.324250 *	G	0.036	-0.171073 *	G	0.031	-0.216619 *	G	0.021	-0.195076 *	G	0.03	-0.219936 *	
H	0.055	-0.297944 *	H	0.05	-0.246546 *	H	0.059	-0.211506 *	H	0.062	-0.201297 *	H	0.056	-0.240797 *	
I	0.018	-0.003446	I	0.022	0.019913	I	0.035	0.049403	I	0.027	-0.129250	I	0.026	-0.002490	
J	0.155	0.047545	J	0.149	0.103958 *	J	0.151	0.096431 *	J	0.196	0.053819	J	0.158	0.079765 *	
K	0.031	0.039204	K	0.029	0.061339	K	0.023	0.106023	K	0.056	0.060506	K	0.032	0.061376 *	
P1	0	0	P1	0	0	P1	0.001	1.142222 *	P1	0	0	P1	0	1.056011 *	
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	
P3	0.153	-0.155241 *	P3	0.146	-0.171600 *	P3	0.208	-0.126115 *	P3	0.193	-0.102938 *	P3	0.174	-0.146106 *	
P4	0.475	-0.197368 *	P4	0.496	-0.262891 *	P4	0.448	-0.178604 *	P4	0.424	-0.182672 *	P4	0.466	-0.214302 *	
P5	0.122	-0.166995 *	P5	0.126	-0.125680 *	P5	0.116	-0.075913 *	P5	0.086	-0.079811	P5	0.116	-0.111740 *	
P7	0.165	-0.129690 *	P7	0.128	-0.169604 *	P7	0.135	-0.096155 *	P7	0.153	-0.073341	P7	0.142	-0.125454 *	
CONSTANT	1	10.167875 *	CONSTANT	1	10.371136 *	CONSTANT	1	10.170493 *	CONSTANT	1	10.267668 *	CONSTANT	1	10.251506 *	

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
510	0.76369	61.92	833	0.75593	89.86	775	0.75214	79.29	373	0.72880	36.70	2491	0.75059	250.78

NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.398	-0.330604 *	SDH	0.355	-0.310363 *	SDH	0.347	-0.289740 *	SDH	0.402	-0.309464 *	SDH	0.369	-0.308220 *
TH	0.419	-0.551921 *	TH	0.474	-0.521400 *	TH	0.487	-0.468733 *	TH	0.413	-0.579263 *	TH	0.457	-0.521088 *
DB	0.041	0.016335	DB	0.028	-0.072702 *	DB	0.032	0.076763	DB	0.043	-0.059845	DB	0.034	-0.006828
SDB	0.046	-0.323956 *	SDB	0.034	-0.240536 *	SDB	0.033	-0.238005 *	SDB	0.031	-0.232664 *	SDB	0.036	-0.261710 *
FB	0.011	-0.577760 *	FB	0.011	-0.409039 *	FB	0.011	-0.454758 *	FB	0.013	-0.336431 *	FB	0.011	-0.443797 *
FC	0.004	-0.498648 *	FC	0.006	-0.361864 *	FC	0.004	-0.493213 *	FC	0.004	-0.754926 *	FC	0.005	-0.462967 *
LH	0.395	-0.009028	LH	0.392	-0.018967	LH	0.397	-0.017335	LH	0.382	-0.007729	LH	0.393	-0.015865 *
SGAR	0.356	-0.130723 *	SGAR	0.36	-0.108618 *	SGAR	0.354	-0.099768 *	SGAR	0.407	-0.207011 *	SGAR	0.365	-0.120650 *
SPACE	0.132	-0.200160 *	SPACE	0.118	-0.196048 *	SPACE	0.1	-0.206114 *	SPACE	0.115	-0.325825 *	SPACE	0.115	-0.215949 *
NOPARK	0.478	-0.302956 *	NOPARK	0.503	-0.270695 *	NOPARK	0.518	-0.259744 *	NOPARK	0.464	-0.373647 *	NOPARK	0.496	-0.287298 *
AGE	62.798	0.000623 *	AGE	64.909	0.000212	AGE	66.229	0.000188	AGE	63.595	0.000417	AGE	64.65	0.000346 *
NOCH	0.357	-0.150479 *	NOCH	0.351	-0.154325 *	NOCH	-0.339	-0.145060 *	NOCH	0.359	-0.145432 *	NOCH	0.35	-0.150697 *
CHP	0.051	-0.060102	CHP	0.056	-0.044410	CHP	0.049	-0.071143 *	CHP	0.05	-0.053080	CHP	0.052	-0.056070 *
SIZE	971.328	0.000403 *	SIZE	950.029	0.000416 *	SIZE	973.274	0.000457 *	SIZE	971.926	0.000392 *	SIZE	964.443	0.000419 *
BATH	1.015	0.171211 *	BATH	1.019	0.102175 *	BATH	1.02	0.079679	BATH	1.034	-0.001582	BATH	1.021	0.073847 *
A	0.01	0.270251 *	A	0.005	0.222631 *	A	0.01	0.162522 *	A	0.006	0.075970	A	0.008	0.199754 *
C	0.259	-0.046391 *	C	0.27	-0.057122 *	C	0.267	-0.070723 *	C	0.249	-0.090551 *	C	0.264	-0.061330 *
D	0.107	-0.201082 *	D	0.13	-0.139188 *	D	0.13	-0.169073 *	D	0.151	-0.126790 *	D	0.128	-0.153528 *
E	0.047	-0.098659 *	E	0.043	-0.046255	E	0.045	-0.003964	E	0.031	-0.138097 *	E	0.043	-0.053669 *
F	0.049	-0.118411 *	F	0.063	-0.104733 *	F	0.056	-0.109464 *	F	0.059	-0.069394	F	0.057	-0.099922 *
G	0.022	-0.021006	G	0.025	-0.093009 *	G	0.026	-0.177032 *	G	0.024	-0.233237 *	G	0.025	-0.123633 *
H	0.023	-0.241376 *	H	0.022	-0.320211 *	H	0.011	-0.372397 *	H	0.013	-0.312369 *	H	0.018	-0.310916 *
I	0.039	0.005931	I	0.04	0.015682	I	0.049	-0.033166	I	0.041	-0.171593 *	I	0.043	-0.022393
J	0.218	0.054572 *	J	0.19	0.096749 *	J	0.204	0.075171 *	J	0.198	0.061677 *	J	0.201	0.076841 *
K	0.03	0.036235	K	0.02	0.071415	K	0.034	0.075657 *	K	0.041	-0.000735	K	0.029	0.060543 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.196	-0.139725 *	P3	0.204	-0.185564 *	P3	0.188	-0.203244 *	P3	0.173	-0.188630 *	P3	0.193	-0.183015 *
P4	0.196	-0.123753 *	P4	0.243	-0.174568 *	P4	0.237	-0.198897 *	P4	0.235	-0.192114 *	P4	0.231	-0.170969 *
P5	0.26	-0.088016 *	P5	0.238	-0.109818 *	P5	0.252	-0.105087 *	P5	0.232	-0.080408 *	P5	0.246	-0.098469 *
P7	0.126	-0.060504 *	P7	0.097	-0.113395 *	P7	0.119	-0.114873 *	P7	0.126	-0.048701	P7	0.114	-0.091866 *
CONSTANT	1	10.237824 *	CONSTANT	1	10.316426 *	CONSTANT	1	10.304611 *	CONSTANT	1	10.597417 *	CONSTANT	1	10.355329 *
SAMPLE SIZE	922		SAMPLE SIZE	1573		SAMPLE SIZE	1276		SAMPLE SIZE	676		SAMPLE SIZE	4447	
ADJUSTED R-SQUARED	0.79254		ADJUSTED R-SQUARED	0.80484		ADJUSTED R-SQUARED	0.79795		ADJUSTED R-SQUARED	0.77672		ADJUSTED R-SQUARED	0.79315	
F STATISTIC	122.33		F STATISTIC	224.55		F STATISTIC	174.63		F STATISTIC	81.97		F STATISTIC	588.86	

W1 1700 ULDER NUUSES	W2 1700 ULDER NUUSES	W3 1700 ULDER NUUSES	W4 1700 ULDER NUUSES	W5 1700 ULDER NUUSES
EAST MIDLANDS				
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT
SDH	0.41	-0.208466 *	0.37	-0.245631 *
TH	0.358	-0.390427 *	0.345	-0.431785 *
DB	0.058	0.122057 *	0.049	0.019356
SDB	0.02	-0.082349	0.022	-0.055220
FB	0.003	-0.555618 *	0.007	-0.522404 *
FC	0.001	-0.092438	0.002	-0.249951
LH	0.012	0.190350	0.019	-0.014021
SGAR	0.402	-0.130749 *	0.42	-0.092995 *
SPACE	0.127	-0.257001 *	0.114	-0.220603 *
NOPARK	0.434	-0.339862 *	0.44	-0.245926 *
AGE	61.873	0.001268 *	59.83	0.000986 *
NOCH	0.224	-0.148576 *	0.233	-0.149845 *
CHP	0.088	-0.097310 *	0.095	-0.075068 *
SIZE	986.321	0.000487 *	961.305	0.000449 *
BATH	1.032	-0.015765	1.026	0.110518 *
A	0.03	-0.092315	0.027	0.110456 *
C	0.338	-0.067210 *	0.329	-0.054650 *
D	0.077	-0.206902 *	0.084	-0.128526 *
E	0.085	-0.063584	0.082	-0.064619 *
F	0.053	-0.067856	0.041	-0.084950 *
G	0.009	-0.216305 *	0.008	-0.084273
H	0.032	-0.161427 *	0.041	-0.067124
I	0.029	-0.095923	0.033	0.009055
J	0.139	0.106139 *	0.147	0.124877 *
K	0.017	-0.077863	0.016	0.033213
P1	0	0	0	0
P2	0	0	0	0
P3	0.13	-0.288518 *	0.116	-0.174077 *
P4	0.322	-0.351647 *	0.262	-0.256781 *
P5	0.4	-0.203702 *	0.415	-0.081423 *
P7	0.121	-0.329035 *	0.178	-0.213926 *
CONSTANT	1	10.403882 *	1	10.193992 *
SAMPLE SIZE	692	1092	792	1092
ADJUSTED R-SQUARED	0.73657	0.75701	0.72875	0.75701
F STATISTIC	67.62	118.2	76.9	118.2

W1 1700 ULDER NUUSES	W2 1700 ULDER NUUSES	W3 1700 ULDER NUUSES	W4 1700 ULDER NUUSES	W5 1700 ULDER NUUSES
EAST MIDLANDS				
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT
SDH	0.346	-0.248857 *	0.346	-0.248857 *
TH	0.328	-0.435473 *	0.328	-0.435473 *
DB	0.076	0.032312	0.076	0.032312
SDB	0.02	-0.102143	0.02	-0.102143
FB	0.007	-0.281503	0.007	-0.281503
FC	0.002	0.607462 *	0.002	0.607462 *
LH	0.027	-0.182870 *	0.027	-0.182870 *
SGAR	0.433	-0.085939	0.433	-0.085939
SPACE	0.103	-0.226841 *	0.103	-0.226841 *
NOPARK	0.417	-0.237499 *	0.417	-0.237499 *
AGE	62.036	0.000633	62.036	0.000633
NOCH	0.208	-0.175385 *	0.208	-0.175385 *
CHP	0.096	-0.118767 *	0.096	-0.118767 *
SIZE	1017.62	0.000411 *	1017.62	0.000411 *
BATH	1.027	0.220298 *	1.027	0.220298 *
A	0.018	-0.150148	0.018	-0.150148
C	0.362	-0.034080	0.362	-0.034080
D	0.047	-0.123526 *	0.047	-0.123526 *
E	0.049	-0.144123 *	0.049	-0.144123 *
F	0.047	-0.049229	0.047	-0.049229
G	0.002	-0.412551	0.002	-0.412551
H	0.04	-0.104640	0.04	-0.104640
I	0.029	0.052703	0.029	0.052703
J	0.172	0.076361 *	0.172	0.076361 *
K	0.025	0.137348	0.025	0.137348
P1	0	0	0	0
P2	0	0	0	0
P3	0.125	-0.139736 *	0.125	-0.139736 *
P4	0.301	-0.211352 *	0.301	-0.211352 *
P5	0.377	0.012814	0.377	0.012814
P7	0.145	-0.215588 *	0.145	-0.215588 *
CONSTANT	1	10.153126 *	1	10.153126 *
SAMPLE SIZE	448	448	448	448
ADJUSTED R-SQUARED	0.74108	0.74108	0.74108	0.74108
F STATISTIC	45.12	45.12	45.12	45.12

W1 1700 ULDER NUUSES	W2 1700 ULDER NUUSES	W3 1700 ULDER NUUSES	W4 1700 ULDER NUUSES	W5 1700 ULDER NUUSES
EAST MIDLANDS				
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT
SDH	0.379	-0.227863 *	0.379	-0.227863 *
TH	0.343	-0.407681 *	0.343	-0.407681 *
DB	0.061	0.040300 *	0.061	0.040300 *
SDB	0.019	-0.056632	0.019	-0.056632
FB	0.006	-0.487654 *	0.006	-0.487654 *
FC	0.001	-0.012354	0.001	-0.012354
LH	0.018	0.005587	0.018	0.005587
SGAR	0.422	-0.136663 *	0.422	-0.136663 *
SPACE	0.112	-0.269033 *	0.112	-0.269033 *
NOPARK	0.433	-0.313863 *	0.433	-0.313863 *
AGE	60.634	0.000985 *	60.634	0.000985 *
NOCH	0.219	-0.138428 *	0.219	-0.138428 *
CHP	0.096	-0.084731 *	0.096	-0.084731 *
SIZE	980.633	0.000456 *	980.633	0.000456 *
BATH	1.026	0.077484 *	1.026	0.077484 *
A	0.024	0.010450	0.024	0.010450
C	0.345	-0.055761 *	0.345	-0.055761 *
D	0.072	-0.164356 *	0.072	-0.164356 *
E	0.075	-0.080900 *	0.075	-0.080900 *
F	0.05	-0.069922 *	0.05	-0.069922 *
G	0.008	-0.125381 *	0.008	-0.125381 *
H	0.037	-0.085096 *	0.037	-0.085096 *
I	0.031	0.014758	0.031	0.014758
J	0.146	0.109486 *	0.146	0.109486 *
K	0.016	0.022866	0.016	0.022866
P1	0	0	0	0
P2	0	0	0	0
P3	0.123	-0.178237 *	0.123	-0.178237 *
P4	0.289	-0.263730 *	0.289	-0.263730 *
P5	0.4	-0.077468 *	0.4	-0.077468 *
P7	0.155	-0.226707 *	0.155	-0.226707 *
CONSTANT	1	10.274498 *	1	10.274498 *
SAMPLE SIZE	3024	3024	3024	3024
ADJUSTED R-SQUARED	0.73802	0.73802	0.73802	0.73802
F STATISTIC	294.65	294.65	294.65	294.65

WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS		
WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	
SDH	0.4	-0.251056 *	SDH	0.428	-0.250807 *	SDH	0.406	-0.235328 *	SDH	0.433	-0.351892 *	SDH	0.417	-0.262529 *
TH	0.346	-0.437100 *	TH	0.36	-0.412083 *	TH	0.345	-0.432339 *	TH	0.306	-0.531726 *	TH	0.345	-0.443145 *
DB	0.034	0.139072 *	DB	0.031	0.109915 *	DB	0.031	0.139217 *	DB	0.033	-0.141638 *	DB	0.031	0.080157 *
SDB	0.012	-0.126153	SDB	0.007	-0.180653 *	SDB	0.009	-0.169641 *	SDB	0.014	-0.333808 *	SDB	0.01	-0.180841 *
FB	0.048	-0.464681 *	FB	0.032	-0.414501 *	FB	0.04	-0.486447 *	FB	0.05	-0.601326 *	FB	0.04	-0.473313 *
FC	0.006	-0.271636 *	FC	0.008	-0.432816 *	FC	0.008	-0.460590 *	FC	0.005	-0.559957 *	FC	0.007	-0.432967 *
LH	0.145	0.038490	LH	0.141	0.029393	LH	0.128	0.027371	LH	0.164	0.001772	LH	0.141	0.025052 *
SGAR	0.521	-0.056680	SGAR	0.497	-0.115566 *	SGAR	0.508	-0.099944 *	SGAR	0.5	-0.099990	SGAR	0.506	-0.094923 *
SPACE	0.092	-0.160475 *	SPACE	0.089	-0.213448 *	SPACE	0.09	-0.176426 *	SPACE	0.09	-0.208438 *	SPACE	0.09	-0.187856 *
NOPARK	0.346	-0.192677 *	NOPARK	0.376	-0.268577 *	NOPARK	0.373	-0.255385 *	NOPARK	0.363	-0.234820 *	NOPARK	0.367	-0.242844 *
AGE	53.668	0.000833 *	AGE	56.354	0.000508 *	AGE	57.401	0.000778 *	AGE	54.183	-0.000616	AGE	55.776	0.000546 *
NOCH	0.323	-0.143625 *	NOCH	0.326	-0.099987 *	NOCH	0.34	-0.130841 *	NOCH	0.292	-0.123718 *	NOCH	0.324	-0.120784 *
CHP	0.102	-0.077426 *	CHP	0.097	-0.048482 *	CHP	0.093	-0.055273 *	CHP	0.095	-0.080515 *	CHP	0.097	-0.063374 *
SIZE	953.23	0.000485 *	SIZE	948.813	0.000527 *	SIZE	971.293	0.000443 *	SIZE	982.495	0.000384 *	SIZE	961.196	0.000472 *
BATH	1.03	-0.007430	BATH	1.018	0.040915	BATH	1.024	0.111926 *	BATH	1.031	0.060609	BATH	1.024	0.052092 *
A	0.017	0.038750	A	0.022	-0.013686	A	0.018	0.039400	A	0.017	0.117260	A	0.019	0.030161
C	0.226	0.015734	C	0.237	-0.046603 *	C	0.255	-0.005888	C	0.249	-0.002320	C	0.242	-0.014181
D	0.071	-0.110100 *	D	0.07	-0.195075 *	D	0.068	-0.150662 *	D	0.047	-0.219234 *	D	0.066	-0.169821 *
E	0.059	-0.021828	E	0.079	-0.059144 *	E	0.069	-0.020287	E	0.069	-0.076811	E	0.071	-0.041245 *
F	0.059	-0.041893	F	0.052	-0.142213 *	F	0.055	-0.065635 *	F	0.05	-0.029278	F	0.054	-0.083073 *
G	0.014	-0.058461	G	0.018	-0.183120 *	G	0.029	-0.127928 *	G	0.022	-0.125710	G	0.021	-0.132948 *
H	0.079	-0.172142 *	H	0.069	-0.226370 *	H	0.064	-0.239763 *	H	0.064	-0.195568 *	H	0.069	-0.214846 *
I	0.019	0.019688	I	0.036	0.001550	I	0.035	-0.000136	I	0.036	0.033164	I	0.033	0.013844
J	0.206	0.160091 *	J	0.192	0.082043 *	J	0.19	0.099397 *	J	0.202	0.125609 *	J	0.196	0.110215 *
K	0.022	0.035948	K	0.02	0.082122	K	0.022	0.090050	K	0.017	0.182223 *	K	0.021	0.091047 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.185	-0.109046 *	P3	0.192	-0.123135 *	P3	0.188	-0.116963 *	P3	0.199	-0.089305 *	P3	0.191	-0.112627 *
P4	0.174	-0.188137 *	P4	0.189	-0.209400 *	P4	0.182	-0.214073 *	P4	0.182	-0.167204 *	P4	0.183	-0.199558 *
P5	0.374	-0.076651 *	P5	0.381	-0.077154 *	P5	0.368	-0.047212 *	P5	0.375	-0.033910	P5	0.375	-0.061252 *
P7	0.141	0.000301	P7	0.124	0.013279	P7	0.12	0.028199	P7	0.123	0.045000	P7	0.126	0.017342
CONSTANT	1	10.141247 *	CONSTANT	1	10.185723 *	CONSTANT	1	10.159601 *	CONSTANT	1	10.440135 *	CONSTANT	1	10.205376 *
SAMPLE SIZE	775		SAMPLE SIZE	1377		SAMPLE SIZE	1081		SAMPLE SIZE	578		SAMPLE SIZE	3811	
ADJUSTED R-SQUARED	0.77104		ADJUSTED R-SQUARED	0.76378		ADJUSTED R-SQUARED	0.77334		ADJUSTED R-SQUARED	0.74952		ADJUSTED R-SQUARED	0.76401	
F STATISTIC	90.88		F STATISTIC	154.41		F STATISTIC	128.07		F STATISTIC	60.54		F STATISTIC	426.35	

Q1 1986 OLDER HOUSES			Q2 1986 OLDER HOUSES			Q3 1986 OLDER HOUSES			Q4 1986 OLDER HOUSES			EAST ANGLIA			EAST ANGLIA		
EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.275	-0.294966 *	SDH	0.301	-0.201411 *	SDH	0.298	-0.232760 *	SDH	0.259	-0.276473 *	SDH	0.289	-0.242932 *	SDH	0.259	-0.276473 *
TH	0.351	-0.408797 *	TH	0.377	-0.300270 *	TH	0.395	-0.327418 *	TH	0.393	-0.391965 *	TH	0.38	-0.348760 *	TH	0.393	-0.391965 *
DB	0.096	-0.064021	DB	0.083	0.019229	DB	0.099	-0.097686 *	DB	0.098	-0.002746	DB	0.093	-0.032928	DB	0.098	-0.002746
SDB	0.073	-0.214488 *	SDB	0.04	-0.192241 *	SDB	0.027	-0.197635 *	SDB	0.031	-0.274798 *	SDB	0.041	-0.217664 *	SDB	0.031	-0.274798 *
FB	0.013	-0.513417 *	FB	0.022	-0.277934 *	FB	0.017	-0.675505 *	FB	0.027	-0.514236 *	FB	0.019	-0.417539 *	FB	0.027	-0.514236 *
FC	0.013	-0.556608 *	FC	0.015	-0.337510 *	FC	0.012	-0.839670 *	FC	0	0	FC	0.012	-0.504539 *	FC	0	0
LH	0.04	0.007144	LH	0.05	0.017988	LH	0.033	0.233131	LH	0.04	0.024288	LH	0.041	0.033885	LH	0.04	0.024288
SGAR	0.493	-0.040189	SGAR	0.43	-0.142425 *	SGAR	0.397	-0.085712	SGAR	0.366	-0.040199	SGAR	0.423	-0.095936 *	SGAR	0.366	-0.040199
SPACE	0.156	-0.078748	SPACE	0.127	-0.255861 *	SPACE	0.155	-0.143191 *	SPACE	0.174	-0.097478	SPACE	0.148	-0.164861 *	SPACE	0.174	-0.097478
NOPARK	0.308	-0.130465	NOPARK	0.415	-0.217416 *	NOPARK	0.397	-0.189496 *	NOPARK	0.415	-0.065870	NOPARK	0.389	-0.166680 *	NOPARK	0.415	-0.065870
AGE	63.801	0.000587	AGE	67.336	0.000612 *	AGE	72.804	0.000520 *	AGE	72.946	0.000668 *	AGE	69.161	0.000648 *	AGE	72.946	0.000668 *
NOCH	0.285	-0.203435 *	NOCH	0.272	-0.139899 *	NOCH	0.304	-0.141782 *	NOCH	0.277	-0.108655 *	NOCH	0.285	-0.150742 *	NOCH	0.277	-0.108655 *
CHP	0.129	-0.103637 *	CHP	0.119	-0.048915	CHP	0.097	-0.023977	CHP	0.112	-0.031734	CHP	0.113	-0.050751 *	CHP	0.112	-0.031734
SIZE	974.143	0.000379 *	SIZE	965.945	0.000417 *	SIZE	982.846	0.000468 *	SIZE	953.395	0.000332 *	SIZE	970.993	0.000408 *	SIZE	953.395	0.000332 *
BATH	1.036	0.069694	BATH	1.028	0.059042	BATH	1.037	-0.014344	BATH	1.022	0.189982 *	BATH	1.032	0.058149 *	BATH	1.022	0.189982 *
A	0.086	0.004619	A	0.051	-0.005943	A	0.048	-0.056606	A	0.071	-0.105421	A	0.06	-0.053114	A	0.071	-0.105421
C	0.341	-0.054349	C	0.347	-0.127041 *	C	0.343	-0.040764	C	0.317	-0.098858 *	C	0.34	-0.092207 *	C	0.317	-0.098858 *
D	0.089	-0.136237 *	D	0.11	-0.182202 *	D	0.103	-0.147079 *	D	0.085	-0.104346	D	0.1	-0.159994 *	D	0.085	-0.104346
E	0.046	0.013522	E	0.077	-0.156453 *	E	0.054	-0.002058	E	0.058	-0.150060 *	E	0.061	-0.084706 *	E	0.058	-0.150060 *
F	0.01	0.031201	F	0.018	-0.150650 *	F	0.025	-0.096246	F	0.018	-0.126301	F	0.019	-0.105950 *	F	0.018	-0.126301
G	0.007	0.040625	G	0.002	-0.720989 *	G	0.008	-0.353017 *	G	0	0	G	0.005	-0.353999 *	G	0	0
H	0.003	-0.635690 *	H	0.013	-0.448752 *	H	0.006	-0.530814 *	H	0	0	H	0.007	-0.463980 *	H	0	0
I	0.03	0.168524 *	I	0.044	-0.077988	I	0.062	0.064787	I	0.054	-0.053007	I	0.048	0.010644	I	0.054	-0.053007
J	0.185	0.076255	J	0.136	-0.034174	J	0.155	0.074725 *	J	0.138	0.059108	J	0.152	0.019667	J	0.138	0.059108
K	0.056	0.007428	K	0.039	-0.083492	K	0.05	-0.032046	K	0.058	-0.092282	K	0.048	-0.059994 *	K	0.058	-0.092282
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0	0	P3	0.002	0.197876	P3	0.002	-0.045152	P3	0	0	P3	0.001	0.133855	P3	0	0
P4	0.238	-0.447611 *	P4	0.235	-0.439698 *	P4	0.25	-0.509501 *	P4	0.25	-0.611269 *	P4	0.243	-0.491377 *	P4	0.25	-0.611269 *
P5	0.159	-0.428836 *	P5	0.176	-0.371158 *	P5	0.159	-0.410352 *	P5	0.143	-0.393901 *	P5	0.163	-0.404099 *	P5	0.143	-0.393901 *
P7	0.57	-0.452434 *	P7	0.551	-0.500234 *	P7	0.554	-0.529770 *	P7	0.567	-0.584746 *	P7	0.558	-0.513506 *	P7	0.567	-0.584746 *
CONSTANT	1	10.768043 *	CONSTANT	1	10.894509 *	CONSTANT	1	10.912742 *	CONSTANT	1	10.897813 *	CONSTANT	1	10.893047 *	CONSTANT	1	10.897813 *
SAMPLE SIZE	302		SAMPLE SIZE	544		SAMPLE SIZE	484		SAMPLE SIZE	224		SAMPLE SIZE	1554		SAMPLE SIZE	224	
ADJUSTED R-SQUARED	0.76554		ADJUSTED R-SQUARED	0.7018		ADJUSTED R-SQUARED	0.73346		ADJUSTED R-SQUARED	0.66477		ADJUSTED R-SQUARED	0.70830		ADJUSTED R-SQUARED	0.66477	
F STATISTIC	32.1		F STATISTIC	45.07		F STATISTIC	46.83		F STATISTIC	18.69		F STATISTIC	131.03		F STATISTIC	18.69	

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.288	-0.218709 *
TH	0.375	-0.333078 *
DB	0.072	-0.028989
SDB	0.024	-0.116591 *
FB	0.061	-0.301810 *
FC	0.06	-0.351996 *
LH	0.133	-0.117332 *
SGAR	0.431	-0.157119 *
SPACE	0.095	-0.229022 *
NOPARK	0.439	-0.254210 *
AGE	60.558	0.000784 *
NOCH	0.292	-0.112704 *
CHP	0.114	-0.052686 *
SIZE	938.085	0.000402 *
BATH	1.022	0.050251 *
A	0.013	0.058539
C	0.279	-0.088855 *
D	0.046	-0.149713 *
E	0.083	-0.028485
F	0.022	-0.097437 *
G	0.004	0.039596
H	0.007	-0.245499 *
I	0.058	-0.014496
J	0.178	0.047625 *
K	0.108	-0.022102
P1	0.003	0.317253 *
P2	0	0
P3	0.002	0.132553
P4	0.016	-0.187887 *
P5	0.434	-0.053551 *
P7	0.315	-0.101808 *
CONSTANT	1	10.653916 *

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.278	-0.229193 *
TH	0.351	-0.330461 *
DB	0.077	-0.000997
SDB	0.035	-0.172570 *
FB	0.048	-0.279414 *
FC	0.071	-0.339019 *
LH	0.13	-0.129477 *
SGAR	0.421	-0.111773 *
SPACE	0.105	-0.175080 *
NOPARK	0.448	-0.232619 *
AGE	61.877	0.000792 *
NOCH	0.272	-0.129077 *
CHP	0.129	-0.040616 *
SIZE	964.124	0.000383 *
BATH	1.029	0.041644
A	0.019	0.039422
C	0.292	-0.064475 *
D	0.037	-0.122906 *
E	0.071	-0.054815 *
F	0.022	-0.126425 *
G	0.009	-0.081983
H	0.011	-0.050257
I	0.065	-0.048093 *
J	0.189	0.051863 *
K	0.129	0.018468
P1	0.001	0.814688 *
P2	0	0
P3	0.004	0.169300 *
P4	0.024	-0.186799 *
P5	0.408	-0.052646 *
P7	0.325	-0.119420 *
CONSTANT	1	10.681224 *

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.278	-0.266118 *
TH	0.344	-0.405856 *
DB	0.075	-0.046246 *
SDB	0.038	-0.255767 *
FB	0.044	-0.405394 *
FC	0.079	-0.427446 *
LH	0.136	-0.116341 *
SGAR	0.421	-0.013013
SPACE	0.113	-0.082909 *
NOPARK	0.442	-0.144237 *
AGE	65.512	0.000909 *
NOCH	0.266	-0.111352 *
CHP	0.104	-0.047226 *
SIZE	966.102	0.000307 *
BATH	1.036	0.089998 *
A	0.019	0.138756 *
C	0.27	-0.065454 *
D	0.046	-0.128577 *
E	0.068	-0.072809 *
F	0.024	-0.131031 *
G	0.005	-0.152048 *
H	0.006	0.027818
I	0.069	-0.050727 *
J	0.19	0.047009 *
K	0.141	0.002203
P1	0.001	0.363764
P2	0	0
P3	0.001	0.183992
P4	0.038	-0.206979 *
P5	0.376	-0.054557 *
P7	0.322	-0.111927 *
CONSTANT	1	10.704988 *

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.27	-0.256033 *
TH	0.348	-0.341351 *
DB	0.073	-0.019063
SDB	0.04	-0.213730 *
FB	0.041	-0.324200 *
FC	0.08	-0.396851 *
LH	0.132	-0.117537 *
SGAR	0.44	-0.056836
SPACE	0.098	-0.172231 *
NOPARK	0.438	-0.208622 *
AGE	62.568	0.000796 *
NOCH	0.26	-0.100727 *
CHP	0.11	-0.049507 *
SIZE	969.785	0.000358 *
BATH	1.046	0.084535 *
A	0.017	0.258902 *
C	0.273	-0.073572 *
D	0.051	-0.198917 *
E	0.077	-0.050872
F	0.024	-0.090973 *
G	0.006	-0.120351
H	0.009	-0.073432
I	0.062	-0.000844
J	0.193	0.066615 *
K	0.12	-0.001233
P1	0.001	0.739093 *
P2	0	0
P3	0.002	0.434541 *
P4	0.041	-0.188911 *
P5	0.389	-0.071309 *
P7	0.333	-0.086730 *
CONSTANT	1	10.731669 *

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.279	-0.247431 *
TH	0.354	-0.358643 *
DB	0.075	-0.025474 *
SDB	0.034	-0.191033 *
FB	0.049	-0.336359 *
FC	0.072	-0.374602 *
LH	0.133	-0.121652 *
SGAR	0.426	-0.079935 *
SPACE	0.104	-0.152097 *
NOPARK	0.443	-0.202720 *
AGE	62.741	0.000818 *
NOCH	0.273	-0.119312 *
CHP	0.116	-0.048515 *
SIZE	959.771	0.000363 *
BATH	1.032	0.069323 *
A	0.017	0.105703 *
C	0.28	-0.070906 *
D	0.044	-0.136905 *
E	0.074	-0.050898 *
F	0.023	-0.110732 *
G	0.006	-0.090091 *
H	0.008	-0.060449 *
I	0.064	-0.035392 *
J	0.187	0.052919 *
K	0.127	0.005239
P1	0.001	0.472308 *
P2	0	0
P3	0.002	0.185981 *
P4	0.029	-0.186512 *
P5	0.402	-0.059061 *
P7	0.323	-0.109334 *
CONSTANT	1	10.682189 *

SAMPLE SIZE	1420
ADJUSTED R-SQUARED	0.72299
F STATISTIC	124.45

SAMPLE SIZE	2181
ADJUSTED R-SQUARED	0.73189
F STATISTIC	199.36

SAMPLE SIZE	1857
ADJUSTED R-SQUARED	0.70427
F STATISTIC	148.34

SAMPLE SIZE	953
ADJUSTED R-SQUARED	0.73021
F STATISTIC	86.89

SAMPLE SIZE	6411
ADJUSTED R-SQUARED	0.71066
F STATISTIC	525.81

OUTER METROPOLITAN

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	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF
SDH	0.304	-0.263763 *	SDH	0.328	-0.245470 *	SDH	0.356	-0.238069 *	SDH	0.362	-0.238513 *	SDH	0.334	-0.242573 *
TH	0.331	-0.369796 *	TH	0.339	-0.367141 *	TH	0.305	-0.352181 *	TH	0.3	-0.361068 *	TH	0.303	-0.362953 *
DB	0.042	-0.030384	DB	0.035	-0.016345	DB	0.047	0.007026	DB	0.053	-0.000639	DB	0.042	-0.003301
SDB	0.025	-0.240250 *	SDB	0.027	-0.212945 *	SDB	0.028	-0.224820 *	SDB	0.026	-0.227101 *	SDB	0.027	-0.220265 *
FB	0.096	-0.463566 *	FB	0.079	-0.398808 *	FB	0.06	-0.426490 *	FB	0.067	-0.408464 *	FB	0.077	-0.417978 *
FC	0.062	-0.510492 *	FC	0.051	-0.470455 *	FC	0.054	-0.475207 *	FC	0.044	-0.421302 *	FC	0.053	-0.466233 *
LH	0.167	0.032042	LH	0.141	-0.002349	LH	0.117	0.013466	LH	0.116	-0.015351	LH	0.137	-0.000770
SGAR	0.455	-0.125258 *	SGAR	0.465	-0.059463 *	SGAR	0.476	-0.067173 *	SGAR	0.474	-0.118638 *	SGAR	0.467	-0.082333 *
SPACE	0.076	-0.179168 *	SPACE	0.073	-0.126311 *	SPACE	0.085	-0.135740 *	SPACE	0.101	-0.142337 *	SPACE	0.08	-0.133430 *
NOPARK	0.429	-0.205163 *	NOPARK	0.429	-0.148852 *	NOPARK	0.403	-0.153025 *	NOPARK	0.388	-0.183456 *	NOPARK	0.417	-0.164015 *
AGE	53.664	0.000481 *	AGE	53.386	0.000686 *	AGE	52.488	0.000596 *	AGE	52.249	0.000238	AGE	53.065	0.000538 *
NOCH	0.201	-0.098556 *	NOCH	0.192	-0.092366 *	NOCH	-0.193	-0.094017 *	NOCH	0.15	-0.094097 *	NOCH	0.189	-0.096890 *
CHP	0.107	-0.045331 *	CHP	0.104	-0.047591 *	CHP	0.091	-0.036345 *	CHP	0.11	-0.029315	CHP	0.102	-0.041864 *
SIZE	912.775	0.000407 *	SIZE	924.731	0.000444 *	SIZE	943.773	0.000433 *	SIZE	953.915	0.000470 *	SIZE	930.829	0.000441 *
BATH	1.027	0.058436 *	BATH	1.026	0.061299 *	BATH	1.042	0.085558 *	BATH	1.03	0.025726	BATH	1.031	0.064301 *
A	0.004	0.073020	A	0.006	0.108609 *	A	0.003	0.144554 *	A	0.002	-0.014750	A	0.004	0.092934 *
C	0.199	-0.022864	C	0.18	-0.025114 *	C	0.19	-0.026551 *	C	0.197	-0.049574 *	C	0.189	-0.027899 *
D	0.045	-0.110936 *	D	0.04	-0.119776 *	D	0.04	-0.106058 *	D	0.038	-0.103468 *	D	0.041	-0.112012 *
E	0.111	-0.030342 *	E	0.12	-0.025964 *	E	0.108	-0.016820	E	0.104	-0.061236 *	E	0.113	-0.031632 *
F	0.019	-0.085072 *	F	0.012	-0.053151	F	0.015	-0.098751 *	F	0.018	-0.143662 *	F	0.015	-0.090586 *
G	0.007	-0.222384 *	G	0.006	-0.077286	G	0.006	-0.110082 *	G	0.004	-0.127606	G	0.006	-0.133058 *
H	0.044	-0.06772 *	H	0.045	-0.105296 *	H	0.037	-0.114380 *	H	0.028	-0.170279 *	H	0.041	-0.110317 *
I	0.042	0.014538	I	0.049	-0.050576 *	I	0.045	-0.022001	I	0.039	-0.011784	I	0.045	-0.024659 *
J	0.245	0.083495 *	J	0.242	0.071804 *	J	0.258	0.081948 *	J	0.258	0.064084 *	J	0.249	0.076909 *
K	0.042	0.001018	K	0.034	0.008417	K	0.04	0.036874	K	0.045	0.038579	K	0.039	0.021790 *
P1	0.001	0.153485	P1	0.001	0.196095 *	P1	0.002	0.388531 *	P1	0.001	0.358089 *	P1	0.001	0.273168 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.076	-0.145933 *	P3	0.064	-0.144642 *	P3	0.068	-0.170016 *	P3	0.066	-0.168306 *	P3	0.068	-0.154279 *
P4	0.008	-0.297134 *	P4	0.009	-0.194823 *	P4	0.014	-0.255185 *	P4	0.008	-0.273232 *	P4	0.01	-0.240515 *
P5	0.5	-0.146332 *	P5	0.505	-0.151766 *	P5	0.503	-0.161694 *	P5	0.486	-0.171942 *	P5	0.501	-0.156356 *
P7	0.048	-0.317593 *	P7	0.056	-0.328180 *	P7	0.057	-0.341651 *	P7	0.056	-0.337931 *	P7	0.055	-0.328546 *
CONSTANT	1	10.885342 *	CONSTANT	1	10.818335 *	CONSTANT	1	10.862862 *	CONSTANT	1	11.028320 *	CONSTANT	1	10.863934 *

	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
	2060	0.80518	284.66	3350	0.78118	399.52	2286	0.79028	288.01	1214	0.79228	155.22	1214	0.79228	155.22

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.199	-0.215385 *	0.223	-0.210699 *	0.228	-0.212887 *	0.248	-0.181877 *	0.222	-0.208652 *
TH	0.317	-0.316105 *	0.324	-0.311443 *	0.328	-0.291899 *	0.347	-0.258015 *	0.327	-0.300313 *
DB	0.009	-0.056995	0.007	-0.047077	0.012	0.022024	0.013	0.006164	0.01	-0.015394
SDB	0.006	-0.162686 *	0.008	-0.154360 *	0.009	-0.208952 *	0.012	-0.094413	0.008	-0.148844 *
FB	0.216	-0.353512 *	0.19	-0.383458 *	0.168	-0.359293 *	0.15	-0.386948 *	0.185	-0.370900 *
FC	0.219	-0.397395 *	0.209	-0.422445 *	0.212	-0.355293 *	0.184	-0.388306 *	0.208	-0.388134 *
LH	0.445	-0.064213 *	0.404	-0.013603	0.382	-0.030492	0.338	0.008408	0.399	-0.035094 *
SGAR	0.242	-0.009982	0.258	-0.021042	0.263	-0.034720	0.294	-0.019236	0.261	-0.027158
SPACE	0.043	-0.050914	0.046	-0.097387 *	0.059	-0.117163 *	0.061	-0.075263	0.051	-0.088329 *
NOPARK	0.702	-0.095564 *	0.683	-0.115386 *	0.662	-0.125394 *	0.628	-0.088119 *	0.675	-0.116132 *
AGE	69.088	0.000900 *	67.707	0.000451 *	67.786	0.000146	66.132	-0.000054	67.826	0.000362 *
NOCH	0.274	-0.110797 *	0.262	-0.114893 *	0.258	-0.099425 *	0.23	-0.107894 *	0.259	-0.110926 *
CHP	0.054	-0.080348 *	0.06	-0.065088 *	0.06	-0.020883	0.057	-0.071663 *	0.058	-0.057269 *
SIZE	854.259	0.000481 *	871.679	0.000501 *	883.912	0.000526 *	898.384	0.000534 *	874.514	0.000508 *
BATH	1.019	0.115716 *	1.018	0.104582 *	1.02	0.160282 *	1.022	0.104195 *	1.02	0.125349 *
A	0	0	0	-0.281632	0	-0.182926	0	0	0	-0.224578
C	0.067	-0.021445	0.072	-0.025192	0.068	-0.052401 *	0.084	-0.024933	0.072	-0.025408 *
D	0.047	-0.056961 *	0.041	-0.076011 *	0.042	-0.066944 *	0.045	-0.065322 *	0.043	-0.065393 *
E	0.044	-0.023753	0.043	-0.009129	0.041	-0.065651 *	0.049	-0.054615 *	0.043	-0.032857 *
F	0.033	-0.042116	0.032	-0.091578 *	0.031	-0.062606 *	0.036	-0.042576	0.033	-0.063235 *
G	0.026	-0.028576	0.02	-0.063576 *	0.023	-0.063478 *	0.022	-0.062687	0.022	-0.051244 *
H	0.214	-0.036842 *	0.232	-0.054306 *	0.227	-0.053638 *	0.216	-0.052004 *	0.224	-0.048324 *
I	0.188	0.106658 *	0.182	0.072136 *	0.162	0.071654 *	0.145	0.076844 *	0.173	0.077970 *
J	0.225	0.065525 *	0.221	0.047796 *	0.238	0.054210 *	0.255	0.042810 *	0.231	0.053795 *
K	0.072	0.074477 *	0.063	0.076081 *	0.074	0.075650 *	0.053	0.074352 *	0.066	0.076573 *
P1	0.219	0.103789 *	0.204	0.127990 *	0.191	0.127207 *	0.174	0.160380 *	0.2	0.124191 *
P2	0	0	0	0	0	0	0	0	0	0
P3	0.163	-0.080712 *	0.161	-0.080674 *	0.18	-0.073428 *	0.155	-0.100026 *	0.165	-0.080916 *
P4	0.045	-0.055269 *	0.046	-0.058914 *	0.042	-0.033079	0.051	-0.023800	0.045	-0.048768 *
P5	0.106	-0.058892 *	0.087	-0.054567 *	0.083	-0.036324 *	0.107	-0.053176 *	0.093	-0.054823 *
P7	0	-0.725961 *	0	-0.417934 *	0	0.014171	0	0	0	-0.436963 *
CONSTANT	1	10.631691 *	1	10.721503 *	1	10.720532 *	1	10.796008 *	1	10.717551 *

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SAMPLE SIZE	2568		4087		2798		1563		11016	
ADJUSTED R-SQUARED	0.68316		0.7131		0.69374		0.70148		0.68349	
F STATISTIC	191.86		339.54		212.19		132.09		793.87	

SOUTH WEST

	WEIGHT	COEFF
SDH	0.27	-0.207086 *
TH	0.362	-0.316853 *
DB	0.086	-0.002249
SDB	0.02	-0.170139 *
FB	0.022	-0.218978 *
FC	0.078	-0.306041 *
LH	0.109	-0.043845
SGAR	0.442	-0.046978
SPACE	0.143	-0.096956 *
NOPARK	0.391	-0.144505 *
AGE	69.123	0.000256
NOCH	0.345	-0.119257 *
CHP	0.144	-0.057829 *
SIZE	983.516	0.000418 *
BATH	1.031	0.134102 *
A	0.044	0.007520
C	0.365	-0.051781 *
D	0.021	-0.230190 *
E	0.065	-0.038781
F	0.024	-0.073629
G	0.006	-0.064294
H	0.005	-0.236260 *
I	0.066	-0.019787
J	0.183	0.067051 *
K	0.101	0.058175 *
P1	0.031	0.107173 *
P2	0	0
P3	0.001	-0.611384 *
P4	0.089	-0.195776 *
P5	0.136	-0.051285
P7	0.687	-0.040571
CONSTANT	1	10.296782 *

SOUTH WEST

	WEIGHT	COEFF
SDH	0.286	-0.242136 *
TH	0.349	-0.356644 *
DB	0.085	-0.029872
SDB	0.024	-0.175679 *
FB	0.034	-0.348919 *
FC	0.078	-0.418865 *
LH	0.127	0.007096
SGAR	0.434	-0.094061 *
SPACE	0.126	-0.185996 *
NOPARK	0.415	-0.211505 *
AGE	68.31	0.000813 *
NOCH	0.294	-0.094686 *
CHP	0.147	-0.067071 *
SIZE	980.01	0.000337 *
BATH	1.049	0.073787 *
A	0.041	0.008627
C	0.361	-0.059219 *
D	0.036	-0.134821 *
E	0.049	-0.086747 *
F	0.028	-0.066756 *
G	0.007	-0.116779 *
H	0.007	-0.320714 *
I	0.073	-0.038984
J	0.158	0.067815 *
K	0.105	0.072094 *
P1	0.03	0.038736
P2	0	0
P3	0.003	-0.261016 *
P4	0.101	-0.161132 *
P5	0.147	-0.081046 *
P7	0.659	-0.030658
CONSTANT	1	10.525922 *

SOUTH WEST

	WEIGHT	COEFF
SDH	0.261	-0.195256 *
TH	0.374	-0.331201 *
DB	0.08	0.033565
SDB	0.02	-0.200469 *
FB	0.036	-0.282700 *
FC	0.074	-0.354171 *
LH	0.128	-0.028135
SGAR	0.417	-0.044600
SPACE	0.129	-0.109298 *
NOPARK	0.429	-0.149428 *
AGE	70.381	0.000216
NOCH	0.323	-0.124487 *
CHP	0.113	-0.065905 *
SIZE	982.826	0.000337 *
BATH	1.032	0.121262 *
A	0.03	0.057588
C	0.365	-0.020780
D	0.035	-0.164284 *
E	0.065	-0.048422
F	0.025	-0.152666 *
G	0.003	-0.033216
H	0.01	-0.256877 *
I	0.075	0.065221 *
J	0.17	0.057149 *
K	0.095	0.048770 *
P1	0.022	0.151446 *
P2	0	0
P3	0.001	-0.854409 *
P4	0.085	-0.157250 *
P5	0.178	-0.054421 *
P7	0.639	0.009527
CONSTANT	1	10.432804 *

SOUTH WEST

	WEIGHT	COEFF
SDH	0.279	-0.169215 *
TH	0.359	-0.344229 *
DB	0.103	0.009675
SDB	0.03	-0.104379 *
FB	0.022	-0.350423 *
FC	0.068	-0.388620 *
LH	0.098	0.034292
SGAR	0.494	-0.025879
SPACE	0.095	-0.056837
NOPARK	0.382	-0.107530 *
AGE	66.083	0.000096
NOCH	0.316	-0.163668 *
CHP	0.105	-0.059603 *
SIZE	998.668	0.000371 *
BATH	1.029	0.173710 *
A	0.042	0.019902
C	0.35	-0.017148
D	0.039	-0.171103 *
E	0.064	-0.016586
F	0.029	-0.005154
G	0.005	-0.192795
H	0.005	-0.201568
I	0.047	0.042842
J	0.171	0.078895 *
K	0.11	0.095497 *
P1	0.02	0.047047
P2	0	0
P3	0.003	0.051305
P4	0.073	-0.159112 *
P5	0.183	-0.025567
P7	0.675	-0.011419
CONSTANT	1	10.357087 *

SOUTH WEST

	WEIGHT	COEFF
SDH	0.275	-0.169215 *
TH	0.359	-0.344229 *
DB	0.103	0.009675
SDB	0.03	-0.104379 *
FB	0.022	-0.350423 *
FC	0.068	-0.388620 *
LH	0.098	0.034292
SGAR	0.494	-0.025879
SPACE	0.095	-0.056837
NOPARK	0.382	-0.107530 *
AGE	66.083	0.000096
NOCH	0.316	-0.163668 *
CHP	0.105	-0.059603 *
SIZE	998.668	0.000371 *
BATH	1.029	0.173710 *
A	0.042	0.019902
C	0.35	-0.017148
D	0.039	-0.171103 *
E	0.064	-0.016586
F	0.029	-0.005154
G	0.005	-0.192795
H	0.005	-0.201568
I	0.047	0.042842
J	0.171	0.078895 *
K	0.11	0.095497 *
P1	0.02	0.047047
P2	0	0
P3	0.003	0.051305
P4	0.073	-0.159112 *
P5	0.183	-0.025567
P7	0.675	-0.011419
CONSTANT	1	10.357087 *

SOUTH WEST

	WEIGHT	COEFF
SDH	0.275	-0.211068 *
TH	0.36	-0.338192 *
DB	0.086	-0.000261
SDB	0.023	-0.160244 *
FB	0.031	-0.297384 *
FC	0.075	-0.368273 *
LH	0.119	-0.012296
SGAR	0.44	-0.067588 *
SPACE	0.126	-0.139276 *
NOPARK	0.409	-0.170872 *
AGE	68.735	0.000410 *
NOCH	0.316	-0.122344 *
CHP	0.131	-0.070222 *
SIZE	984.25	0.000362 *
BATH	1.037	0.111948 *
A	0.039	0.016672
C	0.362	-0.041256 *
D	0.033	-0.154668 *
E	0.059	-0.051948 *
F	0.026	-0.081471 *
G	0.005	-0.116424 *
H	0.007	-0.269643 *
I	0.068	0.007270
J	0.169	0.063359 *
K	0.102	0.064605 *
P1	0.027	0.072156 *
P2	0	0
P3	0.002	-0.283605 *
P4	0.09	-0.172309 *
P5	0.158	-0.057556 *
P7	0.662	-0.020247
CONSTANT	1	10.437504 *

SAMPLE SIZE	862
ADJUSTED R-SQUARED	0.75528
F STATISTIC	80.72

SAMPLE SIZE	1480
ADJUSTED R-SQUARED	0.73377
F STATISTIC	136.88

SAMPLE SIZE	1132
ADJUSTED R-SQUARED	0.71695
F STATISTIC	94.49

SAMPLE SIZE	591
ADJUSTED R-SQUARED	0.70972
F STATISTIC	49.09

SAMPLE SIZE	4065
ADJUSTED R-SQUARED	0.71313
F STATISTIC	337.75

WALES			WALES			WALES			WALES			WALES			WALES			WALES		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.29	-0.201730 *	SDH	0.279	-0.166290 *	SDH	0.305	-0.284778 *	SDH	0.348	-0.016294	SDH	0.348	-0.016294	SDH	0.348	-0.016294	SDH	0.348	-0.016294
TH	0.485	-0.329449 *	TH	0.502	-0.349746 *	TH	0.5	-0.410234 *	TH	0.439	-0.161399 *	TH	0.439	-0.161399 *	TH	0.439	-0.161399 *	TH	0.439	-0.161399 *
DB	0.054	-0.022096	DB	0.052	0.005301	DB	0.066	-0.053878	DB	0.037	0.236625 *	DB	0.037	0.236625 *	DB	0.037	0.236625 *	DB	0.037	0.236625 *
SDB	0.019	-0.181628 *	SDB	0.033	-0.205344 *	SDB	0.018	-0.181298 *	SDB	0.02	0.286926 *	SDB	0.02	0.286926 *	SDB	0.02	0.286926 *	SDB	0.02	0.286926 *
FB	0.017	-0.437077 *	FB	0.016	-0.465681 *	FB	0.011	-0.387150 *	FB	0.012	-0.069741	FB	0.012	-0.069741	FB	0.012	-0.069741	FB	0.012	-0.069741
FC	0.004	-0.402676 *	FC	0.006	-0.319738 *	FC	0.009	-0.475696 *	FC	0.004	0.380730	FC	0.004	0.380730	FC	0.004	0.380730	FC	0.004	0.380730
LH	0.15	0.026293	LH	0.132	0.053944	LH	0.105	0.005874	LH	0.098	-0.063753	LH	0.098	-0.063753	LH	0.098	-0.063753	LH	0.098	-0.063753
SGAR	0.33	-0.054432	SGAR	0.335	-0.038177	SGAR	0.289	-0.153742 *	SGAR	0.344	-0.052648	SGAR	0.344	-0.052648	SGAR	0.344	-0.052648	SGAR	0.344	-0.052648
SPACE	0.161	-0.150330	SPACE	0.21	-0.146481 *	SPACE	0.188	-0.272037 *	SPACE	0.156	-0.225323 *	SPACE	0.156	-0.225323 *	SPACE	0.156	-0.225323 *	SPACE	0.156	-0.225323 *
NOPARK	0.496	-0.164940	NOPARK	0.437	-0.126504	NOPARK	0.502	-0.288908 *	NOPARK	0.463	-0.263249 *	NOPARK	0.463	-0.263249 *	NOPARK	0.463	-0.263249 *	NOPARK	0.463	-0.263249 *
AGE	65.712	-0.001000 *	AGE	64.411	0.000178	AGE	66.734	-0.000653	AGE	67.07	-0.000817	AGE	67.07	-0.000817	AGE	67.07	-0.000817	AGE	67.07	-0.000817
NOCH	0.307	-0.108401 *	NOCH	0.265	-0.169055 *	NOCH	0.314	-0.123870 *	NOCH	0.287	-0.175724 *	NOCH	0.287	-0.175724 *	NOCH	0.287	-0.175724 *	NOCH	0.287	-0.175724 *
CHP	0.073	0.013266	CHP	0.067	-0.060540	CHP	0.074	-0.019520	CHP	0.09	-0.208158 *	CHP	0.09	-0.208158 *	CHP	0.09	-0.208158 *	CHP	0.09	-0.208158 *
SIZE	1007.38	0.000468 *	SIZE	991.997	0.000444 *	SIZE	1008.35	0.000440 *	SIZE	1045.98	0.000559 *	SIZE	1045.98	0.000559 *	SIZE	1045.98	0.000559 *	SIZE	1045.98	0.000559 *
BATH	1.013	-0.013134	BATH	1.017	0.124253 *	BATH	1.018	-0.094991	BATH	1.033	0.105255	BATH	1.033	0.105255	BATH	1.033	0.105255	BATH	1.033	0.105255
A	0.021	-0.177139 *	A	0.024	0.071019	A	0.032	-0.038283	A	0.029	-0.103753	A	0.029	-0.103753	A	0.029	-0.103753	A	0.029	-0.103753
C	0.324	-0.097383 *	C	0.338	-0.051233	C	0.328	-0.023200	C	0.328	-0.023200	C	0.352	-0.095740	C	0.352	-0.095740	C	0.352	-0.095740
D	0.131	-0.184653 *	D	0.132	-0.125935 *	D	0.152	-0.156414 *	D	0.115	-0.181960 *	D	0.115	-0.181960 *	D	0.115	-0.181960 *	D	0.115	-0.181960 *
E	0.094	-0.133546 *	E	0.075	0.024406	E	0.083	-0.020866	E	0.086	-0.054489	E	0.086	-0.054489	E	0.086	-0.054489	E	0.086	-0.054489
F	0.039	-0.199470 *	F	0.038	-0.053217	F	0.028	-0.009000	F	0.057	-0.207083 *	F	0.057	-0.207083 *	F	0.057	-0.207083 *	F	0.057	-0.207083 *
G	0.013	-0.208389 *	G	0.013	-0.106238	G	0.018	-0.081362	G	0.008	-0.282543	G	0.008	-0.282543	G	0.008	-0.282543	G	0.008	-0.282543
H	0.002	-0.035673	H	0.002	0.842573 *	H	0.005	-0.000394	H	0.004	-0.279997	H	0.004	-0.279997	H	0.004	-0.279997	H	0.004	-0.279997
I	0.043	-0.133698 *	I	0.057	-0.008031	I	0.041	-0.116271	I	0.025	0.293348 *	I	0.025	0.293348 *	I	0.025	0.293348 *	I	0.025	0.293348 *
J	0.155	0.044701	J	0.143	0.155511 *	J	0.137	0.109255 *	J	0.16	0.080435	J	0.16	0.080435	J	0.16	0.080435	J	0.16	0.080435
K	0.039	0.055313	K	0.033	0.110222 *	K	0.057	0.046185	K	0.045	0.165907	K	0.045	0.165907	K	0.045	0.165907	K	0.045	0.165907
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.045	-0.238923 *	P3	0.046	-0.232116 *	P3	0.059	-0.236598 *	P3	0.057	-0.230432 *	P3	0.057	-0.230432 *	P3	0.057	-0.230432 *	P3	0.057	-0.230432 *
P4	0.245	-0.195259 *	P4	0.295	-0.187335 *	P4	0.246	-0.210677 *	P4	0.221	-0.174044 *	P4	0.221	-0.174044 *	P4	0.221	-0.174044 *	P4	0.221	-0.174044 *
P5	0.236	-0.196584 *	P5	0.203	-0.131719 *	P5	0.248	-0.198701 *	P5	0.225	-0.075645	P5	0.225	-0.075645	P5	0.225	-0.075645	P5	0.225	-0.075645
P7	0.225	-0.152033 *	P7	0.216	-0.138876 *	P7	0.232	-0.234081 *	P7	0.291	-0.057210	P7	0.291	-0.057210	P7	0.291	-0.057210	P7	0.291	-0.057210
CONSTANT	1	10.299476 *	CONSTANT	1	10.049800 *	CONSTANT	1	10.587539 *	CONSTANT	1	10.011427 *	CONSTANT	1	10.011427 *	CONSTANT	1	10.011427 *	CONSTANT	1	10.011427 *
SAMPLE SIZE	466		SAMPLE SIZE	630		SAMPLE SIZE	564		SAMPLE SIZE	244		SAMPLE SIZE	244		SAMPLE SIZE	244		SAMPLE SIZE	244	
ADJUSTED R-SQUARED	0.69573		ADJUSTED R-SQUARED	0.68663		ADJUSTED R-SQUARED	0.65106		ADJUSTED R-SQUARED	0.71122		ADJUSTED R-SQUARED	0.71122		ADJUSTED R-SQUARED	0.71122		ADJUSTED R-SQUARED	0.71122	
F STATISTIC	37.66		F STATISTIC	48.53		F STATISTIC	37.22		F STATISTIC	21.64		F STATISTIC	21.64		F STATISTIC	21.64		F STATISTIC	21.64	
SAMPLE SIZE	1904		SAMPLE SIZE	1904		SAMPLE SIZE	1904		SAMPLE SIZE	1904		SAMPLE SIZE	1904		SAMPLE SIZE	1904		SAMPLE SIZE	1904	
ADJUSTED R-SQUARED	0.67135		ADJUSTED R-SQUARED	0.67135		ADJUSTED R-SQUARED	0.67135		ADJUSTED R-SQUARED	0.67135		ADJUSTED R-SQUARED	0.67135		ADJUSTED R-SQUARED	0.67135		ADJUSTED R-SQUARED	0.67135	
F STATISTIC	135.04		F STATISTIC	135.04		F STATISTIC	135.04		F STATISTIC	135.04		F STATISTIC	135.04		F STATISTIC	135.04		F STATISTIC	135.04	

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SCOTLAND

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.137	-0.073098 *	0.162	-0.115419 *	0.166	-0.112869 *	0.151	-0.150315 *	0.156	-0.108836 *
TH	0.131	-0.149934 *	0.112	-0.181373 *	0.147	-0.178265 *	0.157	-0.211259 *	0.133	-0.177612 *
DB	0.062	0.042130	0.053	0.032772	0.081	0.019564	0.085	-0.003410	0.068	0.027598
SDB	0.043	-0.032643	0.036	-0.087419 *	0.047	-0.036454	0.043	-0.103760	0.042	-0.059949 *
FB	0.53	-0.256760 *	0.53	-0.217828 *	0.452	-0.253967 *	0.466	-0.353718 *	0.497	-0.261607 *
FC	0.013	-0.236202 *	0.011	-0.105225	0.016	-0.273374 *	0.019	-0.347943 *	0.014	-0.229577 *
LH	0.001	0	0.002	0.191447	0.001	-0.077339	0	0	0.001	0.069932
SGAR	0.249	-0.049741	0.284	0.066484	0.296	-0.057075	0.298	0.050358	0.282	-0.009650
SPACE	0.114	-0.121897 *	0.095	-0.008081	0.105	-0.104418 *	0.111	-0.052755	0.105	-0.081698 *
NOPARK	0.619	-0.139550 *	0.603	-0.035333	0.575	-0.164896 *	0.575	-0.017055	0.594	-0.106633 *
AGE	72.191	-0.000415	71.323	-0.000923 *	70.353	-0.000341	72.709	-0.000291	71.414	-0.000471 *
NOCH	0.449	-0.096586 *	0.443	-0.112238 *	0.414	-0.110878 *	0.425	-0.115460 *	0.433	-0.109594 *
CHP	0.052	-0.066561 *	0.058	-0.017558	0.074	-0.067682 *	0.053	-0.057585	0.061	-0.048738 *
SIZE	902.224	0.000449 *	917.123	0.000502 *	921.495	0.000500 *	943.927	0.000455 *	918.932	0.000480 *
BATH	1.031	0.068227 *	1.03	0.074191 *	1.028	-0.033996	1.023	-0.031811	1.029	0.029065
A	0.017	-0.174805 *	0.026	-0.099105 *	0.019	-0.124009 *	0.023	-0.080690	0.021	-0.118804 *
C	0.114	-0.132982 *	0.1	-0.090279 *	0.109	-0.078536 *	0.111	-0.117968 *	0.108	-0.102847 *
D	0.083	-0.116793 *	0.072	-0.130444 *	0.056	-0.152560 *	0.066	-0.068574	0.069	-0.123830 *
E	0.125	-0.093872 *	0.147	-0.111925 *	0.138	-0.117760 *	0.132	-0.096445 *	0.137	-0.107322 *
F	0.073	-0.127747 *	0.063	-0.116205 *	0.063	-0.134553 *	0.062	-0.119027 *	0.065	-0.124320 *
G	0.052	-0.132185 *	0.054	-0.139749 *	0.053	-0.101338 *	0.049	-0.148949 *	0.053	-0.124993 *
H	0.005	0.147705	0.003	-0.019397	0.004	-0.051368	0.006	-0.020955	0.004	0.002673
I	0.044	0.090659 *	0.067	0.091492 *	0.052	0.068049 *	0.053	0.173720 *	0.055	0.094910 *
J	0.168	0.102583 *	0.174	0.095355 *	0.17	0.085085 *	0.219	0.097029 *	0.178	0.091071 *
K	0.156	-0.007916	0.147	0.004268	0.16	-0.007395	0.153	0.050355	0.154	0.005477
P1	0.068	0.004166	0.076	0.002097	0.066	-0.006346	0.06	0.055512	0.069	0.004406
P2	0.808	-0.201331 *	0.781	-0.207079 *	0.788	-0.199634 *	0.783	-0.155505 *	0.79	-0.199804 *
P3	0.001	-0.147579	0	0	0.002	-0.301424 *	0.002	-0.880748 *	0.001	-0.401257 *
P4	0.001	-0.406444 *	0	0	0	0	0	0	0	-0.507481 *
P5	0.006	-0.239997 *	0.007	-0.045495	0.01	-0.270098 *	0.023	0.006116	0.01	-0.140076 *
P7	0.001	0.201371	0.002	-0.255881	0.001	-0.512356 *	0	0	0.001	-0.195419 *
CONSTANT	1	10.267894 *	1	10.161937 *	1	10.395332 *	1	10.304009 *	1	10.287636 *

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SCOTLAND

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.137	-0.073098 *	0.162	-0.115419 *	0.166	-0.112869 *	0.151	-0.150315 *	0.156	-0.108836 *
TH	0.131	-0.149934 *	0.112	-0.181373 *	0.147	-0.178265 *	0.157	-0.211259 *	0.133	-0.177612 *
DB	0.062	0.042130	0.053	0.032772	0.081	0.019564	0.085	-0.003410	0.068	0.027598
SDB	0.043	-0.032643	0.036	-0.087419 *	0.047	-0.036454	0.043	-0.103760	0.042	-0.059949 *
FB	0.53	-0.256760 *	0.53	-0.217828 *	0.452	-0.253967 *	0.466	-0.353718 *	0.497	-0.261607 *
FC	0.013	-0.236202 *	0.011	-0.105225	0.016	-0.273374 *	0.019	-0.347943 *	0.014	-0.229577 *
LH	0.001	0	0.002	0.191447	0.001	-0.077339	0	0	0.001	0.069932
SGAR	0.249	-0.049741	0.284	0.066484	0.296	-0.057075	0.298	0.050358	0.282	-0.009650
SPACE	0.114	-0.121897 *	0.095	-0.008081	0.105	-0.104418 *	0.111	-0.052755	0.105	-0.081698 *
NOPARK	0.619	-0.139550 *	0.603	-0.035333	0.575	-0.164896 *	0.575	-0.017055	0.594	-0.106633 *
AGE	72.191	-0.000415	71.323	-0.000923 *	70.353	-0.000341	72.709	-0.000291	71.414	-0.000471 *
NOCH	0.449	-0.096586 *	0.443	-0.112238 *	0.414	-0.110878 *	0.425	-0.115460 *	0.433	-0.109594 *
CHP	0.052	-0.066561 *	0.058	-0.017558	0.074	-0.067682 *	0.053	-0.057585	0.061	-0.048738 *
SIZE	902.224	0.000449 *	917.123	0.000502 *	921.495	0.000500 *	943.927	0.000455 *	918.932	0.000480 *
BATH	1.031	0.068227 *	1.03	0.074191 *	1.028	-0.033996	1.023	-0.031811	1.029	0.029065
A	0.017	-0.174805 *	0.026	-0.099105 *	0.019	-0.124009 *	0.023	-0.080690	0.021	-0.118804 *
C	0.114	-0.132982 *	0.1	-0.090279 *	0.109	-0.078536 *	0.111	-0.117968 *	0.108	-0.102847 *
D	0.083	-0.116793 *	0.072	-0.130444 *	0.056	-0.152560 *	0.066	-0.068574	0.069	-0.123830 *
E	0.125	-0.093872 *	0.147	-0.111925 *	0.138	-0.117760 *	0.132	-0.096445 *	0.137	-0.107322 *
F	0.073	-0.127747 *	0.063	-0.116205 *	0.063	-0.134553 *	0.062	-0.119027 *	0.065	-0.124320 *
G	0.052	-0.132185 *	0.054	-0.139749 *	0.053	-0.101338 *	0.049	-0.148949 *	0.053	-0.124993 *
H	0.005	0.147705	0.003	-0.019397	0.004	-0.051368	0.006	-0.020955	0.004	0.002673
I	0.044	0.090659 *	0.067	0.091492 *	0.052	0.068049 *	0.053	0.173720 *	0.055	0.094910 *
J	0.168	0.102583 *	0.174	0.095355 *	0.17	0.085085 *	0.219	0.097029 *	0.178	0.091071 *
K	0.156	-0.007916	0.147	0.004268	0.16	-0.007395	0.153	0.050355	0.154	0.005477
P1	0.068	0.004166	0.076	0.002097	0.066	-0.006346	0.06	0.055512	0.069	0.004406
P2	0.808	-0.201331 *	0.781	-0.207079 *	0.788	-0.199634 *	0.783	-0.155505 *	0.79	-0.199804 *
P3	0.001	-0.147579	0	0	0.002	-0.301424 *	0.002	-0.880748 *	0.001	-0.401257 *
P4	0.001	-0.406444 *	0	0	0	0	0	0	0	-0.507481 *
P5	0.006	-0.239997 *	0.007	-0.045495	0.01	-0.270098 *	0.023	0.006116	0.01	-0.140076 *
P7	0.001	0.201371	0.002	-0.255881	0.001	-0.512356 *	0	0	0.001	-0.195419 *
CONSTANT	1	10.267894 *	1	10.161937 *	1	10.395332 *	1	10.304009 *	1	10.287636 *

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SCOTLAND

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.137	-0.073098 *	0.162	-0.115419 *	0.166	-0.112869 *	0.151	-0.150315 *	0.156	-0.108836 *
TH	0.131	-0.149934 *	0.112	-0.181373 *	0.147	-0.178265 *	0.157	-0.211259 *	0.133	-0.177612 *
DB	0.062	0.042130	0.053	0.032772	0.081	0.019564	0.085	-0.003410	0.068	0.027598
SDB	0.043	-0.032643	0.036	-0.087419 *	0.047	-0.036454	0.043	-0.103760	0.042	-0.059949 *
FB	0.53	-0.256760 *	0.53	-0.217828 *	0.452	-0.253967 *	0.466	-0.353718 *	0.497	-0.261607 *
FC	0.013	-0.236202 *	0.011	-0.105225	0.016	-0.273374 *	0.019	-0.347943 *	0.014	-0.229577 *
LH	0.001	0	0.002	0.191447	0.001	-0.077339	0	0	0.001	0.069932
SGAR	0.249	-0.049741	0.284	0.066484	0.296	-0.057075	0.298	0.050358	0.282	-0.009650
SPACE	0.114	-0.121897 *	0.095	-0.008081	0.105	-0.104418 *	0.111	-0.052755	0.105	-0.081698 *
NOPARK	0.619	-0.139550 *	0.603	-0.035333	0.575	-0.164896 *	0.575	-0.017055	0.594	-0.106633 *
AGE	72.191	-0.000415	71.323	-0.000923 *	70.353	-0.000341	72.709	-0.000291	71.414	-0.000471 *
NOCH	0.449	-0.096586 *	0.443	-0.112238 *	0.414	-0.110878 *	0.425	-0.115460 *	0.433	-0.109594 *
CHP	0.052	-0.066561 *	0.058	-0.017558	0.074	-0.067682 *	0.053	-0.057585	0.061	-0.048738 *
SIZE	902.224	0.000449 *	917.123	0.000502 *	921.495	0.000500 *	943.927	0.000455 *	918.932	0.000480 *
BATH	1.031	0.068227 *	1.03	0.074191 *	1.028	-0.033996	1.023	-0.031811	1.029	0.029065
A	0.017	-0.174805 *	0.026	-0.099105 *	0.019	-0.124009 *	0.023	-0.080690	0.021	-0.118804 *
C	0.114	-0.132982 *	0.1	-0.090279 *	0.109	-0.078536 *	0.111	-0.117968 *	0.108	-0.102847 *
D	0.083	-0.116793 *	0.072	-0.130444 *	0.056	-0.152560 *	0.066	-0.068574	0.069	-0.123830 *
E	0.125	-0.093872 *	0.147	-0.111925 *	0.138	-0.117760 *	0.132	-0.096445 *	0.137	-0.107322 *
F	0.073	-0.127747 *	0.063	-0.116205 *	0.063	-0.134553 *	0.062	-0.119027 *	0.065	-0.124320 *
G	0.052	-0.132185 *	0.054	-0.139749 *	0.053	-0.101338 *	0.049	-0.148949 *	0.053	-0.124993 *
H	0.005	0.147705	0.003	-0.019397	0.004	-0.051368	0.006	-0.020955	0.004	0.002673
I	0.044	0.090659 *	0.067	0.091492 *	0.052	0.068049 *	0.053	0.173720 *	0.055	0.094910 *
J	0.168	0.102583 *	0.174	0.095355 *	0.17	0.085085 *	0.219	0.097029 *	0.178	0.091071 *
K	0.156	-0.007916	0.147	0.004268	0.16	-0.007395	0.153	0.050355	0.154	0.005477
P1	0.068	0.004166	0.076	0.002097	0.066	-0.006346	0.06	0.055512	0.069	0.004406
P2	0.808	-0.201331 *	0.781	-0.207079 *	0.788	-0.199634 *	0.783	-0.155505 *	0.79	-0.199804 *
P3	0.001	-0.147579	0	0	0.002	-0.301424 *	0.002	-0.880748 *	0.001	-0.401257 *
P4	0.001	-0.406444 *	0	0	0	0	0	0	0	-0.507481 *
P5	0.006	-0.239997 *	0.007	-0.045495	0.01	-0.270098 *	0.023	0.006116	0.01	-0.140076 *
P7	0.001	0.201371	0.002	-0.255881	0.001	-0.512356 *	0	0	0.001	-0.195419 *
CONSTANT	1</									

Q1 1986 OLDER HOUSES

NORTHERN IRELAND

	WEIGHT	COEFF
SDH	0.291	-0.079070
TH	0.468	-0.285328 *
DB	0.105	0.149315 *
SDB	0.03	-0.053784
FB	0	0
FC	0.003	-0.070790
LH	0.77	-0.034012
SGAR	0.363	-0.132980
SPACE	0.141	-0.234672 *
NOPARK	0.482	-0.298675 *
AGE	50.327	-0.002424 *
NOCH	0.338	-0.106059 *
CHP	0.136	-0.066627
SIZE	938.606	0.000501 *
BATH	1.017	0.025415
CONSTANT	1	10.031742 *

Q2 1986 OLDER HOUSES

NORTHERN IRELAND

	WEIGHT	COEFF
SDH	0.31	-0.204809 *
TH	0.457	-0.398548 *
DB	0.103	-0.002016
SDB	0.041	-0.209548 *
FB	0.004	-0.445405 *
FC	0.004	-0.139644
LH	0.83	0.075601 *
SGAR	0.372	-0.011094
SPACE	0.179	-0.082095
NOPARK	0.434	-0.190009 *
AGE	49.392	-0.001033 *
NOCH	0.3	-0.186757 *
CHP	0.165	-0.064654 *
SIZE	967.204	0.000525 *
BATH	1.018	0.006054
CONSTANT	1	9.890282 *

Q3 1986 OLDER HOUSES

NORTHERN IRELAND

	WEIGHT	COEFF
SDH	0.312	-0.237420 *
TH	0.437	-0.462128 *
DB	0.114	-0.006438
SDB	0.044	-0.219419 *
FB	0.004	-0.148570
FC	0	0
LH	0.769	0.034374
SGAR	0.399	-0.114108
SPACE	0.173	-0.200857
NOPARK	0.414	-0.276114 *
AGE	50.811	-0.001487 *
NOCH	0.306	-0.155495 *
CHP	0.195	-0.030352
SIZE	969.377	0.000642 *
BATH	1.002	-0.021297
CONSTANT	1	9.999230 *

Q4 1986 OLDER HOUSES

NORTHERN IRELAND

	WEIGHT	COEFF
SDH	0.276	-0.177546 *
TH	0.51	-0.426413 *
DB	0.081	-0.093694
SDB	0.033	-0.179101
FB	0	0
FC	0	0
LH	0.795	-0.001694
SGAR	0.348	-0.123377
SPACE	0.157	-0.205682
NOPARK	0.481	-0.340910 *
AGE	51.586	-0.001714
NOCH	0.31	-0.189903 *
CHP	0.176	-0.041026
SIZE	999.832	0.000642 *
BATH	1.01	0.278568 *
CONSTANT	1	9.718778 *

1986 OLDER HOUSES

NORTHERN IRELAND

	WEIGHT	COEFF
SDH	0.302	-0.177053 *
TH	0.46	-0.394648 *
DB	0.104	0.025608
SDB	0.038	-0.162139 *
FB	0.002	-0.250244
FC	0.002	-0.141280
LH	0.794	0.023352
SGAR	0.375	-0.073400
SPACE	0.166	-0.156726 *
NOPARK	0.445	-0.247250 *
AGE	50.308	-0.001390 *
NOCH	0.311	-0.161594 *
CHP	0.169	-0.051821 *
SIZE	965.702	0.000572 *
BATH	1.012	0.021460
CONSTANT	1	9.929761 *

SAMPLE SIZE	361
ADJUSTED R-SQUARED	0.71117
F STATISTIC	64.31

SAMPLE SIZE	564
ADJUSTED R-SQUARED	0.69578
F STATISTIC	86.84

SAMPLE SIZE	481
ADJUSTED R-SQUARED	0.7083
F STATISTIC	84.25

SAMPLE SIZE	210
ADJUSTED R-SQUARED	0.73046
F STATISTIC	44.47

SAMPLE SIZE	1616
ADJUSTED R-SQUARED	0.70403
F STATISTIC	257.11

TABLE E5: 1945-1970 HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

		1945-1970 NORTH INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	103.280	98.681	107.631
	Q2	100.000	105.801	102.631	113.029
	Q3	100.000	103.602	101.990	106.275
	Q4	100.000	106.258	104.571	103.918
	1986	100.000	104.569	101.731	108.289

		1945-1970 YORKSHIRE & HUMBERSIDE INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	102.985	105.353	107.964
	Q2	100.000	102.300	104.060	108.983
	Q3	100.000	102.504	103.758	107.461
	Q4	100.000	101.687	100.414	104.135
	1986	100.000	102.432	103.663	107.586

		1945-1970 NORTH WEST INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	103.449	105.320	108.099
	Q2	100.000	103.545	105.536	107.674
	Q3	100.000	103.214	105.477	107.685
	Q4	100.000	102.807	104.587	107.220
	1986	100.000	103.314	105.311	107.694

		1945-1970 EAST MIDLANDS INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	100.334	102.842	108.594
	Q2	100.000	101.647	103.838	109.052
	Q3	100.000	101.443	104.108	109.459
	Q4	100.000	99.438	101.660	106.518
	1986	100.000	100.996	103.391	108.682

		1945-1970 WEST MIDLANDS INDEX NUMBERS 1986			
ALTERNATIVE WEIGHTS		Q1	Q2	Q3	Q4
	Q1	100.000	103.745	105.815	108.921
	Q2	100.000	103.856	106.520	109.998
	Q3	100.000	104.095	106.637	108.806
	Q4	100.000	103.725	105.443	109.152
	1986	100.000	103.872	106.072	109.242

		1945-1970 EAST ANGLIA			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	105.333	107.550	106.588	
Q2	100.000	104.507	105.634	110.110	
Q3	100.000	103.505	106.404	109.303	
Q4	100.000	106.873	107.525	111.006	
1986	100.000	104.733	106.550	109.214	

		1945-1970 OUTER SOUTH EAST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.312	109.888	114.690	
Q2	100.000	104.602	109.864	114.704	
Q3	100.000	104.794	109.796	114.416	
Q4	100.000	104.980	110.583	115.565	
1986	100.000	104.632	109.945	114.756	

		1945-1970 OUTER METROPOLITAN			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.376	109.480	115.298	
Q2	100.000	103.525	109.678	115.515	
Q3	100.000	103.743	109.841	115.831	
Q4	100.000	103.588	109.466	116.219	
1986	100.000	103.644	109.715	115.738	

		1945-1970 GREATER LONDON			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	108.178	117.961	122.295	
Q2	100.000	105.838	116.709	122.285	
Q3	100.000	107.516	116.387	122.070	
Q4	100.000	108.041	117.044	122.345	
1986	100.000	107.530	116.767	122.160	

		1945-1970 SOUTH WEST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.786	108.862	112.626	
Q2	100.000	102.320	108.862	112.643	
Q3	100.000	103.507	108.522	112.900	
Q4	100.000	102.441	108.143	112.526	
1986	100.000	102.744	108.678	112.592	

		1945-1970 WALES			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	102.395	106.432	113.535
	Q2	100.000	101.410	106.563	117.308
	Q3	100.000	102.077	103.834	117.273
	Q4	100.000	100.567	106.813	109.295
	1986	100.000	101.703	105.786	115.291

		1945-1970 SCOTLAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	103.289	104.905	102.565
	Q2	100.000	103.679	104.725	102.939
	Q3	100.000	103.724	104.512	104.137
	Q4	100.000	103.427	104.245	103.051
	1986	100.000	103.513	104.602	103.197

		1945-1970 NORTHERN IRELAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	100.255	103.569	100.984
	Q2	100.000	98.985	102.115	99.993
	Q3	100.000	98.521	101.440	99.445
	Q4	100.000	98.871	101.562	100.561
	1986	100.000	99.083	102.138	100.099

Q1 1986 1945-1970		Q2 1986 1945-1970		Q3 1986 1945-1970		Q4 1986 1945-1970		1986 1945-1970	
NORTHERN		NORTHERN		NORTHERN		NORTHERN		NORTHERN	
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.577 -0.15117	0.475 -0.13486 *	0.457 -0.36570 *	0.34 -0.25836 *	0.473 -0.23704 *				
TH	0.179 -0.23397	0.099 -0.24737 *	0.124 -0.57056 *	0.22 -0.38127 *	0.144 -0.39816 *				
DB	0.064 0.241474	0.129 0.082294	0.095 -0.24003 *	0.08 0.56332 *	0.096 -0.01417				
SDB	0.077 -0.03203	0.109 -0.03586	0.133 -0.26447 *	0.12 -0.14738	0.111 -0.13272 *				
FB	0.038 -0.52909 *	0.02 -0.50129 *	0.038 -0.93349 *	0.06 -0.56785 *	0.036 -0.67930 *				
FC	0	0	0	0	0				
LH	0.218 0.106672	0.198 0.01339	0.21 0.086375	0.24 -0.02867	0.213 0.041827				
SGAR	0.731 -0.11754	0.782 -0.09488	0.733 -0.22188 *	0.68 -0.02451	0.74 -0.14679 *				
SPACE	0.051 -0.55799 *	0.119 -0.05033	0.038 -0.28299 *	0.1 -0.12601	0.075 -0.24144 *				
NOPARK	0.167 -0.32716	0.079 -0.27712	0.181 -0.37210 *	0.16 -0.45365 *	0.144 -0.35498 *				
AGE	25.744 -0.00197	24.337 0.0011	25.133 -0.00561	24.74 0.003974	24.976 -0.00153				
NOCH	0.205 -0.08542	0.109 -0.15847 *	0.095 -0.13958 *	0.26 -0.10010	0.15 -0.12196 *				
CHP	0.141 -0.01674	0.079 -0.06133	0.114 -0.12206	0.08 0.015619	0.105 -0.05123				
SIZE	983.564 0.000712 *	969.288 0.000732 *	947.533 0.000503 *	946.173 0.000631 *	962.323 0.000587 *				
BATH	1	0	1	1	1				
A	0	0	0	0	0				
C	0.051 0.028413	0.01 -0.23971	0.019 0.006043	0.04 -0.07918	0.015 -0.07546				
D	0.013 -0.15286	0.109 -0.09604	0.086 -0.01560	0.08 -0.28069	0.084 -0.01392				
E	0.103 -0.11116	0.01 -0.09574	0.01 0.001125	0	0				
F	0.115 -0.18514	0.109 -0.18740 *	0.114 0.030475	0.08 0.039107	0.105 -0.04134				
G	0.038 -0.20708	0.079 -0.15431 *	0.095 0.003081	0.14 0.059097	0.102 -0.07396				
H	0	0	0.019 -0.10975	0.04 -0.37366 *	0.024 -0.23705 *				
I	0.013 0.120134	0.01 0.111749	0	0	0				
J	0.295 0.002882	0.188 0.020231	0.01 0.165652	0	0				
K	0	0.03 0.216798 *	0.181 0.03057	0.22 0.086007	0.216 0.059744 *				
P1	0	0	0.038 0.066625	0.04 -0.00197	0.027 0.208495 *				
P2	0	0	0	0	0				
P3	0.179 0.131048	0.178 0.039809	0.114 -0.01804	0.12 0.709919 *	0.009 0.143738				
P4	0.487	0.446	0.543	0.6 0.48045 *	0.15 0.253843				
P5	0.244 -0.00823	0.277 -0.05816	0.248 -0.09841 *	0.14 0.417694	0.509 0.253164				
P7	0.09 0.335249 *	0.099 0.258659 *	0.095 0.283444 *	0.12 0.331128	0.24 0.201983				
CONSTANT	1	1	1	1	1				
SAMPLE SIZE	78	101	105	50	334				
ADJUSTED R-SQUARED	0.78323	0.82565	0.8329	0.85812	0.79576				
F STATISTIC	13.1	19.21	20.94	12.85	49.05				

Q1 1986 1945-1970

YORKSHIRE & HUMBERSIDE

WEIGHT COEFF

SDH 0.493 -0.25076 *
TH 0.1 -0.39062 *
DB 0.14 -0.01238
SDB 0.107 -0.10561
FB 0 0
FC 0 0
LH 0.12 -0.02948
SGAR 0.74 -0.13138 *
SPACE 0.067 -0.22385 *
NOPARK 0.14 -0.24342 *
AGE 24.84 -0.00136
NOCH 0.213 0.006146
CHP 0.06 -0.10315
SIZE 975.13 0.000575 *
BATH 1.033 -0.02267
A 0.02 0.229381 *
C 0.2 -0.03270
D 0.027 -0.04059
E 0.06 -0.14689 *
F 0.033 0.000496
G 0.033 -0.36596 *
H 0 0
I 0 0
J 0.227 0.090382 *
K 0.053 -0.00055
P1 0 0
P2 0 0
P3 0.08 -0.16551 *
P4 0.42 -0.19998 *
P5 0.147 -0.11989 *
P7 0.233 -0.09646
CONSTANT 1 10.21841 *

Q2 1986 1945-1970

YORKSHIRE & HUMBERSIDE

WEIGHT COEFF

SDH 0.582 -0.32914 *
TH 0.092 -0.43641 *
DB 0.067 0.024619
SDB 0.1 -0.26625 *
FB 0.017 -0.17538
FC 0 0
LH 0.1 0.012117
SGAR 0.736 -0.13712
SPACE 0.088 -0.21295 *
NOPARK 0.142 -0.30512 *
AGE 25.159 -0.00254
NOCH 0.172 -0.09256 *
CHP 0.059 -0.02522
SIZE 946.637 0.000466 *
BATH 1.008 0.11216
A 0.008 0.0112
C 0.176 0.083255 *
D 0.021 -0.18356 *
E 0.105 -0.04956
F 0.059 -0.08088
G 0.063 -0.20959 *
H 0.013 -0.04040
I 0.013 -0.08295
J 0.176 0.104972 *
K 0.025 0.148156
P1 0 0
P2 0 0
P3 0.105 -0.19186 *
P4 0.485 -0.22835 *
P5 0.126 -0.14083 *
P7 0.18 -0.14922 *
CONSTANT 1 10.31811 *

Q3 1986 1945-1970

YORKSHIRE & HUMBERSIDE

WEIGHT COEFF

SDH 0.561 -0.19831 *
TH 0.112 -0.33091 *
DB 0.077 0.056191
SDB 0.082 -0.11243
FB 0.036 -0.41998 *
FC 0 0
LH 0.148 -0.02244
SGAR 0.684 -0.01986
SPACE 0.071 -0.19201 *
NOPARK 0.209 -0.18051 *
AGE 24.878 -0.00268
NOCH 0.189 -0.08352 *
CHP 0.128 -0.06118
SIZE 916.924 0.000542 *
BATH 1.005 0.128376
A 0 0
C 0.163 0.039743
D 0.02 0.015409
E 0.082 -0.14143 *
F 0.082 -0.19636 *
G 0.061 -0.30864 *
H 0.01 -0.32629 *
I 0.026 0.171323
J 0.204 0.1542 *
K 0.02 0.042262
P1 0.005 1.065203 *
P2 0 0
P3 0.112 -0.10108
P4 0.439 -0.09890 *
P5 0.148 -0.00696
P7 0.158 -0.06060
CONSTANT 1 9.965211 *

Q4 1986 1945-1970

YORKSHIRE & HUMBERSIDE

WEIGHT COEFF

SDH 0.619 -0.21048 *
TH 0.041 -0.53655 *
DB 0.082 -0.00534
SDB 0.093 -0.06138
FB 0.031 -0.35462 *
FC 0 0
LH 0.144 -0.06733
SGAR 0.722 0.026062
SPACE 0.103 -0.01435
NOPARK 0.124 -0.02579
AGE 26.474 -0.00090
NOCH 0.216 -0.08450 *
CHP 0.113 -0.12495 *
SIZE 906 0.000776 *
BATH 1.031 0.000800
A 0.031 -0.24035 *
C 0.144 -0.00368
D 0.021 0.058023
E 0.052 -0.18228 *
F 0.093 -0.20725 *
G 0.041 -0.35826 *
H 0.021 -0.25425 *
I 0.01 0.324275 *
J 0.216 0.053922
K 0.041 -0.04675
P1 0 0
P2 0 0
P3 0.093 -0.01393
P4 0.371 -0.14228 *
P5 0.113 -0.00395
P7 0.186 -0.13796 *
CONSTANT 1 9.893432 *

1986

YORKSHIRE & HUMBERSIDE

WEIGHT COEFF

SDH 0.562 -0.24904 *
TH 0.092 -0.38139 *
DB 0.088 0.029809
SDB 0.095 -0.13977 *
FB 0.021 -0.3387 *
FC 0 0
LH 0.125 -0.02811
SGAR 0.72 -0.09825 *
SPACE 0.081 -0.20211 *
NOPARK 0.158 -0.25208 *
AGE 25.195 -0.00166
NOCH 0.192 -0.06361 *
CHP 0.087 -0.05295 *
SIZE 938.585 0.000543 *
BATH 1.016 0.045377
A 0.012 0.012882
C 0.173 0.021512
D 0.022 -0.08440
E 0.081 -0.11142 *
F 0.065 -0.12175 *
G 0.053 -0.29105 *
H 0.01 -0.18518 *
I 0.013 0.067737
J 0.201 0.099216 *
K 0.032 0.055643
P1 0.001 0.974972 *
P2 0 0
P3 0.1 -0.15094 *
P4 0.441 -0.17770 *
P5 0.135 -0.07989 *
P7 0.186 -0.11562 *
CONSTANT 1 10.17868 *

1945-1970

SAMPLE SIZE 150
ADJUSTED R-SQUARED 0.8301
F STATISTIC 30.12

SAMPLE SIZE 239
ADJUSTED R-SQUARED 0.76808
F STATISTIC 29.15

SAMPLE SIZE 196
ADJUSTED R-SQUARED 0.79167
F STATISTIC 27.47

SAMPLE SIZE 97
ADJUSTED R-SQUARED 0.79523
F STATISTIC 14.31

SAMPLE SIZE 682
ADJUSTED R-SQUARED 0.77974
F STATISTIC 84.13

Q1 1986 1945-1970

NORTH WEST

	WEIGHT	COEFF
SDH	0.437	-0.26129 *
TH	0.107	-0.40740 *
DB	0.111	0.065478
SDB	0.149	-0.22044 *
FB	0.038	-0.50611 *
FC	0	0
LH	0.418	0.044438
SGAR	0.651	-0.19881 *
SPACE	0.126	-0.27014 *
NOPARK	0.169	-0.32726 *
AGE	24.372	0.003659
NOCH	0.138	-0.07135
CHP	0.073	0.02051
SIZE	941.841	0.000606 *
BATH	1.023	0.001954
A	0.008	0.292291 *
C	0.119	-0.00802
D	0.015	-0.05850
E	0.054	-0.07125
F	0.054	-0.19382 *
G	0.027	-0.04990
H	0	0
I	0.019	0.10349
J	0.257	0.079152 *
K	0.023	0.101767
P1	0	0
P2	0	0
P3	0.146	-0.16861 *
P4	0.184	-0.17077 *
P5	0.356	-0.11956 *
P7	0.13	-0.16737 *
CONSTANT	1	10.12604 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
261	0.78387	35.93
412	0.7628	48.2
42	0.80007	47.24
313	0.80007	47.24
182	0.7776	25.34
1168	0.77547	144.95

Q2 1986 1945-1970

NORTH WEST

	WEIGHT	COEFF
SDH	0.468	-0.28869 *
TH	0.129	-0.47655 *
DB	0.07	-0.00346
SDB	0.124	-0.19715 *
FB	0.036	-0.41846 *
FC	0	0
LH	0.405	0.035525
SGAR	0.726	-0.05430
SPACE	0.092	-0.12060
NOPARK	0.158	-0.17173 *
AGE	24.672	0.000012
NOCH	0.141	-0.15659 *
CHP	0.08	-0.01193
SIZE	934.804	0.000544 *
BATH	1.027	0.036795
A	0.002	0.123243
C	0.133	-0.01545
D	0.017	-0.09315
E	0.07	-0.06358
F	0.046	-0.06510
G	0.017	-0.13525
H	0.002	0.374689 *
I	0.022	0.042597
J	0.25	0.103956 *
K	0.015	0.156588 *
P1	0	0
P2	0	0
P3	0.129	-0.17404 *
P4	0.187	-0.22534 *
P5	0.381	-0.16092 *
P7	0.104	-0.10711 *
CONSTANT	1	10.17961 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
261	0.78387	35.93
412	0.7628	48.2
42	0.80007	47.24
313	0.80007	47.24
182	0.7776	25.34
1168	0.77547	144.95

Q3 1986 1945-1970

NORTH WEST

	WEIGHT	COEFF
SDH	0.457	-0.22907 *
TH	0.121	-0.34916 *
DB	0.093	0.146164 *
SDB	0.118	-0.14743 *
FB	0.042	-0.38462 *
FC	0	0
LH	0.431	-0.01272
SGAR	0.732	-0.06956
SPACE	0.073	-0.21659 *
NOPARK	0.147	-0.14883 *
AGE	24.942	0.000631
NOCH	0.134	-0.15191 *
CHP	0.08	-0.06806
SIZE	965.36	0.000643 *
BATH	1.013	0.038943
A	0.013	0.208717 *
C	0.089	-0.03625
D	0.022	0.003255
E	0.054	-0.02968
F	0.058	-0.07586
G	0.026	-0.25261 *
H	0	0
I	0.038	-0.00090
J	0.265	0.071727 *
K	0.035	0.090145
P1	0	0
P2	0	0
P3	0.121	-0.20406 *
P4	0.176	-0.17614 *
P5	0.326	-0.15439 *
P7	0.141	-0.12318 *
CONSTANT	1	10.07109 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
261	0.78387	35.93
412	0.7628	48.2
42	0.80007	47.24
313	0.80007	47.24
182	0.7776	25.34
1168	0.77547	144.95

Q4 1986 1945-1970

NORTH WEST

	WEIGHT	COEFF
SDH	0.423	-0.19597 *
TH	0.126	-0.43650 *
DB	0.126	0.022619
SDB	0.104	-0.11858
FB	0.044	-0.24926
FC	0	0
LH	0.418	0.013119
SGAR	0.709	-0.28810 *
SPACE	0.132	-0.40883 *
NOPARK	0.132	-0.44809 *
AGE	24.049	0.000370
NOCH	0.181	-0.06713
CHP	0.077	-0.11188 *
SIZE	937.201	0.000609 *
BATH	1.033	-0.0205
A	0	0
C	0.165	-0.02184
D	0.005	-0.22996
E	0.038	-0.12950
F	0.066	0.028369
G	0.027	-0.16369
H	0	0
I	0.038	-0.12964
J	0.192	0.05428
K	0.038	-0.07347
P1	0	0
P2	0	0
P3	0.115	-0.24503 *
P4	0.214	-0.14198 *
P5	0.407	-0.19741 *
P7	0.088	-0.10125
CONSTANT	1	10.41714 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
261	0.78387	35.93
412	0.7628	48.2
42	0.80007	47.24
313	0.80007	47.24
182	0.7776	25.34
1168	0.77547	144.95

1986 1945-1970

NORTH WEST

	WEIGHT	COEFF
SDH	0.451	-0.25877 *
TH	0.122	-0.42584 *
DB	0.094	0.051835 *
SDB	0.125	-0.18801 *
FB	0.039	-0.43035 *
FC	0	0
LH	0.417	0.022181
SGAR	0.708	-0.12639 *
SPACE	0.101	-0.21122 *
NOPARK	0.153	-0.24911 *
AGE	24.58	0.000712
NOCH	0.145	-0.11127 *
CHP	0.078	-0.03465
SIZE	944.938	0.000583 *
BATH	1.023	0.026201
A	0.006	0.219552 *
C	0.123	-0.01269
D	0.016	-0.05847
E	0.057	-0.06094 *
F	0.054	-0.06407 *
G	0.023	-0.14080 *
H	0.001	0.325662
I	0.028	0.04573
J	0.247	0.083163 *
K	0.026	0.080081 *
P1	0	0
P2	0	0
P3	0.128	-0.19530 *
P4	0.188	-0.18689 *
P5	0.365	-0.15740 *
P7	0.117	-0.13013 *
CONSTANT	1	10.19084 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
261	0.78387	35.93
412	0.7628	48.2
42	0.80007	47.24
313	0.80007	47.24
182	0.7776	25.34
1168	0.77547	144.95

EAST MIDLANDS

	WEIGHT	COEFF
SDH	0.449	-0.16945 *
TH	0.157	-0.22204 *
DB	0.14	0.202305 *
SDB	0.042	-0.00536
FB	0.008	-0.76172 *
FC	0	0
LH	0.017	0.398606 *
SGAR	0.665	-0.06953
SPACE	0.136	-0.16788 *
NOPARK	0.148	-0.26115 *
AGE	25.318	-0.00168
NOCH	0.085	-0.11090 *
CHP	0.085	-0.03920
SIZE	955.328	0.000613 *
BATH	1.017	0.155441
A	0.034	-0.20652 *
C	0.195	0.020796
D	0.025	-0.11863
E	0.131	-0.06904
F	0.051	-0.06025
G	0.008	-0.48735 *
H	0	0
I	0.013	0.041648
J	0.169	0.110272 *
K	0.017	0.157155
P1	0	0
P2	0	0
P3	0.059	-0.18544 *
P4	0.322	-0.23601 *
P5	0.453	-0.14306 *
P7	0.123	-0.26661 *
CONSTANT	1	9.978288 *

EAST MIDLANDS

	WEIGHT	COEFF
SDH	0.462	-0.23352 *
TH	0.075	-0.27991 *
DB	0.103	0.056053
SDB	0.048	-0.05437
FB	0.019	-0.48718 *
FC	0	0
LH	0.034	-0.03584
SGAR	0.654	0.039967
SPACE	0.132	-0.01929
NOPARK	0.173	-0.06081
AGE	25.007	-0.00318 *
NOCH	0.094	-0.13963 *
CHP	0.115	-0.06501 *
SIZE	948.63	0.000616 *
BATH	1.01	0.216733 *
A	0.026	-0.04810
C	0.204	-0.02000
D	0.022	-0.10424
E	0.147	-0.10993 *
F	0.034	-0.10064
G	0.007	-0.16437
H	0.01	0.056426
I	0.007	-0.00953
J	0.161	0.116719 *
K	0.012	0.084534
P1	0	0
P2	0	0
P3	0.075	-0.01308
P4	0.267	-0.12195 *
P5	0.44	0.0165
P7	0.18	-0.04713
CONSTANT	1	9.764121 *

EAST MIDLANDS

	WEIGHT	COEFF
SDH	0.43	-0.18508 *
TH	0.068	-0.29711 *
DB	0.125	0.026143
SDB	0.032	-0.08314
FB	0.022	-0.45232 *
FC	0	0
LH	0.025	0.035464
SGAR	0.713	-0.22071 *
SPACE	0.108	-0.41700 *
NOPARK	0.14	-0.39832 *
AGE	25.473	0.001399
NOCH	0.072	0.026878
CHP	0.111	-0.04679
SIZE	975.385	0.000635 *
BATH	1.018	-0.09065
A	0.025	0.121479
C	0.183	-0.01410
D	0.022	-0.0764
E	0.133	-0.08645 *
F	0.047	-0.03459
G	0.014	-0.10159
H	0.004	0.158147
I	0.004	0.010341
J	0.179	0.095873 *
K	0.011	0.022179
P1	0	0
P2	0	0
P3	0.061	-0.11622
P4	0.28	-0.21654 *
P5	0.455	-0.02714
P7	0.143	-0.22071 *
CONSTANT	1	10.28155 *

EAST MIDLANDS

	WEIGHT	COEFF
SDH	0.393	-0.22071 *
TH	0.093	-0.38071 *
DB	0.18	0.004992
SDB	0.033	-0.11377
FB	0.02	-0.5408 *
FC	0	0
LH	0.047	-0.18207
SGAR	0.727	-0.16023
SPACE	0.1	-0.31516 *
NOPARK	0.133	-0.20271
AGE	25.52	0.002922
NOCH	0.127	-0.05982
CHP	0.1	-0.10106
SIZE	989.201	0.000501 *
BATH	1.04	0.21402 *
A	0.007	0.028715
C	0.16	-0.00666
D	0.027	-0.07529
E	0.073	-0.16966 *
F	0.053	-0.11630
G	0	0
H	0	0
I	0.02	0.265451
J	0.247	0.078803
K	0.007	0.197759
P1	0	0
P2	0	0
P3	0.08	-0.07301
P4	0.24	-0.09591
P5	0.467	0.016981
P7	0.153	-0.18265 *
CONSTANT	1	10.02799 *

EAST MIDLANDS

	WEIGHT	COEFF
SDH	0.441	-0.20897 *
TH	0.093	-0.29785 *
DB	0.128	0.060913 *
SDB	0.041	-0.06082
FB	0.018	-0.4878 *
FC	0	0
LH	0.03	-0.01172
SGAR	0.682	-0.05762
SPACE	0.122	-0.16574 *
NOPARK	0.154	-0.18531 *
AGE	25.266	-0.00038
NOCH	0.091	-0.08469 *
CHP	0.105	-0.05918 *
SIZE	962.627	0.000624 *
BATH	1.018	0.119803 *
A	0.025	-0.05625
C	0.191	-0.01304
D	0.023	-0.09467 *
E	0.13	-0.10978 *
F	0.043	-0.06572 *
G	0.008	-0.24057 *
H	0.005	0.089537
I	0.009	0.068982
J	0.179	0.10442 *
K	0.012	0.092269
P1	0	0
P2	0	0
P3	0.068	-0.09116 *
P4	0.278	-0.17514 *
P5	0.451	-0.03331
P7	0.154	-0.15514 *
CONSTANT	1	9.946361 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
236	0.70983	22.29
416	0.75673	47.11
279	0.72805	27.58
150	0.72291	15.95
1081	0.72872	104.61

WEST MIDLANDS

WEIGHT COEFF

SDH 0.452 -0.21951 *
TH 0.164 -0.37453 *
DB 0.073 0.137478 *
SDB 0.021 -0.12836
FB 0.103 -0.44871 *
FC 0 0
LH 0.261 0.040433
SGAR 0.736 -0.04127
SPACE 0.059 -0.13583 *
NOPARK 0.15 -0.15565 *
AGE 24.223 0.000782
NOCH 0.182 -0.09315 *
CHP 0.109 -0.03850
SIZE 932.605 0.000628 *
BATH 1.032 0.075717
A 0.021 0.068686
C 0.114 0.083399 *
D 0.023 -0.02438
E 0.073 0.029798
F 0.082 -0.02903
G 0.018 -0.09381
H 0.026 -0.13408 *
I 0.009 -0.01484
J 0.214 0.139959 *
K 0.018 -0.04899
P1 0 0
P2 0 0
P3 0.132 -0.13033 *
P4 0.135 -0.19946 *
P5 0.466 -0.14438 *
P7 0.126 -0.10928 *
CONSTANT 1 9.910664

WEST MIDLANDS

WEIGHT COEFF

SDH 0.48 -0.22624 *
TH 0.158 -0.36509 *
DB 0.059 0.141542 *
SDB 0.019 -0.12733
FB 0.08 -0.34315 *
FC 0.002 -0.41632 *
LH 0.259 0.001084
SGAR 0.72 -0.06618
SPACE 0.051 -0.17402 *
NOPARK 0.183 -0.19218 *
AGE 24.865 0.002621
NOCH 0.154 -0.04368
CHP 0.133 -0.06145 *
SIZE 942.758 0.000704 *
BATH 1.015 -0.01970
A 0.023 -0.02459
C 0.166 -0.01207
D 0.011 -0.06300
E 0.091 -0.04405
F 0.05 -0.14173 *
G 0.021 -0.22452 *
H 0.008 -0.26899 *
I 0.015 0.037018
J 0.198 0.068927 *
K 0.023 0.061828
P1 0 0
P2 0 0
P3 0.105 -0.16308 *
P4 0.143 -0.21544 *
P5 0.509 -0.12648 *
P7 0.139 -0.08965 *
CONSTANT 1 9.992448 *

WEST MIDLANDS

WEIGHT COEFF

SDH 0.44 -0.24503 *
TH 0.159 -0.38117 *
DB 0.063 0.120146 *
SDB 0.019 -0.16183 *
FB 0.091 -0.41184 *
FC 0.002 -0.25657
LH 0.225 -0.02896
SGAR 0.766 0.01307
SPACE 0.056 -0.06673
NOPARK 0.143 -0.09038
AGE 24.562 0.001244
NOCH 0.199 -0.12853 *
CHP 0.117 -0.06499 *
SIZE 961.764 0.000595 *
BATH 1.028 -0.08363
A 0.009 0.096522
C 0.162 0.051762
D 0.014 -0.03616
E 0.094 0.050071
F 0.054 -0.06100
G 0.028 -0.27433 *
H 0.023 -0.22688 *
I 0.033 0.034389
J 0.211 0.136316 *
K 0.023 0.125359
P1 0 0
P2 0 0
P3 0.108 -0.09126 *
P4 0.136 -0.17658 *
P5 0.485 -0.07642 *
P7 0.117 -0.09953 *
CONSTANT 1 10.10146 *

WEST MIDLANDS

WEIGHT COEFF

SDH 0.479 -0.25774 *
TH 0.137 -0.35999 *
DB 0.056 -0.01675
SDB 0.034 -0.15304
FB 0.107 -0.42417 *
FC 0 0
LH 0.316 0.030141
SGAR 0.718 -0.09987
SPACE 0.047 -0.24587 *
NOPARK 0.179 -0.27529 *
AGE 24.526 0.005915 *
NOCH 0.15 -0.16462 *
CHP 0.124 -0.02308
SIZE 962.083 0.000609 *
BATH 1.034 0.091392
A 0.013 0.037983
C 0.145 0.027613
D 0.013 0.01466
E 0.115 -0.07161
F 0.034 -0.03784
G 0.038 -0.23431 *
H 0.013 -0.24826
I 0.034 0.065042
J 0.192 0.099554 *
K 0.004 0.226322
P1 0 0
P2 0 0
P3 0.137 -0.07676
P4 0.128 -0.15727 *
P5 0.517 -0.01007
P7 0.111 0.076945
CONSTANT 1 9.902661 *

WEST MIDLANDS

WEIGHT COEFF

SDH 0.462 -0.23784 *
TH 0.157 -0.37496 *
DB 0.063 0.109494 *
SDB 0.022 -0.13601 *
FB 0.092 -0.39941 *
FC 0.001 -0.38525 *
LH 0.259 0.006567
SGAR 0.736 -0.05726 *
SPACE 0.054 -0.16497 *
NOPARK 0.164 -0.18739 *
AGE 24.585 0.002227 *
NOCH 0.172 -0.09739 *
CHP 0.122 -0.06051 *
SIZE 948.767 0.000643 *
BATH 1.026 0.003315
A 0.017 0.037072
C 0.15 0.031375 *
D 0.015 -0.04251
E 0.092 -0.00081
F 0.056 -0.08359 *
G 0.025 -0.21142 *
H 0.017 -0.20181 *
I 0.022 0.041783
J 0.204 0.104244 *
K 0.019 0.062816
P1 0 0
P2 0 0
P3 0.117 -0.12086 *
P4 0.137 -0.18097 *
P5 0.494 -0.09205 *
P7 0.126 -0.06505 *
CONSTANT 1 10.00210 *

SAMPLE SIZE 341
ADJUSTED R-SQUARED 0.81625
F STATISTIC 49.5

SAMPLE SIZE 525
ADJUSTED R-SQUARED 0.78989
F STATISTIC 68.93

SAMPLE SIZE 427
ADJUSTED R-SQUARED 0.76805
F STATISTIC 49.64

SAMPLE SIZE 234
ADJUSTED R-SQUARED 0.77799
F STATISTIC 30.16

SAMPLE SIZE 1527
ADJUSTED R-SQUARED 0.78153
F STATISTIC 189.24

Q1 1986 1945-1970

Q2 1986 1945-1970

Q3 1986 1945-1970

Q4 1986 1945-1970

1986 1945-1970

EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF
SDH	0.278	-0.17467 *	SDH	0.306	-0.23857 *	SDH	0.376	-0.17912 *	SDH	0.31	-0.25504 *	SDH	0.321	-0.21132 *
TH	0.103	-0.25870 *	TH	0.16	-0.22111 *	TH	0.118	-0.24198 *	TH	0.179	-0.31895 *	TH	0.138	-0.24482 *
DB	0.222	0.029882	DB	0.199	0.008536	DB	0.235	-0.03830	DB	0.19	-0.03021	DB	0.213	-0.00997
SDB	0.143	-0.08095	SDB	0.078	-0.20428 *	SDB	0.065	-0.12981	SDB	0.036	-0.33926 *	SDB	0.082	-0.18033 *
FB	0.032	-0.33911	FB	0.053	-0.35449 *	FB	0.035	-1.06132 *	FB	0.071	0	FB	0.046	-0.42427 *
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.056	-0.08195	LH	0.053	0.037117	LH	0.041	0.542738 *	LH	0.071	-0.69557 *	LH	0.053	0.0042
SGAR	0.794	-0.07395	SGAR	0.748	-0.19164 *	SGAR	0.688	-0.07070	SGAR	0.631	-0.03022	SGAR	0.724	-0.12245 *
SPACE	0.087	-0.16184	SPACE	0.078	-0.33219 *	SPACE	0.118	-0.10536	SPACE	0.119	-0.02541	SPACE	0.097	-0.19656 *
NOPARK	0.063	-0.19607 *	NOPARK	0.146	-0.23601 *	NOPARK	0.129	-0.15032	NOPARK	0.202	-0.14666	NOPARK	0.131	-0.20082 *
AGE	23.151	0.003141	AGE	24.209	-0.00211	AGE	23.529	-0.00088	AGE	23.476	0.001398	AGE	23.679	-0.00040
NOCH	0.111	-0.13904 *	NOCH	0.107	-0.12197 *	NOCH	0.135	-0.06662	NOCH	0.143	-0.08720	NOCH	0.121	-0.12182 *
CHP	0.159	-0.09225 *	CHP	0.155	-0.04090	CHP	0.094	-0.11350 *	CHP	0.119	-0.15765 *	CHP	0.133	-0.06720 *
SIZE	947.088	0.000652 *	SIZE	953.36	0.000385 *	SIZE	977.904	0.000623 *	SIZE	924.592	0.000447 *	SIZE	955.008	0.000485 *
BATH	1.024	0.123682	BATH	1.029	0.13268	BATH	1.041	-0.15290	BATH	1.024	0.110821	BATH	1.031	0.061691
A	0.071	-0.01814	A	0.049	0.046943	A	0.041	-0.11725	A	0.06	-0.12875	A	0.053	-0.02370
C	0.278	-0.03373	C	0.233	-0.03629	C	0.247	0.024764	C	0.167	-0.06905	C	0.237	-0.02979
D	0	0	D	0	0	D	0.018	0.080995	D	0.024	-0.15045	D	0.009	-0.06489
E	0.079	0.011807	E	0.121	-0.14066 *	E	0.094	-0.01059	E	0.095	-0.09328	E	0.101	-0.06934 *
F	0.008	0.210306	F	0.024	-0.17618 *	F	0.012	0.024616	F	0.012	0.304658	F	0.015	-0.07728 *
G	0	0	G	0	0	G	0	0	G	0	0	G	0	0
H	0	0	H	0.005	-0.14725	H	0	0	H	0	0	H	0.002	0.007808
I	0.008	0.659437 *	I	0.01	0.163131	I	0.035	0.365185 *	I	0.06	0.355165 *	I	0.024	0.266801 *
J	0.27	0.094968 *	J	0.18	0.006711	J	0.194	0.061854	J	0.131	-0.05518	J	0.196	0.020423
K	0.016	-0.03135	K	0.019	-0.12674	K	0.024	0.214323 *	K	0.06	-0.15281	K	0.026	0.017344
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0	0	P3	0	0	P3	0	0	P3	0	0	P3	0	0
P4	0.159	-0.40324 *	P4	0.131	-0.34912 *	P4	0.171	-0.47013 *	P4	0.214	-0.47390 *	P4	0.16	-0.42121 *
P5	0.206	-0.31414 *	P5	0.214	-0.29150 *	P5	0.224	-0.38085 *	P5	0.214	-0.29835 *	P5	0.215	-0.32472 *
P7	0.595	-0.33869 *	P7	0.626	-0.43252 *	P7	0.582	-0.45902 *	P7	0.524	-0.41724 *	P7	0.592	-0.43300 *
CONSTANT	1	10.23556 *	CONSTANT	1	10.86679 *	CONSTANT	1	10.80379 *	CONSTANT	1	10.72925 *	CONSTANT	1	10.74666 *
SAMPLE SIZE	126		SAMPLE SIZE	206		SAMPLE SIZE	170		SAMPLE SIZE	84		SAMPLE SIZE	586	
ADJUSTED R-SQUARED	0.77587		ADJUSTED R-SQUARED	0.63334		ADJUSTED R-SQUARED	0.69251		ADJUSTED R-SQUARED	0.67644		ADJUSTED R-SQUARED	0.66345	
F STATISTIC	19.03		F STATISTIC	15.16		F STATISTIC	16.22		F STATISTIC	8.23		F STATISTIC	45.36	

Q1 1986 1945-1970

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.347	-0.21841 *
TH	0.233	-0.28576 *
DB	0.11	0.007908
SDB	0.041	-0.13143 *
FB	0.105	-0.29782 *
FC	0.002	-0.11960
LH	0.124	-0.16665 *
SGAR	0.709	-0.16471 *
SPACE	0.059	-0.21273 *
NOPARK	0.183	-0.22323 *
AGE	23.521	0.000385
NOCH	0.157	-0.03154
CHP	0.133	-0.04186
SIZE	931.6	0.000461 *
BATH	1.026	-0.00645
A	0.014	-0.01428
C	0.143	-0.02822
D	0.003	-0.07520
E	0.129	-0.05610 *
F	0.019	-0.18625 *
G	0.005	-0.23361 *
H	0	0
I	0.017	0.047502
J	0.207	0.034757
K	0.071	-0.03267
P1	0	0
P2	0	0
P3	0	0
P4	0.01	-0.19680 *
P5	0.55	-0.10430 *
P7	0.276	-0.14389 *
CONSTANT	1	10.68753 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
580	0.73684	61.04
2413		

Q2 1986 1945-1970

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.306	-0.23777 *
TH	0.236	-0.30722 *
DB	0.123	-0.00271
SDB	0.082	-0.19225 *
FB	0.082	-0.32884 *
FC	0.004	-0.47325 *
LH	0.103	-0.10144 *
SGAR	0.692	-0.07440 *
SPACE	0.09	-0.12270 *
NOPARK	0.183	-0.19578 *
AGE	23.95	0.003593 *
NOCH	0.155	-0.11146 *
CHP	0.149	-0.03599 *
SIZE	945.598	0.000441 *
BATH	1.021	0.081342 *
A	0.013	0.026782
C	0.184	-0.02190
D	0.004	0.072174
E	0.102	-0.05479 *
F	0.025	-0.21347 *
G	0.007	-0.10497
H	0.001	0.142365
I	0.016	0.061854
J	0.236	0.048792 *
K	0.111	0.055739 *
P1	0	0
P2	0	0
P3	0.005	0.07708
P4	0.017	-0.12860 *
P5	0.498	-0.06742 *
P7	0.32	-0.13384 *
CONSTANT	1	10.49628 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
826	0.73947	81.74
638		

Q3 1986 1945-1970

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.329	-0.23559 *
TH	0.191	-0.32526 *
DB	0.119	-0.0159
SDB	0.078	-0.21565 *
FB	0.088	-0.29626 *
FC	0.009	-0.34983 *
LH	0.118	-0.18698 *
SGAR	0.708	-0.07892
SPACE	0.085	-0.17152 *
NOPARK	0.18	-0.15889 *
AGE	24.422	0.002627 *
NOCH	0.165	-0.06582 *
CHP	0.108	-0.04111
SIZE	956.576	0.000392 *
BATH	1.028	0.128886 *
A	0.016	-0.02001
C	0.146	-0.02540
D	0.009	-0.07607
E	0.119	-0.08502 *
F	0.027	-0.17495 *
G	0.005	-0.22132 *
H	0	0
I	0.033	-0.06750
J	0.218	0.042603 *
K	0.121	0.044377
P1	0	0
P2	0	0
P3	0	0
P4	0.024	-0.12051 *
P5	0.48	-0.06204 *
P7	0.293	-0.11987 *
CONSTANT	1	10.57648 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
638	0.73147	65.27
369		

Q4 1986 1945-1970

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.301	-0.24579 *
TH	0.192	-0.28240 *
DB	0.138	-0.02981
SDB	0.084	-0.20758 *
FB	0.079	-0.29524 *
FC	0.003	-0.18684
LH	0.089	-0.12036
SGAR	0.74	0.076273
SPACE	0.057	-0.10371
NOPARK	0.173	-0.00001
AGE	24.629	0.003395 *
NOCH	0.149	-0.06246 *
CHP	0.119	-0.04934
SIZE	961.074	0.000460 *
BATH	1.049	0.103703 *
A	0.016	0.10734
C	0.171	-0.04136
D	0.003	-0.01283
E	0.108	-0.08666 *
F	0.041	-0.19321 *
G	0.005	-0.26612 *
H	0	0
I	0.022	-0.21352 *
J	0.233	0.06697 *
K	0.089	-0.08326 *
P1	0	0
P2	0	0
P3	0	0
P4	0.016	-0.15812 *
P5	0.528	-0.09983 *
P7	0.298	-0.04187
CONSTANT	1	10.41443 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
369	0.73179	38.19
2413		

1986 1945-1970

OUTER SOUTH EAST

	WEIGHT	COEFF
SDH	0.321	-0.23979 *
TH	0.217	-0.31076 *
DB	0.121	-0.00585
SDB	0.072	-0.18357 *
FB	0.089	-0.30785 *
FC	0.005	-0.38468 *
LH	0.11	-0.15099 *
SGAR	0.708	-0.06839 *
SPACE	0.076	-0.14147 *
NOPARK	0.181	-0.15883 *
AGE	24.075	0.002475 *
NOCH	0.157	-0.07016 *
CHP	0.13	-0.04004 *
SIZE	947.502	0.000440 *
BATH	1.028	0.085962 *
A	0.015	0.029729
C	0.162	-0.02285 *
D	0.005	-0.02237
E	0.114	-0.06608 *
F	0.027	-0.17339 *
G	0.006	-0.16863 *
H	0	0.113717
I	0.022	-0.02120
J	0.224	0.04856 *
K	0.101	0.027033
P1	0	0
P2	0	0
P3	0.002	0.073686
P4	0.017	-0.13122 *
P5	0.51	-0.07485 *
P7	0.299	-0.11859 *
CONSTANT	1	10.52991 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
2413	0.72111	216.06
369		

OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF
SDH	0.318	-0.26987 *	SDH	0.332	-0.22912 *	SDH	0.378	-0.24914 *	SDH	0.37	-0.17970 *	SDH	0.346	-0.23251 *
TH	0.274	-0.35315 *	TH	0.279	-0.33053 *	TH	0.255	-0.32568 *	TH	0.248	-0.28406 *	TH	0.267	-0.32709 *
DB	0.052	-0.03292	DB	0.042	0.007876	DB	0.058	-0.04062	DB	0.073	0.025187	DB	0.053	-0.00414
SDB	0.03	-0.23707 *	SDB	0.042	-0.19881 *	SDB	0.036	-0.24765 *	SDB	0.042	-0.19046 *	SDB	0.038	-0.21382 *
FB	0.146	-0.53563 *	FB	0.118	-0.36704 *	FB	0.089	-0.41711 *	FB	0.095	-0.34320 *	FB	0.114	-0.41176 *
FC	0.005	-0.50830 *	FC	0.005	-0.44671 *	FC	0.006	-0.45047 *	FC	0.003	-0.29671 *	FC	0.005	-0.43836 *
LH	0.16	0.098809 *	LH	0.137	-0.01330	LH	0.099	0.004456	LH	0.113	-0.01380	LH	0.129	0.011461
SGAR	0.663	-0.11480 *	SGAR	0.672	-0.07253 *	SGAR	0.689	-0.06734 *	SGAR	0.67	-0.13847 *	SGAR	0.674	-0.08568 *
SPACE	0.05	-0.19045 *	SPACE	0.049	-0.18117 *	SPACE	0.057	-0.13804 *	SPACE	0.069	-0.17644 *	SPACE	0.054	-0.15688 *
NOPARK	0.235	-0.16581 *	NOPARK	0.235	-0.12982 *	NOPARK	0.214	-0.12552 *	NOPARK	0.217	-0.21006 *	NOPARK	0.227	-0.14125 *
AGE	24.877	0.003978 *	AGE	24.916	0.003924 *	AGE	25.236	0.003777 *	AGE	25.339	0.004081 *	AGE	25.05	0.004031 *
NOCH	0.096	-0.05708 *	NOCH	0.104	-0.07000 *	NOCH	0.098	-0.08251 *	NOCH	0.082	-0.05026	NOCH	0.097	-0.06795 *
CHP	0.139	-0.04397 *	CHP	0.13	-0.04682 *	CHP	0.105	-0.04108 *	CHP	0.12	-0.02235	CHP	0.124	-0.04574 *
SIZE	941.096	0.000490 *	SIZE	943.166	0.000530 *	SIZE	958.199	0.000498 *	SIZE	963.151	0.000598 *	SIZE	949.435	0.000528 *
BATH	1.035	0.020945	BATH	1.031	0.040385	BATH	1.045	0.023994	BATH	1.028	0.027985	BATH	1.035	0.027179
A	0.002	0.051486	A	0.004	0.128695	A	0.002	0.152578	A	0	0	A	0.002	0.09447
C	0.098	-0.01189	C	0.089	-0.02222	C	0.092	-0.03191	C	0.125	-0.00833	C	0.097	-0.01697
D	0.009	-0.08193	D	0.005	-0.03859	D	0.006	-0.11801	D	0.007	0.120715	D	0.007	-0.05128
E	0.187	-0.04876 *	E	0.185	-0.05020 *	E	0.175	-0.04238 *	E	0.161	-0.07221 *	E	0.179	-0.05555 *
F	0.025	-0.09643 *	F	0.016	-0.08407 *	F	0.021	-0.15207 *	F	0.014	-0.19126 *	F	0.019	-0.12515 *
G	0.004	-0.23435 *	G	0.001	-0.10637	G	0.006	-0.18442 *	G	0.005	-0.08677	G	0.004	-0.15905 *
H	0.01	0.063469	H	0.007	-0.06726	H	0.005	-0.01348	H	0.009	0.104503	H	0.007	-0.00102
I	0.019	0.035611	I	0.015	-0.02727	I	0.017	0.048972	I	0.014	-0.08119	I	0.016	0.002746
J	0.263	0.073269 *	J	0.229	0.057332 *	J	0.264	0.092172 *	J	0.233	0.035953	J	0.246	0.068344 *
K	0.024	0.05668	K	0.026	0.058518 *	K	0.025	0.081877 *	K	0.026	0.131776 *	K	0.025	0.073721 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.046	-0.12927 *	P3	0.042	-0.11723 *	P3	0.039	-0.15288 *	P3	0.054	-0.17392 *	P3	0.044	-0.13210 *
P4	0.008	-0.24930 *	P4	0.005	-0.27352 *	P4	0.015	-0.25431 *	P4	0.01	-0.27805 *	P4	0.009	-0.24565 *
P5	0.586	-0.15119 *	P5	0.609	-0.16639 *	P5	0.621	-0.16235 *	P5	0.583	-0.17089 *	P5	0.603	-0.16069 *
P7	0.014	-0.23230 *	P7	0.019	-0.31864 *	P7	0.017	-0.31415 *	P7	0.028	-0.30550 *	P7	0.018	-0.28775 *
CONSTANT	1	10.74434 *	CONSTANT	1	10.67475 *	CONSTANT	1	10.77983 *	CONSTANT	1	10.76519 *	CONSTANT	1	10.71767 *
SAMPLE SIZE	927		SAMPLE SIZE	1533		SAMPLE SIZE	1077		SAMPLE SIZE	576		SAMPLE SIZE	4113	
ADJUSTED R-SQUARED	0.8134		ADJUSTED R-SQUARED	0.78312		ADJUSTED R-SQUARED	0.77341		ADJUSTED R-SQUARED	0.77936		ADJUSTED R-SQUARED	0.77341	
F STATISTIC	140.19		F STATISTIC	191.75		F STATISTIC	127.65		F STATISTIC	73.54		F STATISTIC	484.97	

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.201	-0.23933 *	SDH	0.2	-0.26574 *	SDH	0.26	-0.30771 *	SDH	0.281	-0.19686 *	SDH	0.228	-0.25258 *
TH	0.198	-0.38470 *	TH	0.215	-0.39977 *	TH	0.193	-0.39568 *	TH	0.199	-0.19789 *	TH	0.204	-0.36694 *
DB	0.02	-0.11856	DB	0.017	-0.05043	DB	0.025	-0.05657	DB	0.027	0.127197	DB	0.021	-0.02510
SDB	0.007	-0.38539 *	SDB	0.013	-0.18608 *	SDB	0.011	-0.21368	SDB	0.032	-0.01210	SDB	0.014	-0.15587 *
FB	0.485	-0.39871 *	FB	0.461	-0.49531 *	FB	0.403	-0.46409 *	FB	0.357	-0.33022 *	FB	0.435	-0.43704 *
FC	0.017	-0.32615 *	FC	0.022	-0.50368 *	FC	0.019	-0.49733 *	FC	0.018	-0.26341 *	FC	0.02	-0.41949 *
LH	0.525	-0.10073	LH	0.498	0.030091	LH	0.428	0.040249	LH	0.403	0.017513	LH	0.471	-0.01176
SGAR	0.505	0.010414	SGAR	0.506	-0.06920	SGAR	0.517	-0.02587	SGAR	0.529	-0.12097	SGAR	0.512	-0.06046
SPACE	0.04	-0.01790	SPACE	0.039	-0.07850	SPACE	0.044	-0.01826	SPACE	0.059	-0.13729	SPACE	0.044	-0.06385
NOPARK	0.436	-0.04248	NOPARK	0.436	-0.12729 *	NOPARK	0.401	-0.07699	NOPARK	0.385	-0.20924 *	NOPARK	0.419	-0.11823 *
AGE	26.686	-0.00038	AGE	26.5	-0.00157	AGE	27.218	-0.00106	AGE	27.208	0.000591	AGE	26.833	-0.00111
NOCH	0.241	-0.03534	NOCH	0.236	-0.06466 *	NOCH	0.232	-0.12490 *	NOCH	0.195	-0.12576 *	NOCH	0.23	-0.07823 *
CHP	0.122	-0.02159	CHP	0.122	-0.03507	CHP	0.116	-0.04159	CHP	0.113	-0.11113 *	CHP	0.119	-0.04356 *
SIZE	851.663	0.000448 *	SIZE	845.251	0.000481 *	SIZE	894.58	0.000529 *	SIZE	867.351	0.000523 *	SIZE	862.634	0.000490 *
BATH	1.02	0.068082	BATH	1.026	0.083014	BATH	1.05	0.061989	BATH	1.027	0.155695	BATH	1.031	0.105937 *
A	0	0	A	0.002	-0.29490	A	0.003	-0.24692	A	0	0	A	0.001	-0.23724
C	0.033	-0.01301	C	0.054	-0.00674	C	0.066	0.065673	C	0.063	0.048575	C	0.054	0.045252
D	0.003	-0.21881	D	0.006	-0.07319	D	0.008	0.083027	D	0.018	0.060536	D	0.008	0.044914
E	0.116	-0.06208	E	0.094	-0.05528	E	0.091	-0.04055	E	0.127	-0.07485	E	0.103	-0.05430 *
F	0.046	-0.04052	F	0.041	-0.09722 *	F	0.052	-0.04242	F	0.036	-0.24201 *	F	0.044	-0.08256 *
G	0.02	0.043876	G	0.028	-0.16120 *	G	0.011	-0.03294	G	0.023	-0.03125	G	0.021	-0.08328 *
H	0.083	-0.00398	H	0.086	-0.05578	H	0.088	0.012345	H	0.068	-0.00385	H	0.083	-0.02163
I	0.168	0.129565 *	I	0.17	0.056028	I	0.141	0.086498	I	0.118	0.041249	I	0.154	0.078359 *
J	0.274	0.088094 *	J	0.279	0.074522 *	J	0.331	0.095188 *	J	0.33	0.076125 *	J	0.299	0.084122 *
K	0.112	0.05406	K	0.079	0.045188	K	0.08	0.136248 *	K	0.072	-0.01275	K	0.085	0.063623 *
P1	0.096	0.077855 *	P1	0.125	0.115886 *	P1	0.086	0.114512 *	P1	0.081	0.120637 *	P1	0.102	0.104284 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.076	-0.03197	P3	0.092	-0.04833	P3	0.099	-0.09464 *	P3	0.09	-0.08573	P3	0.09	-0.05878 *
P4	0.026	-0.02177	P4	0.015	-0.15947 *	P4	0.022	-0.09817	P4	0.041	-0.15074 *	P4	0.023	-0.08368 *
P5	0.198	-0.04483	P5	0.154	-0.05523 *	P5	0.099	-0.0452	P5	0.167	-0.05365	P5	0.151	-0.06664 *
P7	0	0	P7	0	0	P7	0	0	P7	0	0	P7	0	0
CONSTANT	1	10.71975 *	CONSTANT	1	10.88392 *	CONSTANT	1	10.85800 *	CONSTANT	1	10.80101 *	CONSTANT	1	10.82812 *
SAMPLE SIZE	303		SAMPLE SIZE	534		SAMPLE SIZE	362		SAMPLE SIZE	221		SAMPLE SIZE	1420	
ADJUSTED R-SQUARED	0.78344		ADJUSTED R-SQUARED	0.75917		ADJUSTED R-SQUARED	0.70766		ADJUSTED R-SQUARED	0.76841		ADJUSTED R-SQUARED	0.73109	
F STATISTIC	40.02		F STATISTIC	58.94		F STATISTIC	31.13		F STATISTIC	27.07		F STATISTIC	134.03	

SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.357	-0.22651 *	SDH	0.37	-0.30632 *	SDH	0.331	-0.17798 *	SDH	0.36	-0.10829 *	SDH	0.356	-0.22839 *
TH	0.203	-0.34760 *	TH	0.205	-0.39422 *	TH	0.183	-0.32034 *	TH	0.16	-0.24354 *	TH	0.191	-0.34814 *
DB	0.182	-0.01044	DB	0.169	-0.08121 *	DB	0.18	0.041833	DB	0.213	0.103631 *	DB	0.182	-0.01140
SDB	0.052	-0.19549 *	SDB	0.06	-0.23174 *	SDB	0.056	-0.17639 *	SDB	0.067	0.008162	SDB	0.058	-0.17607 *
FB	0.038	-0.28015 *	FB	0.064	-0.49803 *	FB	0.067	-0.25929 *	FB	0.04	-0.13021	FB	0.055	-0.32551 *
FC	0	0	FC	0.004	-0.45792 *	FC	0.003	-0.70057 *	FC	0.013	-0.11180	FC	0.004	-0.27720 *
LH	0.058	-0.06825	LH	0.08	0.076638	LH	0.093	-0.02800	LH	0.058	0.014897	LH	0.075	-0.00993
SGAR	0.773	-0.13517 *	SGAR	0.734	-0.02002	SGAR	0.728	-0.04683	SGAR	0.813	0.032636	SGAR	0.753	-0.04539
SPACE	0.076	-0.18349 *	SPACE	0.083	-0.12627 *	SPACE	0.073	-0.12535	SPACE	0.036	-0.04578	SPACE	0.071	-0.13151 *
NOPARK	0.12	-0.24273 *	NOPARK	0.155	-0.08333	NOPARK	0.177	-0.12930 *	NOPARK	0.129	-0.04970	NOPARK	0.149	-0.12261 *
AGE	24.234	0.001727	AGE	24.525	0.001759	AGE	24.126	0.002932 *	AGE	24.373	0.003251	AGE	24.335	0.002302 *
NOCH	0.23	-0.11088 *	NOCH	0.195	-0.09384 *	NOCH	0.23	-0.08742 *	NOCH	0.169	-0.10425 *	NOCH	0.207	-0.10070 *
CHP	0.206	-0.06281 *	CHP	0.167	-0.08456 *	CHP	0.124	-0.08728 *	CHP	0.133	-0.05050	CHP	0.159	-0.07941 *
SIZE	927.727	0.000512 *	SIZE	940.997	0.000334 *	SIZE	926.672	0.000459 *	SIZE	951.409	0.000568 *	SIZE	936.184	0.000418 *
BATH	1.038	0.08219	BATH	1.02	0.109775 *	BATH	1.011	0.132988 *	BATH	1.013	0.136823	BATH	1.02	0.131038 *
A	0.031	0.051343	A	0.032	0.031385	A	0.022	0.088938	A	0.027	-0.03797	A	0.028	0.048511
C	0.206	-0.05247	C	0.215	-0.05053 *	C	0.244	-0.02720	C	0.28	-0.01453	C	0.231	-0.02852 *
D	0.003	0.010359	D	0.006	-0.09975	D	0	0	D	0.004	-0.39673 *	D	0.004	-0.09766
E	0.117	-0.01456	E	0.097	-0.11677 *	E	0.112	-0.04028	E	0.102	-0.03714	E	0.106	-0.06112 *
F	0.027	-0.07759	F	0.026	-0.03188	F	0.037	-0.16575 *	F	0.036	-0.09594	F	0.031	-0.08241 *
G	0	0	G	0.018	-0.13228 *	G	0.006	-0.07049	G	0.004	-0.36616 *	G	0.009	-0.13718 *
H	0	0	H	0.002	-0.32973 *	H	0	0	H	0	0	H	0.001	-0.34439 *
I	0.021	0.020879	I	0.02	0.003484	I	0.022	0.059652	I	0.004	0.369921 *	I	0.018	0.02163
J	0.223	0.070009 *	J	0.205	0.041973	J	0.197	0.075129 *	J	0.196	0.086628 *	J	0.205	0.064447 *
K	0.086	0.07292	K	0.095	0.098257 *	K	0.087	0.122539 *	K	0.089	0.084233	K	0.09	0.098079 *
P1	0.007	-0.12124	P1	0.014	-0.01516	P1	0.003	0.133608	P1	0.009	-0.17165	P1	0.009	-0.04470
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.003	-0.61730 *	P3	0.002	-0.08697	P3	0	0	P3	0	0	P3	0.001	-0.38797 *
P4	0.076	-0.18897 *	P4	0.097	-0.09593 *	P4	0.062	-0.20585 *	P4	0.062	-0.18304 *	P4	0.078	-0.15594 *
P5	0.179	-0.11703 *	P5	0.171	-0.00808	P5	0.239	-0.10936 *	P5	0.191	-0.11330 *	P5	0.193	-0.06631 *
P7	0.667	-0.12230 *	P7	0.666	0.02268	P7	0.64	-0.05631	P7	0.684	-0.09569	P7	0.663	-0.04533 *
CONSTANT	1	10.40546 *	CONSTANT	1	10.40003 *	CONSTANT	1	10.28020 *	CONSTANT	1	10.07364 *	CONSTANT	1	10.32494 *
SAMPLE SIZE	291		SAMPLE SIZE	503		SAMPLE SIZE	356		SAMPLE SIZE	225		SAMPLE SIZE	1375	
ADJUSTED R-SQUARED	0.78995		ADJUSTED R-SQUARED	0.78321		ADJUSTED R-SQUARED	0.7553		ADJUSTED R-SQUARED	0.65615		ADJUSTED R-SQUARED	0.72273	
F STATISTIC	41.39		F STATISTIC	48.19		F STATISTIC	41.58		F STATISTIC	16.27		F STATISTIC	120.38	

q1 1986 1945-1970

WALES

SDH	0.385	-0.22524 *
TH	0.179	-0.30203 *
DB	0.137	0.01246
SDB	0.068	-0.14136
FB	0.051	-0.3243 *
FC	0	0
LH	0.316	0.082857
SGAR	0.641	0.002003
SPACE	0.103	-0.03989
NOPARK	0.222	-0.10349
AGE	24.308	0.002748
NOCH	0.162	-0.09137
CHP	0.077	-0.02470
SIZE	947.757	0.000637 *
BATH	1.009	0.022851
A	0.009	-0.02978
C	0.137	-0.11440
D	0.017	-0.30149 *
E	0.162	-0.08044
F	0.077	-0.14498
G	0.026	-0.20828
H	0	0
I	0	0
J	0.171	0.040298
K	0.017	-0.07186
P1	0	0
P2	0	0
P3	0.026	-0.15914
P4	0.171	-0.15625 *
P5	0.299	-0.13680 *
P7	0.179	-0.06831
CONSTANT	1	9.882792 *

q2 1986 1945-1970

WALES

SDH	0.428	-0.09895 *
TH	0.15	-0.16762 *
DB	0.117	0.026975
SDB	0.106	-0.2003 *
FB	0.039	-0.40958 *
FC	0	0
LH	0.3	0.121069 *
SGAR	0.611	-0.00966
SPACE	0.189	-0.11604
NOPARK	0.183	-0.07951
AGE	24.233	-0.00206
NOCH	0.133	-0.15711 *
CHP	0.061	-0.03177
SIZE	976.463	0.000422 *
BATH	1.044	0.192732 *
A	0.017	-0.09086
C	0.128	0.054066
D	0.006	0.256133
E	0.133	0.019834
F	0.067	-0.05090
G	0.022	-0.18339
H	0	0
I	0.017	0.100521
J	0.217	0.159635 *
K	0.039	0.075921
P1	0	0
P2	0	0
P3	0.028	-0.12301
P4	0.222	-0.15768 *
P5	0.294	-0.05448
P7	0.217	-0.12247 *
CONSTANT	1	9.90392 *

q3 1986 1945-1970

WALES

SDH	0.448	-0.31346 *
TH	0.127	-0.33400 *
DB	0.187	-0.16197 *
SDB	0.075	-0.17939 *
FB	0.03	-0.09398
FC	0	0
LH	0.254	-0.00838
SGAR	0.515	-0.01574
SPACE	0.172	-0.14819
NOPARK	0.276	-0.20864
AGE	24.418	-0.00386
NOCH	0.187	-0.00212
CHP	0.097	0.015366
SIZE	962.425	0.000665 *
BATH	1.022	0.109702
A	0.052	-0.00770
C	0.134	-0.04877
D	0.022	-0.27861 *
E	0.142	-0.05952
F	0.045	0.064143
G	0.022	-0.22913
H	0	0
I	0	0
J	0.164	0.146637 *
K	0.06	0.048162
P1	0	0
P2	0	0
P3	0.022	0.063649
P4	0.179	-0.05779
P5	0.373	-0.11578 *
P7	0.254	-0.13878 *
CONSTANT	1	10.03867 *

q4 1986 1945-1970

WALES

SDH	0.413	-0.09050
TH	0.175	-0.19232
DB	0.079	0.232727
SDB	0.079	0.284124 *
FB	0.032	-0.31475
FC	0	0
LH	0.222	-0.02387
SGAR	0.556	0.009732
SPACE	0.111	0.070867
NOPARK	0.286	-0.19135
AGE	25.397	0.007474
NOCH	0.206	-0.20917 *
CHP	0.143	-0.21720 *
SIZE	1000.314	0.000695
BATH	1	0.02635
A	0.032	0.046433
C	0.27	-0.1603
D	0.016	0.210573
E	0.19	-0.10312
F	0.095	-0.12218
G	0	0
H	0	0
I	0	0
J	0.095	0.034781
K	0.016	0.240721
P1	0	0
P2	0	0
P3	0	0
P4	0.27	-0.24594 *
P5	0.254	-0.15857
P7	0.333	-0.10457
CONSTANT	1	9.789552 *

1986 1945-1970

WALES

SDH	0.421	-0.20866 *
TH	0.154	-0.26652 *
DB	0.136	-0.02411
SDB	0.085	-0.15627 *
FB	0.038	-0.30392 *
FC	0	0
LH	0.281	0.06807 *
SGAR	0.585	-0.01661
SPACE	0.154	-0.09704
NOPARK	0.231	-0.13972 *
AGE	24.449	-0.00009
NOCH	0.164	-0.12235 *
CHP	0.085	-0.02693
SIZE	968.898	0.000578 *
BATH	1.024	0.018478
A	0.026	-0.01517
C	0.15	-0.02748
D	0.014	-0.15500 *
E	0.15	-0.03182
F	0.067	-0.06591
G	0.02	-0.19288 *
H	0	0
I	0.006	0.028768
J	0.176	0.120952 *
K	0.036	0.066045
P1	0	0
P2	0	0
P3	0.022	-0.10981
P4	0.204	-0.12247 *
P5	0.312	-0.10300 *
P7	0.233	-0.09879 *
CONSTANT	1	10.01122 *

SAMPLE SIZE	117	180	134	63	494
ADJUSTED R-SQUARED	0.69173	0.65276	0.68664	0.79912	0.66021
F STATISTIC	11.01	13.46	12.21	11.28	36.48

Q1 1986 1945-1970			Q2 1986 1945-1970			Q3 1986 1945-1970			Q4 1986 1945-1970			1986 1945-1970		
SCOTLAND			SCOTLAND			SCOTLAND			SCOTLAND			SCOTLAND		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.295	-0.1175 *	SDH	0.33	-0.14974 *	SDH	0.31	-0.14730 *	SDH	0.308	-0.10039	SDH	0.313	-0.13596 *
TH	0.208	-0.18038 *	TH	0.188	-0.20782 *	TH	0.224	-0.15010 *	TH	0.224	-0.15010 *	TH	0.208	-0.18431 *
DB	0.145	-0.00514	DB	0.105	-0.03907	DB	0.13	-0.07895 *	DB	0.168	-0.06879	DB	0.13	-0.04624 *
SDB	0.075	-0.06232	SDB	0.069	-0.12697 *	SDB	0.072	-0.07099	SDB	0.075	-0.08052	SDB	0.072	-0.09824 *
FB	0.133	-0.23110 *	FB	0.138	-0.25403 *	FB	0.108	-0.19502 *	FB	0.084	-0.25450 *	FB	0.12	-0.24055 *
FC	0	0	FC	0.007	-0.15187 *	FC	0.004	-0.34041 *	FC	0	0	FC	0.004	-0.21753 *
LH	0	0	LH	0.004	0.266765	LH	0.004	-0.22410	LH	0	0	LH	0.002	0.017198
SGAR	0.595	0.020913	SGAR	0.58	-0.04267	SGAR	0.581	-0.04996	SGAR	0.626	-0.05986	SGAR	0.589	-0.02768
SPACE	0.116	-0.06598	SPACE	0.12	-0.10111	SPACE	0.126	-0.11135	SPACE	0.103	-0.26802 *	SPACE	0.119	-0.10060 *
NOPARK	0.26	-0.09792	NOPARK	0.268	-0.13862 *	NOPARK	0.249	-0.15762 *	NOPARK	0.224	-0.29269 *	NOPARK	0.255	-0.14067 *
AGE	23.902	0.002009	AGE	24.612	0.001119	AGE	23.787	-0.00149	AGE	24.056	0.00248	AGE	24.119	0.000452
NOCH	0.197	-0.07172 *	NOCH	0.178	-0.11272 *	NOCH	0.144	-0.03494	NOCH	0.215	-0.08209	NOCH	0.175	-0.07607 *
CHP	0.075	-0.09457	CHP	0.112	-0.01974	CHP	0.101	-0.07365 *	CHP	0.065	-0.02183	CHP	0.095	-0.03984 *
SIZE	946.698	0.000505 *	SIZE	981.144	0.000498 *	SIZE	1002.5	0.000478 *	SIZE	977.409	0.000556 *	SIZE	980.612	0.000497 *
BATH	1.017	0.039135	BATH	1.033	-0.01111	BATH	1.051	0.134473 *	BATH	1.019	-0.00830	BATH	1.034	0.048513
A	0	0	A	0.025	-0.09098	A	0.007	0.067615	A	0	0	A	0.011	-0.02868
C	0.04	-0.04531	C	0.058	-0.01670	C	0.036	-0.04356	C	0.084	-0.17176 *	C	0.05	-0.07903 *
D	0.006	0.087325	D	0	0	D	0.004	-0.01879	D	0	0	D	0.002	0.023724
E	0.15	-0.14189 *	E	0.178	-0.12375 *	E	0.206	-0.19217 *	E	0.187	-0.03029	E	0.182	-0.13557 *
F	0.052	-0.05801	F	0.025	-0.1326 *	F	0.025	-0.10027	F	0.009	-0.05698	F	0.029	-0.09264 *
G	0.087	-0.26036 *	G	0.094	-0.14984 *	G	0.09	-0.22320 *	G	0.056	-0.18769	G	0.086	-0.19675 *
H	0	0	H	0	0	H	0	0	H	0	0	H	0	0
I	0.006	-0.09582	I	0.011	0.091605	I	0.007	0.242506	I	0	0	I	0.007	0.124626
J	0.156	0.11879 *	J	0.167	0.136232 *	J	0.13	0.06118	J	0.243	0.062983	J	0.162	0.10193 *
K	0.017	0.155053	K	0.036	0.134693 *	K	0.014	0.188061 *	K	0.028	-0.07810	K	0.024	0.1374 *
P1	0.006	0.11442	P1	0.014	0.005195	P1	0.011	0.076965	P1	0	0	P1	0.01	0.05575
P2	0.832	-0.11316 *	P2	0.808	-0.11021 *	P2	0.783	-0.11307 *	P2	0.804	-0.12208 *	P2	0.804	-0.12263 *
P3	0	0	P3	0	0	P3	0	0	P3	0	0	P3	0	0
P4	0	0	P4	0	0	P4	0	0	P4	0	0	P4	0	0
P5	0.006	-0.33707 *	P5	0.011	-0.2387 *	P5	0.004	0.057045	P5	0.019	0.241979	P5	0.008	-0.09688
P7	0	0	P7	0.007	-0.18997	P7	0.004	-0.51377 *	P7	0	0	P7	0.004	-0.33187 *
CONSTANT	1	10.08219 *	CONSTANT	1	10.26034 *	CONSTANT	1	10.21590 *	CONSTANT	1	10.20771 *	CONSTANT	1	10.20975 *
SAMPLE SIZE	173		SAMPLE SIZE	276		SAMPLE SIZE	277		SAMPLE SIZE	107		SAMPLE SIZE	833	
ADJUSTED R-SQUARED	0.79492		ADJUSTED R-SQUARED	0.79728		ADJUSTED R-SQUARED	0.7427		ADJUSTED R-SQUARED	0.79631		ADJUSTED R-SQUARED	0.76809	
F STATISTIC	28.78		F STATISTIC	41.06		F STATISTIC	29.45		F STATISTIC	15.82		F STATISTIC	99.41	

Q1 1986 1945-1970 Q2 1986 1945-1970 Q3 1986 1945-1970 Q4 1986 1945-1970 1986 1945-1970

NORTHERN IRELAND			NORTHERN IRELAND			NORTHERN IRELAND			NORTHERN IRELAND		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.454	-0.13147 *	0.453	-0.23895 *	0.412	-0.21717 *	0.425	-0.21173 *	0.437	-0.19390 *	
TH	0.177	-0.30259 *	0.208	-0.40828 *	0.211	-0.44485 *	0.276	-0.33564 *	0.211	-0.37194 *	
DB	0.135	0.126681 *	0.155	0.036041	0.191	-0.00725	0.138	-0.00199	0.16	0.055338	
SDB	0.071	-0.05175	0.078	-0.25058 *	0.098	-0.21197 *	0.069	-0.12728	0.081	-0.16442 *	
FB	0	0	0.008	-0.46104 *	0.01	-0.12679	0	0	0.006	-0.25560 *	
FC	0	0	0	0	0	0	0	0	0	0	
LH	0.851	0.100247 *	0.882	0.180958 *	0.804	0.105173 *	0.828	0.077483	0.845	0.114847 *	
SGAR	0.582	0.022291	0.571	-0.08758	0.559	0.017	0.529	0	0.564	-0.06390	
SPACE	0.149	-0.05587	0.212	-0.21738	0.176	-0.10423	0.23	-0.03243	0.191	-0.16676 *	
NOPARK	0.262	-0.09272	0.204	-0.21160	0.25	-0.12970	0.241	-0.17562 *	0.235	-0.19974 *	
AGE	26.411	-0.00119	26.098	0.002174	25.809	-0.00181	28.253	0.000502	26.353	0.000426	
NOCH	0.099	-0.02668	0.159	-0.11111 *	0.132	-0.08139	0.184	-0.13904 *	0.142	-0.09885 *	
CHP	0.113	-0.03373 *	0.159	-0.02105	0.167	-0.02113	0.138	-0.08340	0.149	-0.03027	
SIZE	993.886	0.000645 *	979.425	0.000600 *	957.498	0.000790 *	996.869	0.000664 *	978.071	0.000656 *	
BATH	1.028	0.065983	1.016	-0.08078	1.005	0.040622	1.023	0.216726	1.016	-0.01803	
CONSTANT	1	9.553323 *	1	9.813861 *	1	9.599455 *	1	9.476603 *	1	9.742707 *	

1	SAMPLE SIZE	141	SAMPLE SIZE	245	SAMPLE SIZE	204	SAMPLE SIZE	87	SAMPLE SIZE	677
4	ADJUSTED R-SQUARED	0.73356	0.72552	0.71448	0.71448	0.71492	0.71492	0.71911	0.71911	
CO	F STATISTIC	30.65	47.07	37.28	37.28	18.97	18.97	124.62	124.62	

TABLE E6: 1919-1944 HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

		1919-1944 NORTH			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	106.029	100.593	101.154
	Q2	100.000	97.673	95.759	99.386
	Q3	100.000	98.941	101.173	99.522
	Q4	100.000	98.987	94.613	99.047
	1986	100.000	100.189	98.170	99.820

		1919-1944 YORKSHIRE & HUMBERSIDE			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	104.666	106.975	116.829
	Q2	100.000	105.003	106.175	118.069
	Q3	100.000	103.464	104.773	115.236
	Q4	100.000	102.011	104.419	110.773
	1986	100.000	103.964	105.597	115.726

		1919-1944 NORTH WEST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	100.321	102.710	104.260
	Q2	100.000	99.194	100.631	103.420
	Q3	100.000	100.403	102.449	103.352
	Q4	100.000	100.219	102.046	104.369
	1986	100.000	99.950	101.857	103.688

		1919-1944 EAST MIDLANDS			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	101.857	104.901	105.631
	Q2	100.000	102.033	104.615	104.326
	Q3	100.000	101.922	104.274	105.113
	Q4	100.000	99.784	105.308	104.827
	1986	100.000	101.630	104.528	104.899

		1919-1944 WEST MIDLANDS			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
	Q1	100.000	102.536	102.193	110.516
	Q2	100.000	101.851	102.795	108.769
	Q3	100.000	101.482	104.083	109.342
	Q4	100.000	101.424	102.268	108.583
	1986	100.000	101.794	102.580	109.229

		1919-1944 EAST ANGLIA			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	110.630	113.923	122.853	
Q2	100.000	109.215	116.056	129.139	
Q3	100.000	110.999	111.963	123.389	
Q4	100.000	103.030	104.149	113.843	
1986	100.000	109.208	112.735	123.942	

		1919-1944 OUTER SOUTH EAST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	100.633	106.217	114.818	
Q2	100.000	101.037	106.275	113.761	
Q3	100.000	101.395	106.758	115.028	
Q4	100.000	99.132	104.248	112.205	
1986	100.000	100.848	106.176	114.158	

		1919-1944 OUTER METROPOLITAN			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.608	110.174	117.529	
Q2	100.000	106.442	111.591	119.119	
Q3	100.000	105.845	111.613	119.309	
Q4	100.000	106.072	111.768	120.901	
1986	100.000	106.167	111.667	119.217	

		1919-1944 GREATER LONDON			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	105.543	112.816	119.085	
Q2	100.000	104.706	112.515	118.883	
Q3	100.000	105.170	112.494	118.845	
Q4	100.000	105.364	112.728	120.155	
1986	100.000	105.161	112.448	118.747	

		1919-1944 SOUTH WEST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.688	110.431	113.670	
Q2	100.000	105.476	111.050	115.253	
Q3	100.000	106.229	111.089	115.229	
Q4	100.000	106.936	111.795	116.827	
1986	100.000	105.647	111.006	115.003	

		1919-1944 WALES			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	100.546	104.818	104.379	
Q2	100.000	101.341	106.199	107.788	
Q3	100.000	101.036	102.259	104.468	
Q4	100.000	103.692	105.725	110.104	
1986	100.000	101.364	104.722	106.286	

		1919-1944 SCOTLAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.284	105.093	98.521	
Q2	100.000	103.097	105.290	100.516	
Q3	100.000	104.249	107.754	101.133	
Q4	100.000	103.613	106.543	99.339	
1986	100.000	103.345	106.064	100.337	

		1919-1944 NORTHERN IRELAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	98.169	99.929	95.268	
Q2	100.000	99.204	101.087	96.811	
Q3	100.000	99.503	100.606	98.905	
Q4	100.000	101.992	103.908	101.362	
1986	100.000	99.376	101.015	97.601	

	Q1 1986 1919-1944			Q2 1986 1919-1944			Q3 1986 1919-1944			Q4 1986 1919-1944			1986 1919-1944		
	NORTHERN			NORTHERN			NORTHERN			NORTHERN			NORTHERN		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.638	-0.578536 *		0.584	0.190777		0.562	-0.240842 *		0.574	-0.10756		0.59	-0.219538 *	
TH	0.203	-0.730425 *		0.258	-0.062961		0.274	-0.455711 *		0.34	-0.139054		0.263	-0.378364 *	
DB	0.043	-0.12498		0.034	0.490541 *		0	0		0.043	1.698761 *		0.029	0.185312	
SDB	0.058	-0.658079 *		0.022	0.186028		0.041	0.082237		0	0		0.032	-0.057717	
FB	0.029	-0.754882		0.045	-0.075044		0.027	-0.537198 *		0.021	0.28241		0.032	-0.489637 *	
FC	0.014	-0.928871 *		0	0		0.014	0.005112		0	0		0.007	-0.168957	
LH	0.087	-0.011988		0.124	0.019872		0.082	-0.026248		0.043	-0.125088		0.09	-0.01077	
SGAR	0.536	0.020786		0.517	-0.138972		0.452	-0.02591		0.532	0		0.507	-0.087263	
SPACE	0.101	-0.195935		0.09	-0.312345		0.11	-0.023171		0.106	-0.025744		0.101	-0.194867 *	
NOPARK	0.319	-0.235745		0.36	-0.275865		0.425	-0.145466		0.362	-0.046798		0.367	-0.258705 *	
AGE	56.072	-0.005231		56.191	-0.008392		56.397	-0.003605		57.936	-0.011441		56.511	-0.004113	
NOCH	0.217	-0.013233		0.247	-0.040979		0.233	-0.057185		0.34	-0.334661 *		0.252	-0.106999 *	
CHP	0.188	0.087248		0.079	0.120162		0.11	-0.145741		0.106	-0.122225		0.119	-0.036027	
SIZE	1014.07	0.00057235 *		977.347	0.00077199 *		1001.43	0.00077849 *		1046.49	0.00071971 *		1004.47	0.00057113 *	
BATH	0.986	0.223714		1.022	-0.333959 *		1	0		1	0		1.004	-0.091373	
A	0	0		0.011	-0.38915		0	0		0	0		0.004	-0.156914	
C	0.391	0.10511		0.337	-0.11772		0.329	-0.097396		0.319	-0.015116		0.345	-0.085898	
D	0	0		0.067	-0.032034		0.082	-0.157637		0.043	0.059186		0.05	-0.082824	
E	0.072	0.258103 *		0.169	-0.213739 *		0.055	-0.07273		0.064	-0.04296		0.097	-0.145985 *	
F	0.058	-0.018834		0.022	-0.131328		0.068	-0.077876		0.043	-0.276164		0.047	-0.144044 *	
G	0.029	-0.013708		0.011	0.018686		0.014	-0.283404		0.043	-1.06198 *		0.022	-0.214235 *	
H	0	0		0	0		0	0		0	0		0	0	
I	0.029	-0.200059		0.022	0.070288		0.027	0.13072		0.021	0.683448 *		0.025	0.021037	
J	0.29	0.19132 *		0.202	-0.002485		0.301	0.011835		0.319	0.130721		0.27	0.062438	
K	0.029	0.301331 *		0.022	0.4372		0.055	-0.113629		0.064	0.112229		0.04	0.032996	
P1	0	0		0	0		0	0		0	0		0	0	
P2	0	0		0	0		0	0		0	0		0	0	
P3	0.29	0.367457 *		0.236	0.681588 *		0.233	-0.193934		0.34	0.220463		0.266	0.095398	
P4	0.594	0.250393		0.64	0.713201 *		0.548	-0.097531		0.426	0.099576		0.568	0.125665	
P5	0.029	0.464066 *		0.079	0.691369 *		0.11	-0.170142		0.149	0.098283		0.086	0.127394	
P7	0.043	0.68895 *		0.034	1.139217 *		0.027	0.00052321		0.021	-1.327152 *		0.032	0.281567 *	
CONSTANT	1	9.905286 *		1	9.640422 *		1	10.112209 *		1	10.149521 *		1	10.253827 *	
SAMPLE SIZE	69			89			73			47			278		
ADJUSTED R-SQUARED	0.88816			0.77604			0.81005			0.78968			0.73975		
F STATISTIC	21.77			12.29			13.28			8.51			29.12		

Q1 1986 1919-1944

Q2 1986 1919-1944

Q3 1986 1919-1944

Q4 1986 1919-1944

1986 1919-1944

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	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.557	-0.414094 *	0.627	-0.334886 *	0.596	-0.345219 *	0.604	-0.406366 *	0.604	-0.406366 *
TH	0.336	-0.50156 *	0.269	-0.430812 *	0.305	-0.408287 *	0.356	-0.540045 *	0.356	-0.540045 *
DB	0.016	-0.225504	0.033	-0.063411	0.01	-0.239423	0.01	0.107206	0.01	0.107206
SDB	0	0	0	0	0.005	-0.372871	0	0	0	0
FB	0	0	0	0	0	0	0	0	0	0
FC	0	0	0	0	0	0	0	0	0	0
LH	0.107	0.033086	0.066	0.016654	0.059	-0.011813	0.059	-0.003365	0.059	-0.003365
SGAR	0.467	0.263441	0.514	0.002405	0.488	0.05598	0.525	0.040704	0.525	0.040704
SPACE	0.18	0.064901	0.16	-0.127691	0.182	0.004687	0.129	-0.0003775	0.129	-0.0003775
NOPARK	0.336	0.046561	0.283	-0.18892 *	0.296	-0.07674	0.317	-0.06789	0.317	-0.06789
AGE	56.025	-0.006093	55.443	-0.008571 *	55.197	-0.003747	53.921	-0.002374	53.921	-0.002374
NOCH	0.434	-0.133533 *	0.354	-0.066966 *	0.419	-0.136845 *	0.347	-0.064692	0.347	-0.064692
CHP	0.049	-0.077485	0.094	-0.056918	0.079	-0.059468	0.059	-0.1263	0.059	-0.1263
SIZE	948.737	0.00052309 *	966.628	0.00060207 *	931.086	0.00057814 *	881.559	0.00067956 *	881.559	0.00067956 *
BATH	1.025	0.043823	1.009	0.137775	1.005	0.34071	1.02	-0.137697	1.02	-0.137697
A	0	0	0.005	-0.180477	0.02	-0.178682	0	0	0	0
C	0.352	-0.078856	0.269	0.0014	0.261	-0.028091	0.297	0.014778	0.297	0.014778
D	0.041	-0.183881	0.038	0.005643	0.039	-0.037494	0.01	-0.053419	0.01	-0.053419
E	0.09	-0.06351	0.057	-0.061469	0.094	-0.027429	0.04	-0.049073	0.04	-0.049073
F	0.082	-0.238078 *	0.113	-0.150178 *	0.064	-0.140022 *	0.079	-0.134973	0.079	-0.134973
G	0.016	-0.197904	0.057	-0.150416 *	0.03	-0.184356 *	0.02	0.08974	0.02	0.08974
H	0.016	-0.19382	0.019	-0.262522 *	0.02	-0.028256	0.02	-0.176228	0.02	-0.176228
I	0	0	0.019	-0.076116	0.034	-0.01317	0.03	0.01087	0.03	0.01087
J	0.23	0.01703	0.274	0.071091	0.261	0.040424	0.307	0.05053	0.307	0.05053
K	0.049	0.105474	0.028	-0.065725	0.034	0.079422	0.079	0.018865	0.079	0.018865
P1	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0
P3	0.139	-0.097247	0.127	-0.05465	0.222	-0.143369 *	0.208	-0.074325	0.208	-0.074325
P4	0.516	-0.17163 *	0.524	-0.145241 *	0.414	-0.193011 *	0.416	-0.150586 *	0.416	-0.150586 *
P5	0.123	-0.171925 *	0.108	-0.001449	0.099	-0.109716	0.069	0.00010505	0.069	0.00010505
P7	0.09	0.006258	0.085	0.001131	0.118	-0.044953	0.109	-0.061291	0.109	-0.061291
CONSTANT	1	10.321506 *	1	10.384625 *	1	9.958263 *	1	10.354713 *	1	10.354713 *
SAMPLE SIZE	122		212		203		101		101	
ADJUSTED R-SQUARED	0.77154		0.75183		0.74366		0.69436		0.69436	
F STATISTIC	18.03		25.58		22.7		10.09		10.09	
SAMPLE SIZE	638									
ADJUSTED R-SQUARED	0.74941									
F STATISTIC	71.56									

NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.69	-0.223812 *	SDH	0.647	-0.285154 *	SDH	0.627	-0.326716 *	SDH	0.756	-0.358673 *	SDH	0.667	-0.303255 *
TH	0.198	-0.332459 *	TH	0.192	-0.435557 *	TH	0.213	-0.452353 *	TH	0.112	-0.586445 *	TH	0.187	-0.450269 *
DB	0.034	0.217808 *	DB	0.032	-0.05358	DB	0.033	-0.037325	DB	0.03	-0.13794	DB	0.033	0.00011467
SDB	0.007	-0.114426	SDB	0.005	-0.272704	SDB	0.014	-0.20048 *	SDB	0.005	-0.237841	SDB	0.008	-0.204497 *
FB	0	0	FB	0.007	-0.488078 *	FB	0.003	-0.623414 *	FB	0	0	FB	0.003	-0.519136 *
FC	0	0	FC	0.005	-0.359409 *	FC	0.003	-0.897675 *	FC	0	0	FC	0.002	-0.534072 *
LH	0.336	0.018075	LH	0.309	0.028043	LH	0.307	-0.001159	LH	0.274	0.066114 *	LH	0.309	0.013549
SGAR	0.414	-0.011332	SGAR	0.446	-0.155095 *	SGAR	0.453	-0.117069	SGAR	0.558	-0.0145	SGAR	0.459	-0.115626 *
SPACE	0.194	-0.074729	SPACE	0.182	-0.266302 *	SPACE	0.141	-0.192424 *	SPACE	0.142	-0.111087	SPACE	0.167	-0.212316 *
NOPARK	0.354	-0.138415 *	NOPARK	0.351	-0.283366 *	NOPARK	0.376	-0.21938 *	NOPARK	0.284	-0.183884	NOPARK	0.348	-0.244493 *
AGE	54.72	-0.00658 *	AGE	55.266	-0.003804	AGE	54.497	-0.004671 *	AGE	54.411	0.002329	AGE	54.795	-0.003853 *
NOCH	0.384	-0.118205 *	NOCH	0.337	-0.127468 *	NOCH	0.301	-0.105899 *	NOCH	0.294	-0.156057 *	NOCH	0.33	-0.123962 *
CHP	0.026	-0.070455 *	CHP	0.042	-0.002356	CHP	0.041	-0.044373	CHP	0.056	-0.026612	CHP	0.04	-0.032971
SIZE	959.524	0.00067138	SIZE	989.255	0.0005237 *	SIZE	970.323	0.00063011 *	SIZE	1017.61	0.00050942 *	SIZE	981.925	0.00055984 *
BATH	1	-0.026429	BATH	1.014	0.10213	BATH	1.017	-0.067074	BATH	1.02	-0.580678 *	BATH	1.013	-0.151577 *
A	0.004	0.069954	A	0.005	0.260268	A	0.011	0.179826	A	0.01	0.185865	A	0.007	0.213853 *
C	0.257	-0.049686	C	0.266	-0.075151 *	C	0.251	-0.055956	C	0.239	-0.127493 *	C	0.256	-0.068456 *
D	0.019	-0.03715	D	0.053	-0.144833 *	D	0.041	-0.195941 *	D	0.041	-0.08681	D	0.04	-0.14314 *
E	0.049	-0.076623	E	0.042	-0.062297	E	0.069	0.009855	E	0.051	-0.119538	E	0.052	-0.044485
F	0.052	-0.147364 *	F	0.072	-0.164836 *	F	0.052	-0.168692 *	F	0.076	-0.084345	F	0.063	-0.149188 *
G	0.03	-0.008249	G	0.051	-0.109455 *	G	0.036	-0.178143 *	G	0.03	-0.186343 *	G	0.039	-0.121314 *
H	0.011	-0.202604	H	0.009	-0.116649	H	0.008	-0.265283 *	H	0.005	-0.378938 *	H	0.009	-0.213798 *
I	0.03	0.01456	I	0.028	-0.038363	I	0.019	-0.028325	I	0.03	-0.128194	I	0.026	-0.047768
J	0.362	0.032787	J	0.286	0.026368	J	0.318	0.073895 *	J	0.335	0.075713	J	0.319	0.049901 *
K	0.049	-0.023427	K	0.037	-0.015544	K	0.055	0.050581	K	0.056	-0.009895	K	0.048	0.006464
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.16	-0.089695 *	P3	0.203	-0.119835 *	P3	0.144	-0.105898 *	P3	0.147	-0.120868 *	P3	0.168	-0.104443 *
P4	0.149	-0.119562 *	P4	0.18	-0.142996 *	P4	0.199	-0.103221 *	P4	0.162	-0.174965 *	P4	0.176	-0.12647 *
P5	0.231	-0.07618 *	P5	0.194	-0.059057 *	P5	0.262	-0.030094	P5	0.203	-0.087595 *	P5	0.223	-0.047757 *
P7	0.142	-0.064168	P7	0.129	-0.071735 *	P7	0.174	-0.090402 *	P7	0.168	-0.029918	P7	0.151	-0.064109 *
CONSTANT	1	10.32559 *	CONSTANT	1	10.428629 *	CONSTANT	1	10.511324 *	CONSTANT	1	10.793164 *	CONSTANT	1	10.62167 *
SAMPLE SIZE	268		SAMPLE SIZE	433		SAMPLE SIZE	362		SAMPLE SIZE	197		SAMPLE SIZE	1260	
ADJUSTED R-SQUARED	0.80631		ADJUSTED R-SQUARED	0.81574		ADJUSTED R-SQUARED	0.80072		ADJUSTED R-SQUARED	0.78208		ADJUSTED R-SQUARED	0.79812	
F STATISTIC	42.17		F STATISTIC	66.95		F STATISTIC	51.02		F STATISTIC	27.05		F STATISTIC	172.63	

EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS		
WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.63	-0.217916 *	0.537	-0.262257 *	0.585	-0.236926 *	0.508	-0.162512 *	0.568	-0.227446 *	
TH	0.165	-0.367317 *	0.176	-0.416766 *	0.171	-0.352154 *	0.123	-0.32202 *	0.164	-0.379648 *	
DB	0.035	0.029538	0.04	0.005757	0.097	-0.008536	0.054	0.14417	0.056	0.027947	
SDB	0.02	-0.09021	0.015	0.099871	0.005	0.58966 *	0.031	0.131985	0.016	0.080537	
FB	0	0	0	0	0	0	0	0	0	0	
FC	0	0	0.004	-0.758843 *	0	0	0.008	0.348937	0.002	-0.152972	
LH	0.005	-0.031066	0.018	0.041366	0.005	-0.090612	0.015	0.07378	0.011	0.005109	
SGAR	0.395	-0.221328 *	0.471	-0.142748	0.461	0.00553	0.469	-0.12118	0.449	-0.149459 *	
SPACE	0.155	-0.227245 *	0.132	-0.294363 *	0.152	-0.115744	0.154	-0.225963 *	0.147	-0.24354 *	
NOPARK	0.415	-0.324352 *	0.382	-0.243126 *	0.369	-0.087769	0.315	-0.241125 *	0.376	-0.257092 *	
AGE	56.255	-0.008339 *	55.93	-0.001075	55.687	-0.010576 *	55.577	-0.002798	55.889	-0.006774 *	
NOCH	0.24	-0.128933 *	0.243	-0.127413 *	0.221	-0.085215 *	0.185	-0.202705 *	0.227	-0.130931 *	
CHP	0.11	-0.060799	0.092	-0.081873	0.083	-0.035455	0.115	-0.096595	0.098	-0.072972 *	
SIZE	987.817	0.00062338 *	978.924	0.00047358 *	965.566	0.00059598 *	1013.51	0.00048122 *	983.047	0.00052525 *	
BATH	1.04	-0.021864	1.022	-0.045909	1.018	0.016831	1.023	0.354117 *	1.026	0.00044404	
A	0.015	-0.225915	0.015	0.021902	0.014	0.14089	0.015	-0.220031	0.015	-0.023566	
C	0.41	-0.065871	0.415	0.008623	0.406	-0.072211	0.415	-0.063	0.411	-0.045541	
D	0.045	-0.211978 *	0.074	-0.113177	0.051	-0.332378 *	0.015	-0.371237 *	0.051	-0.219649 *	
E	0.05	-0.111201	0.055	-0.002002	0.06	-0.231315 *	0.038	-0.1396	0.053	-0.110109 *	
F	0.07	-0.129698	0.055	0.016547	0.065	-0.066554	0.031	0.014183	0.057	-0.068313	
G	0.015	-0.139967	0.007	0.177105	0	0	0	0	0.006	-0.073742	
H	0.025	-0.035508	0.029	0.141917	0.06	-0.101492	0.023	-0.075757	0.035	-0.0002005	
I	0.02	-0.069557	0.018	-0.028994	0.032	-0.0952	0.031	-0.107008	0.024	-0.061552	
J	0.22	0.069874	0.217	0.148282 *	0.171	0.054153	0.231	0.036771	0.208	0.082056 *	
K	0	0	0.022	0.092168	0.009	0.116022	0.054	0.091422	0.018	0.081519	
P1	0	0	0	0	0	0	0	0	0	0	
P2	0	0	0	0	0	0	0	0	0	0	
P3	0.185	-0.203457	0.132	-0.067366	0.194	-0.252485 *	0.185	-0.156454	0.17	-0.146157 *	
P4	0.29	-0.25953 *	0.298	-0.218758 *	0.267	-0.395536 *	0.354	-0.198526	0.297	-0.263316 *	
P5	0.36	-0.192575	0.368	-0.065798	0.373	-0.246126 *	0.308	-0.103905	0.358	-0.136415 *	
P7	0.145	-0.270066 *	0.18	-0.239323 *	0.147	-0.395717 *	0.108	-0.288856 *	0.151	-0.271732 *	
CONSTANT	1	10.813508	1	10.407873 *	1	10.846804 *	1	10.150575 *	1	10.725325 *	

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
200	0.70297	19.11	272	0.7299	27.15	217	0.74413	25.16	130	0.71982	13.27
819	0.72116	76.56									

Q1 1986 1919-1944			Q2 1986 1919-1944			Q3 1986 1919-1944			Q4 1986 1919-1944			1986 1919-1944		
WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.569	-0.163226 *	SDH	0.632	-0.241497 *	SDH	0.636	-0.248589 *	SDH	0.648	-0.29548 *	SDH	0.624	-0.243262 *
TH	0.222	-0.308296 *	TH	0.2	-0.372959 *	TH	0.204	-0.410081 *	TH	0.145	-0.409084 *	TH	0.196	-0.383425 *
DB	0.005	0.265518	DB	0.024	0.164966 *	DB	0.019	0.22285 *	DB	0.028	-0.155217	DB	0.019	0.136797 *
SDB	0.009	0.140024	SDB	0	0	SDB	0.006	-0.26734	SDB	0	0	SDB	0.004	-0.103852
FB	0.009	-0.31669 *	FB	0.005	-0.433285 *	FB	0.009	-0.702127 *	FB	0.011	-0.558218 *	FB	0.008	-0.533079 *
FC	0	0	FC	0.007	-0.318076 *	FC	0	0	FC	0	0	FC	0.003	-0.240301 *
LH	0.065	0.019487	LH	0.112	0.030089	LH	0.091	0.050649	LH	0.089	-0.085982	LH	0.093	0.009717
SGAR	0.542	0.019836	SGAR	0.606	-0.068342	SGAR	0.536	-0.009489	SGAR	0.508	-0.049172	SGAR	0.559	-0.056237
SPACE	0.125	-0.084008	SPACE	0.114	-0.155588 *	SPACE	0.15	-0.091127	SPACE	0.151	-0.164066	SPACE	0.132	-0.142671 *
NOPARK	0.292	-0.076469	NOPARK	0.238	-0.192705 *	NOPARK	0.285	-0.150711	NOPARK	0.291	-0.176649 *	NOPARK	0.27	-0.172978 *
AGE	54.13	-0.006116 *	AGE	54.223	-0.001329	AGE	53.621	-0.003932	AGE	53.117	-0.002198	AGE	53.862	-0.003234 *
NOCH	0.352	-0.145987 *	NOCH	0.347	-0.11151 *	NOCH	0.382	-0.104598 *	NOCH	0.296	-0.146285 *	NOCH	0.35	-0.121933 *
CHP	0.088	-0.159124 *	CHP	0.069	-0.056658	CHP	0.085	-0.069809	CHP	0.073	-0.093207	CHP	0.078	-0.089783 *
SIZE	972.947	0.00072149 *	SIZE	965.156	0.00054520 *	SIZE	947.931	0.00053811 *	SIZE	976.754	0.00052033 *	SIZE	963.627	0.00056524 *
BATH	1.019	0.130527	BATH	1.01	0.086013	BATH	1.016	0.241846 *	BATH	1.017	-0.05525	BATH	1.014	0.074347
A	0	0	A	0.01	-0.359944 *	A	0.013	-0.351317 *	A	0.006	0.084142	A	0.008	-0.305705 *
C	0.287	-0.058903	C	0.299	-0.114626 *	C	0.304	-0.100021 *	C	0.296	-0.035899	C	0.298	-0.085352 *
D	0.065	-0.173573 *	D	0.045	-0.220899 *	D	0.066	-0.191969 *	D	0.045	-0.236332 *	D	0.055	-0.215733 *
E	0.069	-0.079585	E	0.093	-0.140335 *	E	0.078	-0.159153 *	E	0.045	-0.187331 *	E	0.077	-0.139938 *
F	0.056	-0.134636 *	F	0.052	-0.204694 *	F	0.063	-0.19891 *	F	0.095	-0.096588	F	0.063	-0.159158 *
G	0.009	-0.068434	G	0.024	-0.269755 *	G	0.05	-0.125054	G	0.017	-0.127219	G	0.027	-0.158845 *
H	0.069	-0.182149 *	H	0.038	-0.277592 *	H	0.034	-0.336128 *	H	0.017	-0.099916	H	0.04	-0.261127 *
I	0.009	0.042878	I	0.026	-0.02637	I	0.028	-0.056373	I	0.028	-0.059035	I	0.024	-0.044019
J	0.306	0.092555 *	J	0.28	-0.002637	J	0.232	-0.009103	J	0.307	0.024344	J	0.276	0.018093
K	0	0	K	0.019	-0.002355	K	0.016	0.11355	K	0.017	0.058063	K	0.014	0.060283
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.278	-0.111708 *	P3	0.29	-0.11799 *	P3	0.292	-0.060619	P3	0.246	-0.091116	P3	0.281	-0.102323 *
P4	0.25	-0.119402 *	P4	0.221	-0.149221 *	P4	0.232	-0.084135 *	P4	0.212	-0.12794 *	P4	0.228	-0.129718 *
P5	0.241	-0.04625	P5	0.259	-0.08764 *	P5	0.266	-0.003668	P5	0.268	-0.063809	P5	0.259	-0.059808 *
P7	0.093	-0.009846	P7	0.105	0.028159	P7	0.056	0.0028	P7	0.089	-0.080305	P7	0.086	-0.009691
CONSTANT	1	10.042346 *	CONSTANT	1	10.236664 *	CONSTANT	1	10.134091 *	CONSTANT	1	10.522884 *	CONSTANT	1	10.305319 *
SAMPLE SIZE	216		SAMPLE SIZE	421		SAMPLE SIZE	319		SAMPLE SIZE	179		SAMPLE SIZE	1135	
ADJUSTED R-SQUARED	0.81344		ADJUSTED R-SQUARED	0.74553		ADJUSTED R-SQUARED	0.75299		ADJUSTED R-SQUARED	0.74179		ADJUSTED R-SQUARED	0.76300	
F STATISTIC	37.05		F STATISTIC	44.95		F STATISTIC	35.62		F STATISTIC	19.94		F STATISTIC	126.89	

Q1 1986 1919-1944			Q2 1986 1919-1944			Q3 1986 1919-1944			Q4 1986 1919-1944			1919-1944			1986		
OUTER SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.449	-0.131751 *	SDH	0.419	-0.222603 *	SDH	0.406	-0.264394 *	SDH	0.405	-0.316429 *	SDH	0.419	-0.238637 *	SDH	0.419	-0.238637 *
TH	0.169	-0.223982 *	TH	0.192	-0.327099 *	TH	0.203	-0.373521 *	TH	0.24	-0.422148 *	TH	0.198	-0.337295 *	TH	0.198	-0.337295 *
DB	0.122	0.013545	DB	0.123	-0.024782	DB	0.125	-0.071151 *	DB	0.09	-0.06331	DB	0.119	-0.049703 *	DB	0.119	-0.049703 *
SDB	0.034	0.005572	SDB	0.018	-0.187275 *	SDB	0.026	-0.22409 *	SDB	0.035	-0.270956 *	SDB	0.026	-0.169799 *	SDB	0.026	-0.169799 *
FB	0.054	-0.141434	FB	0.018	-0.185073 *	FB	0.022	-0.259615 *	FB	0.015	-0.252038	FB	0.026	-0.236477 *	FB	0.026	-0.236477 *
FC	0.017	-0.168679	FC	0.028	-0.016995	FC	0.022	-0.30234 *	FC	0.025	-0.45702 *	FC	0.023	-0.22466 *	FC	0.023	-0.22466 *
LH	0.081	-0.049334	LH	0.052	-0.281338 *	LH	0.054	-0.180789 *	LH	0.06	-0.113787	LH	0.059	-0.152326 *	LH	0.059	-0.152326 *
SGAR	0.466	-0.129412 *	SGAR	0.478	-0.088762	SGAR	0.484	0.027774	SGAR	0.48	-0.336787 *	SGAR	0.478	-0.104544 *	SGAR	0.478	-0.104544 *
SPACE	0.172	-0.211341 *	SPACE	0.157	-0.123941 *	SPACE	0.162	-0.031636	SPACE	0.13	-0.425945 *	SPACE	0.158	-0.168969 *	SPACE	0.158	-0.168969 *
NOPARK	0.324	-0.231058 *	NOPARK	0.331	-0.169654 *	NOPARK	0.328	-0.11777	NOPARK	0.35	-0.469599 *	NOPARK	0.332	-0.218505 *	NOPARK	0.332	-0.218505 *
AGE	56.125	-0.005504 *	AGE	55.843	-0.003542 *	AGE	55.775	-0.0000051	AGE	55.97	-0.001687	AGE	55.896	-0.002657 *	AGE	55.896	-0.002657 *
NOCH	0.318	-0.117547 *	NOCH	0.278	-0.143048 *	NOCH	0.248	-0.090359 *	NOCH	0.26	-0.132485 *	NOCH	0.274	-0.118734 *	NOCH	0.274	-0.118734 *
CHP	0.115	-0.049037	CHP	0.119	-0.057267 *	CHP	0.114	-0.075896 *	CHP	0.125	-0.044229	CHP	0.118	-0.055343 *	CHP	0.118	-0.055343 *
SIZE	996.823	0.00052878 *	SIZE	1032.63	0.00042485 *	SIZE	992.015	0.00037942 *	SIZE	1064.90	0.00032329 *	SIZE	1016.94	0.0004154 *	SIZE	1016.94	0.0004154 *
BATH	1.02	0.057621	BATH	1.036	0.020982	BATH	1.022	-0.025761	BATH	1.05	-0.023394	BATH	1.03	0.0342	BATH	1.03	0.0342
A	0	0	A	0.01	-0.061686	A	0.009	0.212139 *	A	0	0	A	0.006	0.041917	A	0.006	0.041917
C	0.287	-0.108508 *	C	0.302	-0.093958 *	C	0.285	-0.028129	C	0.255	0.028101	C	0.287	-0.077068 *	C	0.287	-0.077068 *
D	0.02	-0.182051 *	D	0.01	-0.220493 *	D	0.013	-0.089061	D	0.04	-0.21068 *	D	0.017	-0.148523 *	D	0.017	-0.148523 *
E	0.108	-0.117817 *	E	0.091	-0.11535 *	E	0.06	-0.07722	E	0.085	-0.06866	E	0.084	-0.113149 *	E	0.084	-0.113149 *
F	0.017	-0.044161	F	0.018	-0.084281	F	0.024	-0.134385 *	F	0.005	-0.08411	F	0.018	-0.109507 *	F	0.018	-0.109507 *
G	0	0	G	0.016	-0.150237 *	G	0.006	-0.060438	G	0.015	-0.108274	G	0.01	-0.141625 *	G	0.01	-0.141625 *
H	0.007	-0.048514	H	0.008	-0.175354	H	0.002	0	H	0.005	-0.090113	H	0.005	-0.162661 *	H	0.005	-0.162661 *
I	0.03	-0.093321	I	0.036	-0.036664	I	0.037	0.030897	I	0.04	0.078463	I	0.036	-0.015641	I	0.036	-0.015641
J	0.274	-0.037171	J	0.244	0.008427	J	0.272	0.032213	J	0.28	0.115296 *	J	0.264	0.014013	J	0.264	0.014013
K	0.166	-0.093621 *	K	0.163	0.014999	K	0.166	0.022254	K	0.165	0.030826	K	0.165	-0.018561	K	0.165	-0.018561
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.003	-0.425479	P3	0.004	0.479216 *	P3	0.002	0.152502	P3	0	0	P3	0.003	0.193175	P3	0.003	0.193175
P4	0.01	-0.135326	P4	0.02	-0.310717 *	P4	0.028	-0.161445 *	P4	0.035	-0.175981	P4	0.023	-0.192089 *	P4	0.023	-0.192089 *
P5	0.345	-0.024827	P5	0.379	-0.034145	P5	0.35	-0.028316	P5	0.29	-0.115289 *	P5	0.351	-0.043682 *	P5	0.351	-0.043682 *
P7	0.382	-0.022657	P7	0.381	-0.079006 *	P7	0.374	-0.069768 *	P7	0.44	-0.107717 *	P7	0.387	-0.060832 *	P7	0.387	-0.060832 *
CONSTANT	1	10.799751 *	CONSTANT	1	10.869569 *	CONSTANT	1	10.708918 *	CONSTANT	1	11.329759 *	CONSTANT	1	10.872796 *	CONSTANT	1	10.872796 *
SAMPLE SIZE	296		SAMPLE SIZE	504		SAMPLE SIZE	463		SAMPLE SIZE	200		SAMPLE SIZE	1463		SAMPLE SIZE	1463	
ADJUSTED R-SQUARED	0.73749		ADJUSTED R-SQUARED	0.73513		ADJUSTED R-SQUARED	0.67454		ADJUSTED R-SQUARED	0.7302		ADJUSTED R-SQUARED	0.70168		ADJUSTED R-SQUARED	0.70168	
F STATISTIC	31.69		F STATISTIC	49.14		F STATISTIC	35.2		F STATISTIC	20.95		F STATISTIC	119.58		F STATISTIC	119.58	

OUTER METROPOLITAN OUTER METROPOLITAN OUTER METROPOLITAN OUTER METROPOLITAN

	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.4	-0.249252 *	0.438	-0.224292 *	0.456	-0.223008 *	0.473	-0.292724 *	0.439	-0.234651 *
TH	0.201	-0.354744 *	0.21	-0.32805 *	0.168	-0.320818 *	0.179	-0.386532 *	0.193	-0.339033 *
DB	0.069	-0.019161	0.056	-0.015488	0.077	0.064052	0.063	0.002884	0.065	0.009823
SDB	0.039	-0.199731 *	0.028	-0.162396 *	0.044	-0.18512 *	0.025	-0.196403 *	0.034	-0.188421 *
FB	0.082	-0.350308 *	0.072	-0.356003 *	0.032	-0.275716 *	0.044	-0.464825 *	0.06	-0.350717 *
FC	0.035	-0.410496 *	0.04	-0.398846 *	0.05	-0.36268 *	0.031	-0.386584 *	0.04	-0.377141 *
LH	0.126	-0.02717	0.123	0.018938	0.085	-0.068687	0.075	0.062911	0.108	-0.022485
SGAR	0.472	-0.060057	0.455	-0.011289	0.448	-0.065436	0.48	-0.028615	0.46	-0.039023
SPACE	0.112	-0.091191 *	0.112	-0.07661 *	0.14	-0.157786 *	0.122	-0.023728	0.12	-0.087345 *
NOPARK	0.374	-0.124769 *	0.397	-0.108942 *	0.371	-0.153365 *	0.354	-0.070719	0.379	-0.116607 *
AGE	54.779	-0.005672 *	55.056	-0.003105 *	55.12	-0.003975 *	55.179	-0.005501 *	55.024	-0.004004 *
NOCH	0.229	-0.102624 *	0.202	-0.085163 *	0.186	-0.085077 *	0.16	-0.141826 *	0.199	-0.105001 *
CHP	0.082	0.00034571	0.087	-0.025045	0.08	-0.021778	0.116	-0.024427	0.088	-0.019714
SIZE	936.441	0.00049589 *	942.359	0.00053469 *	957.1	0.00049260 *	977.414	0.00051541 *	949.58	0.00051071 *
BATH	1.028	0.143374 *	1.023	-0.013553 *	1.05	0.176061 *	1.034	0.041303	1.033	0.104936 *
A	0.004	-0.062043	0.005	0.025159	0.007	0.035575	0.003	-0.163427	0.005	0.00033331
C	0.242	-0.030329	0.219	-0.018885	0.262	-0.034546	0.194	-0.116753 *	0.232	-0.032153 *
D	0.037	-0.017903	0.024	-0.04036	0.021	-0.043034	0.025	-0.099634	0.026	-0.042573
E	0.067	-0.061354	0.08	0.001431	0.067	0.002512	0.072	-0.121825 *	0.073	-0.028294
F	0.019	-0.118327 *	0.012	-0.108892	0.01	-0.081108	0.028	-0.174081 *	0.015	-0.101466 *
G	0.006	-0.189666	0.008	-0.017656	0.003	-0.089096	0.003	-0.273255	0.006	-0.104108 *
H	0.043	-0.027969	0.064	-0.037843	0.051	-0.120904 *	0.041	-0.228464 *	0.053	-0.067087 *
I	0.024	0.04271	0.026	0.008766	0.026	-0.058076	0.016	0.07674	0.024	0.003599
J	0.314	0.03517	0.336	0.05673 *	0.33	0.020285	0.357	0.036256	0.332	0.050362 *
K	0.045	-0.021105	0.036	0.018164	0.043	0.013017	0.066	-0.037438	0.044	0.022232
P1	0.002	0.02284	0.002	-0.008036	0	0	0	0	0.001	-0.002847
P2	0	0	0	0	0	0	0	0	0	0
P3	0.147	-0.207968 *	0.123	-0.188568 *	0.126	-0.206325 *	0.1	-0.171799 *	0.126	-0.203008 *
P4	0.007	-0.372532 *	0.014	-0.185996 *	0.015	-0.224812 *	0.009	-0.273474 *	0.012	-0.236814 *
P5	0.368	-0.18111 *	0.373	-0.17815 *	0.368	-0.199477 *	0.373	-0.199985 *	0.371	-0.185467 *
P7	0.074	-0.33562 *	0.087	-0.353901 *	0.079	-0.316976 *	0.066	-0.34188 *	0.079	-0.345781 *
CONSTANT	1	11.011061 *	1	10.980659 *	1	11.000762 *	1	11.291506 *	1	10.990088 *
SAMPLE SIZE	538		860		585		319		2302	
ADJUSTED R-SQUARED	0.82299		0.80709		0.79255		0.83097		0.79577	
F STATISTIC	84.23		120.79		77.93		54.91		299.85	

GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON			GREATER LONDON		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.354	-0.192392 *	SDH	0.385	-0.22931 *	SDH	0.37	-0.223279 *	SDH	0.379	-0.192918 *	SDH	0.373	-0.217802 *
TH	0.318	-0.295141 *	TH	0.323	-0.33653 *	TH	0.35	-0.299323 *	TH	0.364	-0.288268 *	TH	0.335	-0.309348 *
DB	0.016	-0.028036	DB	0.011	-0.093326 *	DB	0.021	0.013505	DB	0.021	-0.066541	DB	0.016	-0.036504
SDB	0.013	-0.118198 *	SDB	0.014	-0.176713 *	SDB	0.018	-0.22883 *	SDB	0.016	-0.099796	SDB	0.015	-0.164769 *
FB	0.208	-0.314335 *	FB	0.169	-0.424873 *	FB	0.148	-0.431414 *	FB	0.116	-0.441829 *	FB	0.165	-0.407036 *
FC	0.042	-0.338402 *	FC	0.043	-0.432934 *	FC	0.036	-0.37154 *	FC	0.039	-0.422184 *	FC	0.04	-0.393274 *
LH	0.258	-0.077429	LH	0.217	-0.028918	LH	0.186	0.01521	LH	0.154	0.006967	LH	0.209	-0.030533
SGAR	0.413	0.008735	SGAR	0.433	-0.048483	SGAR	0.422	-0.02715	SGAR	0.459	0.020906	SGAR	0.429	-0.02282
SPACE	0.071	-0.032123	SPACE	0.071	-0.125918 *	SPACE	0.09	-0.090787 *	SPACE	0.084	-0.042672	SPACE	0.078	-0.081834 *
NOPARK	0.496	-0.068339	NOPARK	0.477	-0.115387 *	NOPARK	0.463	-0.105799 *	NOPARK	0.427	-0.040722	NOPARK	0.47	-0.094757 *
AGE	54.344	-0.0005047	AGE	54.201	0.00029651	AGE	54.234	-0.001906	AGE	54.129	-0.00216	AGE	54.231	-0.001283 *
NOCH	0.263	-0.073231 *	NOCH	0.226	-0.08224 *	NOCH	0.228	-0.08638 *	NOCH	0.213	-0.112262 *	NOCH	0.233	-0.085666 *
CHP	0.043	-0.104148 *	CHP	0.061	-0.067978 *	CHP	0.07	0.017763	CHP	0.059	-0.060222 *	CHP	0.059	-0.039783 *
SIZE	882.098	0.00052540 *	SIZE	911.982	0.00054866 *	SIZE	921.417	0.00056802 *	SIZE	932.765	0.00052794 *	SIZE	910.585	0.00055056 *
BATH	1.011	0.098934 *	BATH	1.013	0.097459 *	BATH	1.017	0.108574 *	BATH	1.013	0.025267	BATH	1.014	0.095155 *
A	0	0	A	0	0	A	0	0	A	0	0	A	0	0
C	0.075	-0.016788	C	0.078	-0.012774	C	0.081	-0.071533 *	C	0.086	-0.013277	C	0.079	-0.025949 *
D	0.012	-0.04477	D	0.01	-0.094435 *	D	0.01	0.040832	D	0.007	-0.169954 *	D	0.01	-0.059999 *
E	0.047	-0.02934	E	0.053	-0.005642	E	0.047	-0.046741	E	0.059	-0.026191	E	0.051	-0.020907
F	0.039	-0.06485 *	F	0.035	-0.119652 *	F	0.036	-0.080252 *	F	0.034	-0.051567	F	0.036	-0.088235 *
G	0.013	-0.098355 *	G	0.012	-0.030393	G	0.011	-0.046809	G	0.012	0.032472	G	0.012	-0.043744
H	0.15	0.013517	H	0.156	0.015299	H	0.159	0.026995	H	0.116	0.002041	H	0.149	0.014408
I	0.071	0.136678 *	I	0.064	0.089878 *	I	0.057	0.099338 *	I	0.068	0.052819	I	0.065	0.096169 *
J	0.389	0.066521 *	J	0.372	0.043059 *	J	0.382	0.037799 *	J	0.41	0.055377 *	J	0.384	0.049578 *
K	0.049	0.054134	K	0.052	0.076079 *	K	0.055	0.070612 *	K	0.046	0.112287 *	K	0.051	0.079341 *
P1	0.081	0.078549 *	P1	0.075	0.06275 *	P1	0.08	0.008264	P1	0.058	0.115115 *	P1	0.075	0.059527 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.103	-0.025641	P3	0.115	-0.062521 *	P3	0.134	-0.083639 *	P3	0.09	-0.063227 *	P3	0.113	-0.058692 *
P4	0.068	-0.048039 *	P4	0.071	-0.068733 *	P4	0.068	-0.026595	P4	0.071	-0.004089	P4	0.069	-0.045572 *
P5	0.16	-0.041476 *	P5	0.135	-0.051887 *	P5	0.132	-0.035345 *	P5	0.153	-0.059186 *	P5	0.143	-0.047781 *
P7	0	0	P7	0.001	-0.410841 *	P7	0	0	P7	0	0	P7	0	-0.469733 *
CONSTANT	1	10.636422 *	CONSTANT	1	10.738055 *	CONSTANT	1	10.854174 *	CONSTANT	1	10.972749 *	CONSTANT	1	10.800057 *
SAMPLE SIZE	1052		SAMPLE SIZE	1670		SAMPLE SIZE	1169		SAMPLE SIZE	675		SAMPLE SIZE	4566	
ADJUSTED R-SQUARED	0.74493		ADJUSTED R-SQUARED	0.76658		ADJUSTED R-SQUARED	0.75022		ADJUSTED R-SQUARED	0.75065		ADJUSTED R-SQUARED	0.75706	
F STATISTIC	110.62		F STATISTIC	190.00		F STATISTIC	126.29		F STATISTIC	75.6		F STATISTIC	442.24	

Q1 1986 1919-1944

Q2 1986 1919-1944

Q3 1986 1919-1944

Q4 1986 1919-1944

1986 1919-1944

SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST					
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF				
SDH	0.325	-0.199621 *	SDH	0.394	-0.191676 *	SDH	-0.173628 *	SDH	0.456	-0.193572 *	SDH	0.456	-0.193572 *	SDH	0.384	-0.185272 *	
TH	0.222	-0.309217 *	TH	0.17	-0.289755 *	TH	0.198	-0.259815 *	TH	0.184	-0.303732 *	TH	0.184	-0.303732 *	TH	0.191	-0.285389 *
DB	0.098	-0.042789	DB	0.11	0.014956	DB	0.103	0.047076	DB	0.096	-0.099264	DB	0.096	-0.099264	DB	0.104	-0.007185
SDB	0.01	-0.003582	SDB	0.009	-0.030906	SDB	0.008	-0.229282	SDB	0.024	-0.09986	SDB	0.024	-0.09986	SDB	0.011	-0.069546
FB	0.036	-0.068737	FB	0.03	-0.194955 *	FB	0.041	-0.243439 *	FB	0.008	-0.219544	FB	0.008	-0.219544	FB	0.031	-0.189851 *
FC	0.046	-0.292005 *	FC	0.03	-0.250478 *	FC	0.037	-0.279366 *	FC	0.072	-0.233703 *	FC	0.072	-0.233703 *	FC	0.041	-0.265796 *
LH	0.088	-0.035739	LH	0.078	0.041151	LH	0.116	-0.075916	LH	0.104	-0.016561	LH	0.104	-0.016561	LH	0.094	-0.023709
SGAR	0.485	0.12421	SGAR	0.478	-0.173427 *	SGAR	0.45	-0.037391	SGAR	0.528	-0.102477	SGAR	0.528	-0.102477	SGAR	0.479	-0.099906 *
SPACE	0.216	0.116408	SPACE	0.152	-0.219838 *	SPACE	0.136	-0.105256	SPACE	0.136	-0.153705	SPACE	0.136	-0.153705	SPACE	0.16	-0.1495 *
NOPARK	0.289	0.074939	NOPARK	0.337	-0.25275 *	NOPARK	0.364	-0.096942	NOPARK	0.296	-0.233651 *	NOPARK	0.296	-0.233651 *	NOPARK	0.328	-0.164121 *
AGE	56.381	-0.002562	AGE	56.021	-0.005474 *	AGE	56.025	-0.00398	AGE	54.944	-0.002528	AGE	54.944	-0.002528	AGE	55.95	-0.004808 *
NOCH	0.376	-0.090126 *	NOCH	0.281	-0.086716 *	NOCH	0.273	-0.095655 *	NOCH	0.304	-0.160626 *	NOCH	0.304	-0.160626 *	NOCH	0.302	-0.11391 *
CHP	0.124	-0.028474	CHP	0.113	-0.076661 *	CHP	0.128	-0.075252 *	CHP	0.08	-0.092807	CHP	0.08	-0.092807	CHP	0.115	-0.080479 *
SIZE	1015.09	0.00058717 *	SIZE	999.21	0.00055679 *	SIZE	1024.23	0.00040709 *	SIZE	1016.60	0.00045577 *	SIZE	1016.60	0.00045577 *	SIZE	1011.83	0.00049652 *
BATH	1.041	0.054247	BATH	1.054	-0.056932	BATH	1.045	-0.026429	BATH	1.024	-0.090957	BATH	1.024	-0.090957	BATH	1.045	0.006959
A	0.046	0.054519	A	0.027	0.065115	A	0.021	0.099289	A	0.04	-0.161285	A	0.04	-0.161285	A	0.031	0.015283
C	0.356	-0.028329	C	0.427	0.00035551	C	0.372	0.028094	C	0.288	-0.024866	C	0.288	-0.024866	C	0.377	0.004137
D	0.005	-0.366076 *	D	0.015	-0.042971	D	0.004	-0.269645	D	0.016	-0.266935 *	D	0.016	-0.266935 *	D	0.01	-0.201269 *
E	0.057	-0.070049	E	0.045	-0.059908	E	0.07	-0.022914	E	0.064	-0.069088	E	0.064	-0.069088	E	0.057	-0.025732
F	0.021	-0.099349	F	0.027	0.016498	F	0.017	-0.116059	F	0.016	0.075722	F	0.016	0.075722	F	0.021	-0.027609
G	0.01	-0.181032	G	0.003	-0.285747	G	0.004	-0.073937	G	0.016	-0.132335	G	0.016	-0.132335	G	0.007	-0.141381
H	0.005	-0.178945	H	0	0	H	0	0	H	0	0	H	0	0	H	0.001	-0.209111
I	0.031	-0.130682	I	0.033	-0.030291	I	0.045	0.175186 *	I	0.04	0.032295	I	0.04	0.032295	I	0.037	0.043446
J	0.278	0.04013	J	0.191	0.113426 *	J	0.26	0.098496 *	J	0.224	0.045519	J	0.224	0.045519	J	0.233	0.084089 *
K	0.144	0.032176	K	0.149	0.084202 *	K	0.14	0.066434	K	0.2	-0.011966	K	0.2	-0.011966	K	0.153	0.072202 *
P1	0.021	0.093168	P1	0.021	-0.034066	P1	0.017	0.035783	P1	0.032	-0.09361	P1	0.032	-0.09361	P1	0.021	0.021064
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0	0	P3	0.003	-0.330057	P3	0	0	P3	0.008	0.502611 *	P3	0.008	0.502611 *	P3	0.002	0.199397
P4	0.098	-0.136386	P4	0.113	-0.19016 *	P4	0.12	-0.170595 *	P4	0.096	-0.261867 *	P4	0.096	-0.261867 *	P4	0.109	-0.19003 *
P5	0.155	-0.05056	P5	0.128	-0.085285 *	P5	0.116	-0.06315	P5	0.16	-0.079301	P5	0.16	-0.079301	P5	0.135	-0.072871 *
P7	0.706	-0.010753	P7	0.657	-0.072055	P7	0.661	0.030226	P7	0.664	-0.003036	P7	0.664	-0.003036	P7	0.67	-0.028455
CONSTANT	1	10.147878 *	CONSTANT	1	10.812912 *	CONSTANT	1	10.678973 *	CONSTANT	1	10.871129 *	CONSTANT	1	10.871129 *	CONSTANT	1	10.696441 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC	SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
194	0.78285	24.99	335	0.75098	35.73	242	0.72371	23.55	125	0.74172	13.28	125	0.74172	13.28	896	0.7325	82.69

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WALES			WALES			WALES			WALES					
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF				
SDH	0.509	-0.133154	0.438	-0.029312	SDH	0.526	-0.226596 *	SDH	0.689	0.003051	SDH	0.516	-0.138313 *	
TH	0.315	-0.302816 *	0.354	-0.239028 *	TH	0.271	-0.359404 *	TH	0.197	-0.13215	TH	0.298	-0.288054 *	
DB	0.074	-0.017803	0.069	0.143003	DB	0.068	0.100924	DB	0.049	0.001016	DB	0.067	0.077109	
SDB	0	0	0.007	-0.294218	SDB	0	0	SDB	0	0	SDB	0.002	-0.401894	
FB	0	0	0.007	0	FB	0.008	-0.996435 *	FB	0	0	FB	0.004	-0.339045	
FC	0	0	0	0	FC	0.008	-0.991642 *	FC	0	0	FC	0.002	-0.73953 *	
LH	0.065	0.030199	0.069	-0.073639	LH	0.045	0.161898	LH	0.049	0.04985	LH	0.058	0.007454	
SGAR	0.343	0.054394	0.417	0.121023	SGAR	0.353	-0.395389 *	SGAR	0.459	-0.261176	SGAR	0.386	-0.154294	
SPACE	0.167	0.020371	0.16	0.001756	SPACE	0.165	-0.502428 *	SPACE	0.115	-0.406019	SPACE	0.157	-0.241041 *	
NOPARK	0.491	0	0.396	-0.026832	NOPARK	0.466	-0.545245 *	NOPARK	0.393	-0.586068 *	NOPARK	0.439	-0.294592 *	
AGE	58.444	-0.002991	59.479	-0.00185	AGE	58.932	0.001708	AGE	58.279	-0.004896	AGE	58.901	-0.00327	
NOCH	0.352	-0.023527	0.313	-0.193423 *	NOCH	0.346	-0.129993 *	NOCH	0.23	-0.154321 *	NOCH	0.321	-0.12398 *	
CHP	0.056	-0.063786	0.042	-0.117111	CHP	0.068	-0.071701	CHP	0.049	-0.209407	CHP	0.054	-0.113039 *	
SIZE	1015.28	0.00067128 *	1042.19	0.00060189 *	SIZE	1055.38	0.00036473 *	SIZE	1057.31	0.00050482 *	SIZE	1041.67	0.00049252 *	
BATH	1.019	-0.312882	1.007	-0.067728	BATH	1.023	-0.292916	BATH	1.033	0.391038	BATH	1.018	-0.102942	
A	0	0	0.021	0.259205	A	0.03	-0.216516	A	0	0	A	0.016	0.008854	
C	0.361	0.009985	0.375	0.054434	C	0.338	-0.070256	C	0.328	0.18269	C	0.354	-0.012941	
D	0.056	-0.167743	0.104	0.075315	D	0.045	-0.256824 *	D	0.066	0.147013	D	0.07	-0.133461 *	
E	0.074	-0.173411	0.069	0.157021	E	0.105	-0.070906	E	0.033	0.321373	E	0.076	-0.012763	
F	0.037	-0.080472	0.042	-0.022135	F	0.045	-0.196796	F	0.033	-0.029024	F	0.04	-0.16875 *	
G	0.019	-0.264226	0.007	-0.136202	G	0.015	-0.375372	G	0	0	G	0.011	-0.245035 *	
H	0	0	0.007	0.766512 *	H	0	0	H	0.016	0.054606	H	0.004	0.283289	
I	0.037	0.007493	0.049	-0.089965	I	0.038	-0.294476	I	0.066	0.405646 *	I	0.045	-0.080721 *	
J	0.287	0.139362	0.229	0.218608 *	J	0.203	0.085339	J	0.311	0.288759	J	0.247	0.131688	
K	0.065	0.148618	0.056	0.09868	K	0.083	0.033439	K	0.082	0.408855 *	K	0.07	0.098477	
P1	0	0	0	0	P1	0	0	P1	0	0	P1	0	0	
P2	0	0	0	0	P2	0	0	P2	0	0	P2	0	0	
P3	0.019	-0.018004	0.049	-0.296485 *	P3	0.038	-0.131815	P3	0.033	-0.129163	P3	0.036	-0.181836 *	
P4	0.213	-0.13957	0.299	-0.174853 *	P4	0.195	-0.256896 *	P4	0.18	-0.175824	P4	0.231	-0.205008 *	
P5	0.231	-0.184295 *	0.132	-0.168389 *	P5	0.271	-0.361594 *	P5	0.213	-0.215238 *	P5	0.209	-0.23445 *	
P7	0.194	-0.200517 *	0.222	-0.101535	P7	0.211	-0.271761 *	P7	0.164	-0.032375	P7	0.204	-0.195484 *	
CONSTANT	1	10.240156 *	CONSTANT	1	9.893005 *	CONSTANT	1	11.047612 *	CONSTANT	1	10.028026 *	CONSTANT	1	10.569868 *
SAMPLE SIZE	108		SAMPLE SIZE	144		SAMPLE SIZE	133		SAMPLE SIZE	61		SAMPLE SIZE	446	
ADJUSTED R-SQUARED	0.66497		ADJUSTED R-SQUARED	0.76254		ADJUSTED R-SQUARED	0.61026		ADJUSTED R-SQUARED	0.76027		ADJUSTED R-SQUARED	0.66995	
F STATISTIC	10.23		F STATISTIC	18.01		F STATISTIC	8.66		F STATISTIC	8.93		F STATISTIC	32.09	

Q1 1986 1919-1944

Q2 1986 1919-1944

Q3 1986 1919-1944

Q4 1986 1919-1944

1919-1944

1986

1919-1944

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	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.174	-0.104267	0.217	-0.121711 *	0.183	-0.017368	0.194	-0.475671 *	0.192	-0.12192 *
TH	0.159	-0.102249	0.106	-0.195983 *	0.11	-0.143394 *	0.117	-0.589432 *	0.12	-0.203638 *
DB	0.174	-0.004722	0.139	0.062371	0.192	0.119885 *	0.175	-0.197568 *	0.17	0.044232
SDB	0.116	-0.12359	0.078	-0.099505	0.11	0.033355	0.087	-0.335943 *	0.098	-0.071369 *
FB	0.268	-0.287772 *	0.361	-0.293796 *	0.306	-0.166684 *	0.291	-0.71765 *	0.311	-0.29777 *
FC	0.007	-0.111603	0	0	0	0	0.01	-0.828662 *	0.003	-0.24878
LH	0	0	0	0	0	0	0	0	0	0
SGAR	0.355	-0.024132	0.422	0	0.443	-0.076195	0.427	0.259759	0.416	-0.0002390
SPACE	0.217	-0.038903	0.183	-0.097662 *	0.192	-0.145061	0.184	0.207476	0.194	-0.068295
NOPARK	0.399	-0.090862	0.394	-0.102605 *	0.342	-0.206017 *	0.369	0.321816	0.373	-0.075988
AGE	56.246	-0.009606 *	55.417	-0.005757 *	56.562	-0.003311	55.806	-0.010943 *	56.05	-0.006295 *
NOCH	0.319	-0.052036	0.344	-0.046887	0.329	-0.106252 *	0.272	-0.049678	0.322	-0.068559 *
CHP	0.043	0.044126	0.067	-0.074844	0.068	-0.107332 *	0.039	-0.21103 *	0.058	-0.08042 *
SIZE	1003.68	0.00049322 *	986.938	0.00050893 *	960.403	0.00042730 *	1067.91	0.00037574 *	994.5	0.00045358 *
BATH	1.051	0.062384	1.011	-0.143415	1.018	0.029751	1.049	-0.023119	1.028	0.013779
A	0.014	-0.205801	0.011	-0.446892 *	0.027	-0.278436 *	0.019	-0.372048 *	0.019	-0.264086 *
C	0.138	-0.002476	0.072	-0.029889	0.091	-0.081271	0.068	-0.086383	0.092	-0.050497
D	0.007	-0.348827	0.011	-0.170532	0.027	-0.227245 *	0.019	-0.046501	0.017	-0.19719 *
E	0.123	-0.033664	0.117	-0.113959	0.137	-0.112343 *	0.107	-0.037027	0.123	-0.090232 *
F	0.051	-0.123561	0.072	-0.15623 *	0.064	-0.017423	0.087	-0.040084	0.067	-0.092126 *
G	0.043	-0.062747	0.072	-0.133776	0.032	-0.141612	0.078	-0.118491	0.053	-0.145022 *
H	0.007	0.270392	0	0	0	0	0	0	0.002	0.172911
I	0	0	0.011	0.133702	0.018	-0.054625	0.019	0.104237	0.013	0.033385
J	0.362	0.074196	0.461	0.063264	0.311	0.05181	0.35	0.12374 *	0.37	0.070757 *
K	0.058	-0.116104	0.05	-0.182606 *	0.091	0.044338	0.097	0.003861	0.073	-0.035665
P1	0.022	0.076284	0.044	0.140265	0.073	-0.045743	0.058	0.251222 *	0.052	0.06789
P2	0.754	-0.118175 *	0.7	-0.111104 *	0.699	-0.15772 *	0.757	-0.073148	0.72	-0.127022 *
P3	0.007	-0.324073	0	0	0.005	-0.226246	0.01	-1.110419 *	0.005	-0.449107 *
P4	0	0	0	0	0	0	0	0	0	0
P5	0	0	0	0	0.009	-0.2162	0	0	0.003	-0.115331
P7	0.007	0.243236	0	0	0	0	0	0	0.002	0.206938
CONSTANT	1	10.659507 *	1	10.703806 *	1	10.536176 *	1	10.894271 *	1	10.620884 *

SAMPLE SIZE	138	180	219	103	640
ADJUSTED R-SQUARED	0.75823	0.79458	0.74906	0.81803	0.76714
F STATISTIC	16.91	31.1	26.03	18.64	73.59

SAMPLE SIZE	180	219	103	640
ADJUSTED R-SQUARED	0.79458	0.74906	0.81803	0.76714
F STATISTIC	31.1	26.03	18.64	73.59

SAMPLE SIZE	180	219	103	640
ADJUSTED R-SQUARED	0.79458	0.74906	0.81803	0.76714
F STATISTIC	31.1	26.03	18.64	73.59

SAMPLE SIZE	180	219	103	640
ADJUSTED R-SQUARED	0.79458	0.74906	0.81803	0.76714
F STATISTIC	31.1	26.03	18.64	73.59

Q1 1986 1919-1944 Q2 1986 1919-1944 Q3 1986 1919-1944 Q4 1986 1919-1944 1986 1919-1944

NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND			
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF		
SDH	0.259	0.052142	0.286	-0.121106	0.344	-0.267855 *	0.264	-0.219996	SDH	0.292	-0.158165 *
TH	0.585	-0.177462	0.556	-0.343974 *	0.503	-0.507173 *	0.583	-0.645361 *	TH	0.552	-0.406338 *
DB	0.088	0.302404 *	0.077	-0.099475	0.061	0.020118	0.028	-0.462229 *	DB	0.069	-0.003085
SDB	0.007	-0.147226	0.015	-0.027615	0.006	-0.098905	0.014	-0.277223	SDB	0.01	-0.13916
FB	0	0	0	0	0	0	0	0	FB	0	0
FC	0	0	0.005	-0.155006	0	0	0	0	FC	0.002	-0.193166
LH	0.769	-0.075308	0.827	-0.039929	0.779	-0.005221	0.778	-0.003772	LH	0.792	-0.030914
SGAR	0.231	-0.220565	0.25	0.132029	0.325	-0.331122	0.236	-0.281002	SGAR	0.265	-0.080117
SPACE	0.143	-0.295875	0.179	0.102894	0.19	-0.373136	0.056	-0.369145	SPACE	0.157	-0.126434
NOPARK	0.612	-0.438283 *	0.551	-0.047838	0.472	-0.487556 *	0.667	-0.417237 *	NOPARK	0.559	-0.253134 *
AGE	57.973	-0.003107	57.73	-0.003756	58.319	-0.007103 *	57.514	0.005508	AGE	57.931	-0.003765 *
NOCH	0.497	-0.112872 *	0.449	-0.211223 *	0.429	-0.16027 *	0.375	-0.309024 *	NOCH	0.446	-0.180172 *
CHP	0.156	-0.030807	0.143	-0.093798	0.221	-0.029693	0.194	0.00155	CHP	0.175	-0.061235 *
SIZE	862.905	0.00051529 *	869.345	0.00062967 *	896.81	0.00059877 *	994.238	0.00042677 *	SIZE	891.01	0.0005887 *
BATH	1.014	-0.033162	1.005	-0.034061	1.006	-0.161491	1.014	0.293537	BATH	1.009	-0.081105
CONSTANT	1	10.148408 *	CONSTANT	1	9.900645 *	CONSTANT	1	10.773937 *	CONSTANT	1	10.212247 *

SAMPLE SIZE	147	SAMPLE SIZE	196	SAMPLE SIZE	163	SAMPLE SIZE	72	SAMPLE SIZE	578
ADJUSTED R-SQUARED	0.62993	ADJUSTED R-SQUARED	0.71197	ADJUSTED R-SQUARED	0.69835	ADJUSTED R-SQUARED	0.7842	ADJUSTED R-SQUARED	0.70075
F STATISTIC	20.12	F STATISTIC	35.43	F STATISTIC	29.85	F STATISTIC	20.85	F STATISTIC	97.51

TABLE E7: PRE-1919 HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

PRE-1919 NORTH

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	110.852	103.744	112.787
Q2	100.000	106.040	101.042	108.650
Q3	100.000	106.881	106.149	113.116
Q4	100.000	101.401	101.590	106.257
1986	100.000	106.761	103.305	110.676

YORKSHIRE & HUMBERSIDE

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	104.815	102.986	101.792
Q2	100.000	106.268	105.782	103.958
Q3	100.000	108.385	107.085	105.744
Q4	100.000	109.022	106.977	105.437
1986	100.000	107.076	105.795	104.267

NORTH WEST

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	102.397	105.293	102.737
Q2	100.000	102.102	104.529	101.747
Q3	100.000	102.503	105.304	101.374
Q4	100.000	102.329	105.187	103.757
1986	100.000	102.324	104.989	101.996

EAST MIDLANDS

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	106.023	109.196	110.467
Q2	100.000	105.695	109.288	112.839
Q3	100.000	105.641	108.800	112.268
Q4	100.000	105.208	108.026	109.054
1986	100.000	105.684	108.872	111.510

WEST MIDLANDS

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	103.029	105.066	101.247
Q2	100.000	101.958	104.077	101.532
Q3	100.000	102.106	105.429	100.709
Q4	100.000	102.759	103.518	106.816
1986	100.000	102.285	103.935	101.512

EAST ANGLIA

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	107.313	109.483	113.670
Q2	100.000	107.852	109.518	115.693
Q3	100.000	106.712	109.949	113.619
Q4	100.000	105.583	110.486	110.940
1986	100.000	107.016	109.504	113.940

OUTER SOUTH EAST

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	104.189	108.111	114.062
Q2	100.000	103.558	108.278	113.656
Q3	100.000	103.490	107.751	113.230
Q4	100.000	103.557	108.620	113.288
1986	100.000	103.669	108.124	113.544

OUTER METROPOLITAN

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	97.367	103.626	108.415
Q2	100.000	103.731	110.611	116.130
Q3	100.000	104.331	111.050	116.730
Q4	100.000	104.332	111.128	121.677
1986	100.000	104.092	110.892	116.353

GREATER LONDON

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	108.539	116.909	125.892
Q2	100.000	99.706	112.493	121.509
Q3	100.000	104.605	112.486	121.403
Q4	100.000	104.324	112.293	130.432
1986	100.000	104.458	112.463	121.363

SOUTH WEST

ALTERNATIVE WEIGHTS	INDEX NUMBERS 1986			
	Q1	Q2	Q3	Q4
Q1	100.000	106.321	109.523	111.558
Q2	100.000	104.605	108.771	111.130
Q3	100.000	104.776	108.075	110.333
Q4	100.000	104.844	107.051	109.237
1986	100.000	104.832	108.317	110.551

WALES

ALTERNATIVE
WEIGHTS

INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	106.577	105.593	110.072
Q2	100.000	104.559	105.032	110.557
Q3	100.000	105.703	104.738	110.940
Q4	100.000	107.736	105.082	107.036
1986	100.000	105.803	105.064	110.054

SCOTLAND

ALTERNATIVE
WEIGHTS

INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	101.521	102.705	102.715
Q2	100.000	102.028	103.384	103.083
Q3	100.000	102.244	104.239	103.727
Q4	100.000	103.075	103.678	103.991
1986	100.000	102.260	103.517	103.510

NORTHERN IRELAND

ALTERNATIVE
WEIGHTS

INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.047	101.139	90.940
Q2	100.000	105.196	107.252	96.647
Q3	100.000	106.244	106.856	97.460
Q4	100.000	107.574	105.748	94.471
1986	100.000	105.261	105.720	95.500

Q1 1986 PRE-1919

NORTHERN

	WEIGHT	COEFF
SDH	0.118	-0.262997
TH	0.815	-0.554807
DB	0.008	-0.184115
SDB	0.017	-0.71402
FB	0.025	-0.754048
FC	0.008	-0.221298
LH	0.067	-0.144024
SGAR	0.227	0.311096
SPACE	0.176	0.407385
NOPARK	0.571	0.353824
AGE	93.143	-0.001263
NOCH	0.319	-0.186456 *
CHP	0.193	-0.049271
SIZE	1167.59	0.00048968 *
BATH	1.05	-0.290262 *
A	0.034	-0.295718
C	0.361	-0.156918
D	0.151	-0.169929
E	0.05	-0.21061
F	0.092	-0.168171
G	0.008	-0.485506
H	0.017	-0.589415 *
I	0.067	-0.125422
J	0.109	0.0598
K	0.05	-0.034132
P1	0	0
P2	0	0
P3	0.101	-0.515011 *
P4	0.63	-0.530288 *
P5	0.118	-0.778076 *
P7	0.101	-0.14498
CONSTANT	1	10.634367 *

Q2 1986 PRE-1919

NORTHERN

	WEIGHT	COEFF
SDH	0.044	-0.473743 *
TH	0.861	-0.500282 *
DB	0	0
SDB	0	0
FB	0.051	-0.822225 *
FC	0.013	-0.673951 *
LH	0.158	0.08745
SGAR	0.152	0.017829
SPACE	0.247	0.03974
NOPARK	0.601	0
AGE	93.025	-0.001444
NOCH	0.335	-0.086446
CHP	0.12	-0.036722
SIZE	997.945	0.00053885 *
BATH	1.025	0.03244
A	0.019	0.276246
C	0.418	-0.145418
D	0.184	-0.240265 *
E	0.051	-0.45159 *
F	0.089	-0.219286
G	0.025	-0.223535
H	0	0
I	0.057	0.034964
J	0.082	0.070187
K	0.019	0.469038 *
P1	0	0
P2	0	0
P3	0.165	-0.304658 *
P4	0.633	-0.322634 *
P5	0.095	-0.416802 *
P7	0.07	0.108845
CONSTANT	1	10.347915 *

Q3 1986 PRE-1919

NORTHERN

	WEIGHT	COEFF
SDH	0.096	-0.101628
TH	0.739	-0.241228
DB	0.013	0.123021
SDB	0.006	0.519078
FB	0.064	0.080911
FC	0.032	0.012641
LH	0.14	-0.271472 *
SGAR	0.223	0.203148 *
SPACE	0.166	-0.038211
NOPARK	0.605	0
AGE	98.873	0.001484
NOCH	0.363	-0.140013 *
CHP	0.115	-0.104028
SIZE	1105.43	0.00042781 *
BATH	1.045	0.049403
A	0.032	-0.197296
C	0.433	-0.11014
D	0.159	-0.353699 *
E	0.051	-0.525124 *
F	0.057	-0.307096 *
G	0.013	0.028032
H	0	0
I	0.045	-0.163608
J	0.121	-0.054252
K	0.019	-0.273768
P1	0	0
P2	0.006	-0.123098
P3	0.178	-0.127103
P4	0.599	-0.199529
P5	0.108	-0.252262
P7	0.089	0.098457
CONSTANT	1	9.834009 *

Q4 1986 PRE-1919

NORTHERN

	WEIGHT	COEFF
SDH	0.054	-0.46978
TH	0.811	-0.959498 *
DB	0	0
SDB	0.014	-0.361938
FB	0.054	-1.068427 *
FC	0.041	-1.102776 *
LH	0.095	0.054858
SGAR	0.176	-0.510785
SPACE	0.176	-0.410465
NOPARK	0.622	-0.606195 *
AGE	99.851	0.00042139
NOCH	0.257	-0.249828 *
CHP	0.122	-0.313419 *
SIZE	1003.10	0.00046936 *
BATH	1	0
A	0.014	0.718817
C	0.297	-0.062832
D	0.216	-0.116636
E	0.041	-0.03203
F	0.095	-0.126769
G	0.014	0
H	0	0
I	0.081	0.141013
J	0.149	0.191561
K	0.014	0.703769 *
P1	0	0
P2	0.014	0.187339
P3	0.176	-0.198367
P4	0.622	-0.228055
P5	0.054	-0.21173
P7	0.081	-0.455029
CONSTANT	1	11.18484 *

PRE-1919

NORTHERN

	WEIGHT	COEFF
SDH	0.079	-0.264504 *
TH	0.805	-0.441681 *
DB	0.006	-0.116946
SDB	0.008	-0.307799
FB	0.049	-0.498881 *
FC	0.022	-0.410597 *
LH	0.122	-0.045156
SGAR	0.195	-0.051029
SPACE	0.195	-0.115978
NOPARK	0.598	-0.138558
AGE	95.854	0.001115 *
NOCH	0.329	-0.167927 *
CHP	0.136	-0.119034 *
SIZE	1071.65	0.00042978 *
BATH	1.033	-0.047321
A	0.026	-0.161414
C	0.392	-0.152761 *
D	0.173	-0.267408 *
E	0.049	-0.394181 *
F	0.081	-0.26113 *
G	0.016	-0.26069 *
H	0.004	-0.698897 *
I	0.059	-0.054775
J	0.11	0.021295
K	0.026	0.059157
P1	0	0
P2	0.004	0.003187
P3	0.156	-0.353763 *
P4	0.62	-0.387182 *
P5	0.098	-0.463313 *
P7	0.085	-0.11629
CONSTANT	1	10.496288 *

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
119	0.65527	8.70
158	0.65287	12.81
157	0.72937	16.02
74	0.72968	8.58
508	0.66331	34.29

SAMPLE SIZE	ADJUSTED R-SQUARED	F STATISTIC
508	0.66331	34.29

Q1 1986	PRE-1919	Q2 1986	PRE-1919	Q3 1986	PRE-1919	Q4 1986	PRE-1919	1986	PRE-1919	
YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		
	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.038	-0.0491	0.071	-0.100321	0.09	-0.244204 *	0.109	-0.078713	0.076	-0.149867 *
TH	0.92	-0.06639	0.877	-0.388402 *	0.838	-0.496184 *	0.817	-0.342424 *	0.864	-0.384955 *
DB	0.004	0.573168	0	0	0	0	0	0	0.001	0.177275
SDB	0	0	0	0	0.003	0.122014	0	0	0.001	0.181493
FB	0	0	0	0	0.003	-0.618258 *	0.006	-0.462677	0.002	-0.600621 *
FC	0	0	0.01	-0.521469 *	0.003	-0.189763	0	0	0.004	-0.317523 *
LH	0.118	0.15779 *	0.073	0.163712 *	0.085	0.082718	0.109	-0.017852	0.091	0.098469 *
SGAR	0.097	-0.389764 *	0.118	-0.06018	0.133	0.028878	0.149	-0.240458	0.123	-0.102624
SPACE	0.109	-0.436833 *	0.173	-0.148238	0.08	-0.019631	0.08	-0.227707	0.116	-0.174694 *
NOPARK	0.773	-0.457689 *	0.688	-0.151661	0.774	-0.145884	0.749	-0.292271 *	0.742	-0.211576 *
AGE	92.521	0.002582 *	96.063	0.003658 *	97.928	0.002089 *	98.697	0.003546 *	96.336	0.002782 *
NOCH	0.559	-0.108449 *	0.565	-0.15484 *	0.585	-0.162679 *	0.497	-0.181163 *	0.56	-0.151495 *
CHP	0.088	0.00743	0.065	-0.185972 *	0.072	-0.013847	0.086	-0.008503	0.075	-0.074554 *
SIZE	889.881	0.00053021 *	925	0.00047561 *	896.705	0.00031127 *	919.92	0.00054519 *	908.018	0.00043625 *
BATH	1.004	0.175965	1.021	-0.29241 *	1.019	0.032198	1.017	-0.08636	1.016	-0.085411
A	0.038	0.236501	0.013	0.128894	0.013	0.05011	0.023	-0.415535 *	0.02	0.003648
C	0.382	0.00509	0.479	-0.053171	0.418	0.024409	0.349	-0.075501	0.42	-0.004536
D	0.202	-0.064204	0.107	-0.112664	0.128	-0.125744	0.143	-0.039907	0.138	-0.086906 *
E	0.034	-0.095375	0.039	-0.061685	0.04	-0.125779	0.011	0.008509	0.034	-0.083604
F	0.046	-0.171372	0.063	-0.169959 *	0.09	-0.049485	0.069	-0.123956	0.069	-0.112927 *
G	0.021	-0.277478 *	0.008	-0.093762	0.016	-0.023193	0.011	-0.159124	0.014	-0.156421 *
H	0.109	-0.222066 *	0.092	-0.251575 *	0.106	-0.132568	0.109	-0.152795	0.102	-0.184206 *
I	0.038	0.062606	0.029	-0.012991	0.04	0.084398	0.034	-0.292377 *	0.035	0.012159
J	0.071	0.110511	0.063	0.109167	0.064	0.143921	0.12	0.012489	0.073	0.109384 *
K	0.008	0.101718	0.031	0.030021	0.019	0.26911 *	0.051	-0.049433	0.026	0.134273 *
P1	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0
P3	0.206	-0.155712	0.183	-0.277209 *	0.25	-0.142673	0.24	-0.111205	0.218	-0.189603 *
P4	0.487	-0.187543 *	0.487	-0.372063 *	0.471	-0.20448 *	0.457	-0.208812 *	0.477	-0.258373 *
P5	0.105	-0.163226	0.136	-0.227182 *	0.109	-0.075119	0.08	-0.228029 *	0.113	-0.158993 *
P7	0.16	-0.143772	0.12	-0.331577 *	0.133	-0.103821	0.16	-0.018019	0.138	-0.177645 *
CONSTANT	1	9.565135 *	1	10.263684 *	1	10.076252 *	1	9.946533 *	1	10.067495 *
SAMPLE SIZE	238		382		376		175		1171	
ADJUSTED R-SQUARED	0.60834		0.73401		0.69931		0.72084		0.68787	
F STATISTIC	15.16		41.44		32.15		18.28		89.91	

	Q1 1986	Q2 1986	Q3 1986	Q4 1986	PRE-1919	PRE-1919	PRE-1919	PRE-1919	PRE-1919	
	NORTH WEST		NORTH WEST		NORTH WEST		NORTH WEST		NORTH WEST	
	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
SDH	0.173	-0.455408 *	0.118	-0.309815 *	0.121	-0.031115	0.155	-0.427702 *	0.135	-0.284399 *
TH	0.776	-0.633409 *	0.837	-0.511914 *	0.844	-0.207648 *	0.788	-0.693886 *	0.82	-0.484485 *
DB	0	0	0.001	-0.839092 *	0	0	0	0	0	-0.830999 *
SDB	0.003	-0.716405 *	0	0	0	0	0.003	-0.165073	0.001	-0.189206
FB	0	0	0	0	0	0	0.003	0.003029	0	0.040062
FC	0.01	-0.56594 *	0.01	-0.372442 *	0.007	-0.20013	0.01	-0.912406 *	0.009	-0.448721 *
LH	0.42	-0.036054	0.434	-0.060284 *	0.434	-0.005257	0.431	-0.049066	0.431	-0.039769 *
SGAR	0.12	-0.078393	0.103	-0.08914	0.098	0.029158	0.121	0.059978	0.107	-0.026759
SPACE	0.094	-0.165615	0.095	-0.164138	0.088	-0.130204	0.088	-0.095788	0.092	-0.138069 *
NOPARK	0.788	-0.246159 *	0.788	-0.281803 *	0.797	-0.186973 *	0.788	-0.077286	0.787	-0.214518 *
AGE	93.827	0.002575 *	93.416	0.001545 *	94.797	0.002085 *	93.919	0.00084979	93.981	0.001788 *
NOCH	0.483	-0.188744 *	0.478	-0.15581 *	0.469	-0.156942 *	0.512	-0.171082 *	0.481	-0.167173 *
CHP	0.053	-0.061464	0.051	-0.103933 *	0.038	-0.059022	0.03	-0.016382	0.045	-0.085478 *
SIZE	998.961	0.00031661 *	935.314	0.00035113 *	979.174	0.00039504 *	962.902	0.00026770 *	964.817	0.00034634 *
BATH	1.02	0.296202 *	1.018	0.077648	1.027	0.151258 *	1.044	0.182592 *	1.025	0.151142 *
A	0.015	0.250495 *	0.007	0.179923	0.008	-0.008562	0.007	-0.183201	0.009	0.143337 *
C	0.354	-0.084883	0.35	-0.049681	0.369	-0.113512 *	0.306	-0.138351 *	0.35	-0.087081 *
D	0.229	-0.212808 *	0.239	-0.117112 *	0.24	-0.189847 *	0.313	-0.182539 *	0.248	-0.16227 *
E	0.041	-0.177019 *	0.029	0.007888	0.025	-0.104096	0.013	-0.311601 *	0.028	-0.100063 *
F	0.043	-0.127041	0.067	-0.066717	0.057	-0.153213 *	0.044	-0.274074 *	0.056	-0.127308 *
G	0.013	-0.171194	0.015	-0.123387	0.02	-0.226962 *	0.017	-0.556263 *	0.016	-0.220769 *
H	0.046	-0.246366 *	0.041	-0.325778 *	0.018	-0.390834 *	0.027	-0.322116 *	0.033	-0.326757 *
I	0.059	-0.001777	0.058	0.067362	0.072	-0.05656	0.051	-0.187788 *	0.061	-0.015582
J	0.094	-0.0003240	0.099	0.135195 *	0.103	0.019004	0.111	-0.064353	0.101	0.051466 *
K	0.023	-0.042196	0.014	0.15617 *	0.02	0.086115	0.034	-0.027616	0.02	0.079616
P1	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0
P3	0.254	-0.151711 *	0.247	-0.231117 *	0.25	-0.259958 *	0.226	-0.215999 *	0.246	-0.222318 *
P4	0.237	-0.12104 *	0.313	-0.18395 *	0.293	-0.262541 *	0.296	-0.251096 *	0.29	-0.197677 *
P5	0.216	-0.07931	0.184	-0.103384 *	0.206	-0.135596 *	0.145	-0.002494	0.191	-0.092047 *
P7	0.112	0.025704	0.073	-0.141352 *	0.075	-0.096076 *	0.121	-0.048298	0.088	-0.087134 *
CONSTANT	1	10.069863 *	1	10.277272 *	1	9.836749 *	1	10.403439 *	1	10.139177 *
SAMPLE SIZE	393		728		601		297		2019	
ADJUSTED R-SQUARED	0.75794		0.74688		0.74348		0.71738		0.73609	
F STATISTIC	46.46		80.45		67.89		27.83		195.09	

Q1 1986	PRE-1919	Q2 1986	PRE-1919	Q3 1986	PRE-1919	Q4 1986	PRE-1919	1986	PRE-1919
EAST MIDLANDS		EAST MIDLANDS		EAST MIDLANDS		EAST MIDLANDS		EAST MIDLANDS	
	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT		WEIGHT
SDH	0.203	0.163	0.186	0.186	0.179	0.179	0.179	SDH	0.181
TH	0.695	0.738	0.706	0.706	0.696	0.696	0.696	TH	0.714
DB	0	0	0.003	0.003	0	0	0	DB	0.001
SDB	0	0	0	0	0	0	0	SDB	0
FB	0	0	0	0	0	0	0	FB	0
FC	0.004	0.002	0.002	0.002	0	0	0	FC	0.002
LH	0.012	0.005	0.017	0.017	0.018	0.018	0.018	LH	0.012
SGAR	0.164	0.146	0.155	0.155	0.143	0.143	0.143	SGAR	0.152
SPACE	0.098	0.082	0.061	0.061	0.065	0.065	0.065	SPACE	0.077
NOPARK	0.711	0.752	0.757	0.757	0.75	0.75	0.75	NOPARK	0.744
AGE	99.961	98.312	95.355	95.355	99.637	99.637	99.637	AGE	98.107
NOCH	0.34	0.369	0.311	0.311	0.298	0.298	0.298	NOCH	0.336
CHP	0.074	0.077	0.115	0.115	0.077	0.077	0.077	CHP	0.086
SIZE	1013.72	962.495	998.654	998.654	1046.17	1046.17	1046.17	SIZE	996.192
BATH	1.039	1.045	1.03	1.03	1.018	1.018	1.018	BATH	1.036
A	0.039	0.035	0.014	0.014	0.03	0.03	0.03	A	0.029
C	0.414	0.399	0.5	0.5	0.5	0.5	0.5	C	0.444
D	0.148	0.156	0.118	0.118	0.089	0.089	0.089	D	0.134
E	0.07	0.032	0.02	0.02	0.036	0.036	0.036	E	0.038
F	0.043	0.04	0.068	0.068	0.054	0.054	0.054	F	0.05
G	0.004	0.01	0.017	0.017	0.006	0.006	0.006	G	0.01
H	0.066	0.082	0.044	0.044	0.089	0.089	0.089	H	0.069
I	0.051	0.069	0.057	0.057	0.036	0.036	0.036	I	0.057
J	0.047	0.084	0.068	0.068	0.06	0.06	0.06	J	0.068
K	0.031	0.015	0.014	0.014	0.018	0.018	0.018	K	0.019
P1	0	0	0	0	0	0	0	P1	0
P2	0	0	0	0	0	0	0	P2	0
P3	0.152	0.149	0.139	0.139	0.119	0.119	0.119	P3	0.142
P4	0.348	0.233	0.321	0.321	0.315	0.315	0.315	P4	0.294
P5	0.383	0.421	0.348	0.348	0.351	0.351	0.351	P5	0.383
P7	0.102	0.173	0.182	0.182	0.167	0.167	0.167	P7	0.158
CONSTANT	1	1	1	1	1	1	1	CONSTANT	1
	9.952017 *	10.336711 *	10.033424 *	10.033424 *	9.950632 *	9.950632 *	9.950632 *		10.073112 *
SAMPLE SIZE	256	404	296	296	168	168	168	SAMPLE SIZE	1124
ADJUSTED R-SQUARED	0.78649	0.77852	0.71479	0.71479	0.73660	0.73660	0.73660	ADJUSTED R-SQUARED	0.74624
F STATISTIC	37.13	55.48	29.43	29.43	19.68	19.68	19.68	F STATISTIC	123.31

Q1 1986			Q2 1986			Q3 1986			Q4 1986			PRE-1919		
WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.151	-0.268254 *	SDH	0.167	-0.237963 *	SDH	0.143	-0.134937 *	SDH	0.133	-0.615241 *	SDH	0.152	-0.274431 *
TH	0.752	-0.462685 *	TH	0.763	-0.305655 *	TH	0.716	-0.330138 *	TH	0.721	-0.744237 *	TH	0.742	-0.399722 *
DB	0	0	DB	0.002	-0.379194	DB	0	0	DB	0.006	-0.330837	DB	0.002	-0.219159
SDB	0	0	SDB	0	0	SDB	0	0	SDB	0	0	SDB	0	0
FB	0	0	FB	0	0	FB	0.003	-0.597478 *	FB	0.012	-0.458547	FB	0.003	-0.44203 *
FC	0.023	-0.244957	FC	0.016	-0.422717 *	FC	0.024	-0.39893 *	FC	0.018	-0.843861 *	FC	0.02	-0.421324 *
LH	0.041	-0.1129	LH	0.026	0.070011	LH	0.039	-0.023551	LH	0.03	0	LH	0.033	-0.018451
SGAR	0.165	-0.014385	SGAR	0.121	-0.290909 *	SGAR	0.152	-0.216975 *	SGAR	0.182	-0.17512	SGAR	0.147	-0.158784 *
SPACE	0.11	-0.061287	SPACE	0.111	-0.309338 *	SPACE	0.075	-0.326098 *	SPACE	0.085	-0.270914	SPACE	0.097	-0.2127 *
NOPARK	0.706	-0.127546	NOPARK	0.747	-0.396024 *	NOPARK	0.749	-0.362242 *	NOPARK	0.703	-0.218972	NOPARK	0.734	-0.274425 *
AGE	99.271	0.00216 *	AGE	96.794	0.001649 *	AGE	102.857	0.001089 *	AGE	97.4	-0.002695 *	AGE	99.118	0.001271 *
NOCH	0.514	-0.150129 *	NOCH	0.515	-0.094143 *	NOCH	0.478	-0.145401 *	NOCH	0.491	-0.062304	NOCH	0.5	-0.117897 *
CHP	0.106	-0.054142	CHP	0.081	0.03351	CHP	0.072	-0.045919	CHP	0.079	-0.110482	CHP	0.083	-0.036491
SIZE	965.955	0.00032806 *	SIZE	940.224	0.00050136 *	SIZE	1005.68	0.00037515 *	SIZE	1017.67	0.00028274 *	SIZE	975.314	0.00039469 *
BATH	1.037	-0.043293	BATH	1.03	0.038313	BATH	1.027	0.29687 *	BATH	1.042	0.11774	BATH	1.032	0.087315 *
A	0.028	-0.02538	A	0.032	0.084126	A	0.033	0.098365	A	0.036	0.26908	A	0.032	0.091339
C	0.339	0.032614	C	0.262	-0.012211	C	0.328	-0.0000864	C	0.345	0.008377	C	0.308	0.001378
D	0.151	-0.066064	D	0.165	-0.103081	D	0.137	-0.090201	D	0.097	-0.221651	D	0.144	-0.119233 *
E	0.028	-0.152032	E	0.051	-0.045587	E	0.03	-0.101729	E	0.03	0.041124	E	0.037	-0.084843
F	0.028	-0.017362	F	0.053	-0.062882	F	0.048	-0.027552	F	0.024	-0.0592	F	0.043	-0.040126
G	0.014	-0.049649	G	0.009	-0.071411	G	0.009	-0.276954 *	G	0.006	-0.046122	G	0.01	-0.125631
H	0.17	-0.074374	H	0.174	-0.095575	H	0.143	-0.135113 *	H	0.188	-0.136291	H	0.166	-0.108142 *
I	0.046	0.114538	I	0.072	0.077964	I	0.045	0.043911	I	0.048	0.179832	I	0.056	0.076667
J	0.096	0.182765 *	J	0.1	0.194098 *	J	0.122	0.098988	J	0.103	0.290521 *	J	0.106	0.184812 *
K	0.05	0.029032	K	0.019	0.169747	K	0.027	0.072882	K	0.036	0.153386	K	0.03	0.103737 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.174	-0.114086	P3	0.204	-0.153626 *	P3	0.191	-0.207338 *	P3	0.236	-0.005853	P3	0.199	-0.14957 *
P4	0.161	-0.240195 *	P4	0.213	-0.282945 *	P4	0.194	-0.381111 *	P4	0.224	-0.103823	P4	0.199	-0.285069 *
P5	0.362	0.0213	P5	0.346	-0.011416	P5	0.316	-0.025252	P5	0.291	0.1393	P5	0.332	-0.001598
P7	0.211	0.111767	P7	0.125	0.134675 *	P7	0.185	0.137731 *	P7	0.176	0.318465 *	P7	0.166	0.134643 *
CONSTANT	1	10.053265 *	CONSTANT	1	10.01438 *	CONSTANT	1	9.998819 *	CONSTANT	1	10.655648 *	CONSTANT	1	10.084354 *
SAMPLE SIZE	218		SAMPLE SIZE	431		SAMPLE SIZE	335		SAMPLE SIZE	165		SAMPLE SIZE	1149	
ADJUSTED R-SQUARED	0.70086		ADJUSTED R-SQUARED	0.70304		ADJUSTED R-SQUARED	0.82173		ADJUSTED R-SQUARED	0.70861		ADJUSTED R-SQUARED	0.74061	
F STATISTIC	20.55		F STATISTIC	38.70		F STATISTIC	58.02		F STATISTIC	15.77		F STATISTIC	118.06	

Q1 1986	PRE-1919	Q2 1986	PRE-1919	Q3 1986	PRE-1919	Q4 1986	PRE-1919	1986	PRE-1919		
EAST ANGLIA		EAST ANGLIA		EAST ANGLIA		EAST ANGLIA		EAST ANGLIA			
	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	
SDH	0.194	-0.258515 *	0.212	-0.185614 *	0.183	-0.36718 *	0.179	-0.333147 *	SDH	0.194	-0.298504 *
TH	0.667	-0.398899 *	0.652	-0.311671 *	0.647	-0.414492 *	0.632	-0.443426 *	TH	0.65	-0.396012 *
DB	0	0	0	0	0.004	-0.893517 *	0	0	DB	0.001	-0.798806 *
SDB	0	0	0	0	0	0	0.009	0.044992	SDB	0.001	0.066313
FB	0	0	0.004	-0.381798	0.004	-0.981641 *	0	0	FB	0.003	-0.66269 *
FC	0.031	-0.62615 *	0.028	-0.17589	0.025	-0.707241 *	0	0	FC	0.023	-0.481311 *
LH	0.023	0.149057	0.048	-0.126564	0.033	0.029836	0.028	0.002901	LH	0.036	-0.01883
SGAR	0.209	0.01268	0.132	-0.129321	0.158	0.049995	0.189	-0.019793	SGAR	0.163	-0.06262 *
SPACE	0.233	-0.020844	0.14	-0.220713 *	0.187	-0.044072	0.151	-0.110251	SPACE	0.174	-0.120651
NOPARK	0.527	-0.031606	0.704	-0.194905 *	0.606	-0.015897	0.623	0.028125	NOPARK	0.628	-0.098512
AGE	106.814	0.00096339	106.824	0.001199 *	112.394	0.001002 *	118.142	0.001301 *	AGE	110.324	0.001141 *
NOCH	0.488	-0.256039 *	0.436	-0.135473 *	0.436	-0.116589 *	0.358	-0.138068 *	NOCH	0.434	-0.159675 *
CHP	0.116	-0.209822 *	0.1	-0.043978	0.104	0.022289	0.113	-0.075132	CHP	0.106	-0.070222 *
SIZE	959.989	0.00038755 *	950.414	0.00045150 *	983.51	0.00043957 *	980.535	0.00031515 *	SIZE	967.5	0.00040306 *
BATH	1.047	0.074454	1.028	-0.048939	1.033	0.018774	1.009	0.11189	BATH	1.03	0.018902
A	0.116	-0.04225	0.048	-0.184915 *	0.058	-0.167147	0.094	-0.119428	A	0.07	-0.138136 *
C	0.395	-0.176074	0.42	-0.301443 *	0.427	-0.192299 *	0.443	-0.105646	C	0.421	-0.180579 *
D	0.209	-0.209322	0.228	-0.351501 *	0.17	-0.318845 *	0.151	-0.090085	D	0.194	-0.242047 *
E	0.008	-0.176427	0.028	-0.23635 *	0.017	-0.200298	0.019	-0.462306 *	E	0.019	-0.216396 *
F	0.008	-0.099616	0.008	-0.242589	0.041	-0.235321 *	0.019	-0.204103	F	0.021	-0.194907 *
G	0.016	-0.051612	0.004	-0.74005 *	0.008	-0.712644 *	0	0	G	0.007	-0.489201 *
H	0.008	-0.838355 *	0.024	-0.510252 *	0.012	-0.69437 *	0	0	H	0.014	-0.533309 *
I	0.062	-0.013101	0.084	-0.301333 *	0.079	-0.099296	0.066	-0.078897	I	0.076	-0.10085
J	0.085	-0.002997	0.06	-0.313253 *	0.104	-0.018555	0.094	0.169869	J	0.084	-0.027556
K	0.062	0.001367	0.052	-0.346034 *	0.058	-0.285883 *	0.057	-0.096251	K	0.056	-0.190727 *
P1	0	0	0	0	0	0	0	P1	0	0	
P2	0	0	0	0	0	0	0	P2	0	0	
P3	0	0	0.004	0.031356	0.004	-0.091734	0	0	P3	0.003	0.086448
P4	0.31	-0.522098 *	0.328	-0.490944 *	0.299	-0.560637 *	0.236	-0.642284 *	P4	0.302	-0.53045 *
P5	0.124	-0.474058 *	0.128	-0.570304 *	0.1	-0.446388 *	0.123	-0.436325 *	P5	0.117	-0.476932 *
P7	0.535	-0.548045 *	0.508	-0.547041 *	0.564	-0.580018 *	0.604	-0.593241 *	P7	0.545	-0.553195 *
CONSTANT	1	10.827437 *	1	11.118265 *	1	10.957956 *	1	10.904892 *	CONSTANT	1	10.987563 *
SAMPLE SIZE	129	250	241	250	241	250	106	726	SAMPLE SIZE	106	726
ADJUSTED R-SQUARED	0.73243	0.73328	0.76439	0.73328	0.76439	0.76439	0.64990	0.72546	ADJUSTED R-SQUARED	0.64990	0.72546
F STATISTIC	15.02	26.35	28.81	26.35	28.81	28.81	9.47	67.06	F STATISTIC	9.47	67.06

Q1 1986 PRE-1919				Q2 1986 PRE-1919				Q3 1986 PRE-1919				Q4 1986 PRE-1919				1986 PRE-1919			
OUTER SOUTH EAST				OUTER SOUTH EAST				OUTER SOUTH EAST				OUTER SOUTH EAST				OUTER SOUTH EAST			
SDH	TH	DB	SDB	SDH	TH	DB	SDB	SDH	TH	DB	SDB	SDH	TH	DB	SDB	SDH	TH	DB	SDB
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF
0.138	-0.232409 *	0.004	-0.285149 *	0.168	-0.157132 *	0.005	-0.120315	0.157	-0.23349 *	0.008	0.03756	0.169	-0.137542 *	0.003	-0.196434	0.159	-0.194431 *		
0.018	-0.434669 *	0	0	0.033	-0.189488 *	0	0	0.02	-0.571074 *	0.011	-0.418804 *	0.018	-0.165471	0	0	0.024	-0.350382 *		
0.145	-0.386023 *	0.171	-0.089757	0.161	-0.26485 *	0.203	-0.126423 *	0.172	-0.511453 *	0.172	-0.511453 *	0.182	-0.278077 *	0.164	-0.363821 *	0.164	-0.363821 *		
0.116	-0.133452	0.123	-0.159498 *	0.203	-0.126423 *	0.123	-0.159498 *	0.202	-0.009139	0.202	-0.009139	0.211	-0.134635 *	0.197	-0.080106 *	0.197	-0.080106 *		
0.092	-0.204253 *	0.088	-0.203553 *	0.088	-0.203553 *	0.088	-0.203553 *	0.106	0.04874	0.106	0.04874	0.12	-0.015673	0.127	-0.025068	0.127	-0.025068		
0.776	-0.216314 *	0.773	-0.260088 *	0.773	-0.260088 *	0.773	-0.260088 *	0.733	-0.023468	0.733	-0.023468	0.737	-0.076184	0.756	-0.135579 *	0.756	-0.135579 *		
102.46	0.001396 *	0.423	-0.147608 *	102.263	0.001595 *	0.383	-0.130203 *	106.152	0.001535 *	0.362	-0.132355 *	0.367	-0.106994 *	103.495	0.001532 *	0.383	-0.134764 *		
0.094	-0.060615 *	0.094	-0.060615 *	0.115	-0.057723 *	0.115	-0.057723 *	0.095	-0.051003	0.095	-0.051003	0.094	-0.068979	0.101	-0.063262 *	0.101	-0.063262 *		
913.04	0.00034677 *	1.018	0.026813	941.533	0.00036402 *	1.033	0.034688	958.272	0.00026100 *	1.05	0.130641 *	1.042	0.047939	938.454	0.00032787 *	1.036	0.065022 *		
0.018	0.129944	0.018	0.129944	0.031	0.089849	0.031	0.089849	0.028	0.206334 *	0.028	0.206334 *	0.026	0.43571 *	0.026	0.176249 *	0.026	0.176249 *		
0.419	-0.075759 *	0.419	-0.075759 *	0.39	-0.062713	0.39	-0.062713	0.366	-0.09719 *	0.366	-0.09719 *	0.38	-0.098965 *	0.388	-0.084004 *	0.388	-0.084004 *		
0.107	-0.096455 *	0.107	-0.096455 *	0.086	-0.108392 *	0.086	-0.108392 *	0.097	-0.140679 *	0.097	-0.140679 *	0.104	-0.182623 *	0.096	-0.125997 *	0.096	-0.125997 *		
0.02	0.135313 *	0.028	-0.019463	0.028	-0.019463	0.028	-0.019463	0.03	-0.078846	0.03	-0.078846	0.042	0.00033011	0.029	0.00027966	0.029	0.00027966		
0.028	-0.075224	0.021	-0.059865	0.021	-0.059865	0.021	-0.059865	0.021	-0.136578 *	0.021	-0.136578 *	0.018	-0.018791	0.022	-0.08332 *	0.022	-0.08332 *		
0.004	0.477154 *	0.015	-0.206389 *	0.006	-0.01102	0.006	-0.01102	0.005	-0.218656	0.005	-0.218656	0.003	-0.201958	0.005	-0.010938	0.005	-0.010938		
0.015	-0.206389 *	0.116	0.013787	0.021	-0.025329	0.021	-0.025329	0.015	0.023872	0.015	0.023872	0.021	-0.069673	0.018	-0.040152	0.018	-0.040152		
0.096	0.12393 *	0.096	0.12393 *	0.13	-0.054778	0.13	-0.054778	0.12	-0.085055	0.12	-0.085055	0.112	0.04285	0.121	-0.040543	0.121	-0.040543		
0.118	0.027885	0.127	-0.012409	0.11	0.077346 *	0.11	0.077346 *	0.116	0.087697 *	0.116	0.087697 *	0.109	0.055145	0.109	0.086648 *	0.109	0.086648 *		
0.007	0.340688 *	0.002	0.80744 *	0.127	-0.012409	0.127	-0.012409	0.143	-0.042573	0.143	-0.042573	0.125	0.055624	0.129	-0.008604	0.129	-0.008604		
0	0	0	0	0.002	0.80744 *	0.002	0.80744 *	0.001	0.317722	0.001	0.317722	0.003	0.735408 *	0.003	0.461354 *	0.003	0.461354 *		
0.004	0.28908 *	0.026	-0.193268 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.026	-0.193268 *	0.358	-0.041595	0.002	0.050354	0.002	0.050354	0.001	0.183075	0.001	0.183075	0.005	0.442564 *	0.003	0.243621 *	0.003	0.243621 *	0.043	-0.205988 *
0.32	-0.155366 *	1	10.618004 *	0.033	-0.196623 *	0.033	-0.196623 *	0.056	-0.243165 *	0.056	-0.243165 *	0.068	-0.195046 *	0.043	-0.205988 *	0.328	-0.065735 *	0.328	-0.065735 *
1	10.618004 *	1	10.618004 *	0.296	-0.147014 *	0.296	-0.147014 *	0.315	-0.168235 *	0.315	-0.168235 *	0.31	-0.140189 *	0.309	-0.152697 *	0.309	-0.152697 *	1	10.541631 *
CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1	CONSTANT	1
SAMPLE SIZE	544	SAMPLE SIZE	851	SAMPLE SIZE	756	SAMPLE SIZE	384	SAMPLE SIZE	2535	SAMPLE SIZE	384	SAMPLE SIZE	2535	SAMPLE SIZE	2535	SAMPLE SIZE	2535	SAMPLE SIZE	2535
ADJUSTED R-SQUARED	0.69312	ADJUSTED R-SQUARED	0.69937	ADJUSTED R-SQUARED	0.68819	ADJUSTED R-SQUARED	0.71257	ADJUSTED R-SQUARED	0.68190	ADJUSTED R-SQUARED	0.68190	ADJUSTED R-SQUARED	0.71257	ADJUSTED R-SQUARED	0.68190	ADJUSTED R-SQUARED	0.68190	ADJUSTED R-SQUARED	0.68190
F STATISTIC	43.29	F STATISTIC	69.19	F STATISTIC	56.54	F STATISTIC	33.74	F STATISTIC	182.07	F STATISTIC	33.74	F STATISTIC	182.07	F STATISTIC	182.07	F STATISTIC	182.07	F STATISTIC	182.07

	Q1 1986	Q2 1986	Q3 1986	Q4 1986	1986	PRE-1919
	PRE-1919	PRE-1919	PRE-1919	PRE-1919	PRE-1919	PRE-1919
	OUTER METROPOLITAN	OUTER METROPOLITAN	OUTER METROPOLITAN	OUTER METROPOLITAN	OUTER METROPOLITAN	OUTER METROPOLITAN
	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF
SDH	0.195	0.223	0.224	0.224	0.238	0.218
TH	0.536	0.552	0.521	0.521	0.514	0.535
DB	0.002	0.005	0.002	0.002	0.006	0.004
SDB	0.005	0.002	0	0	0	0.002
FB	0.032	0.023	0.037	0.037	0.038	0.03
FC	0.175	0.135	0.141	0.141	0.132	0.145
LH	0.213	0.163	0.178	0.178	0.163	0.179
SGAR	0.116	0.142	0.135	0.135	0.113	0.13
SPACE	0.084	0.076	0.082	0.082	0.138	0.087
NOPARK	0.782	0.768	0.76	0.76	0.73	0.764
AGE	97.506	97.492	97.058	97.058	97.909	97.44
NOCH	0.339	0.325	0.364	0.364	0.263	0.33
CHP	0.079	0.076	0.077	0.077	0.088	0.079
SIZE	847.253	879.359	906.381	906.381	913.741	882.857
BATH	1.013	1.019	1.029	1.029	1.028	1.021
A	0.007	0.009	0.003	0.003	0.003	0.006
C	0.316	0.29	0.292	0.292	0.329	0.302
D	0.109	0.109	0.117	0.117	0.107	0.111
E	0.034	0.053	0.032	0.032	0.031	0.04
F	0.012	0.005	0.008	0.008	0.016	0.009
G	0.013	0.01	0.008	0.008	0.003	0.01
H	0.099	0.09	0.08	0.08	0.05	0.085
I	0.094	0.123	0.112	0.112	0.107	0.111
J	0.153	0.179	0.179	0.179	0.204	0.176
K	0.069	0.046	0.064	0.064	0.06	0.058
P1	0.003	0.002	0.006	0.006	0.003	0.004
P2	0	0	0	0	0	0
P3	0.057	0.047	0.064	0.064	0.053	0.055
P4	0.01	0.009	0.011	0.011	0.003	0.009
P5	0.486	0.459	0.426	0.426	0.423	0.453
P7	0.077	0.089	0.106	0.106	0.097	0.091
CONSTANT	1	1	1	1	1	1
	10.781092 *	10.726023 *	10.757612 *	10.757612 *	11.217309 *	10.813429 *
SAMPLE SIZE	595	957	624	624	319	2495
ADJUSTED R-SQUARED	0.76649	0.74802	0.80181	0.80181	0.78690	0.76273
F STATISTIC	65.99	95.60	87.91	87.91	41.49	268.24

Q1 1986	PRE-1919	Q2 1986	PRE-1919	Q3 1986	PRE-1919	Q4 1986	PRE-1919	1986	PRE-1919	
GREATER LONDON		GREATER LONDON		GREATER LONDON		GREATER LONDON		GREATER LONDON		
	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	
	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF	
SDH	0.064	-0.268489 *	0.087	-0.098083 *	0.089	-0.087971	0.105	-0.138916	0.084	-0.136335 *
TH	0.346	-0.288722 *	0.356	-0.127737 *	0.347	-0.136539 *	0.378	-0.173606 *	0.354	-0.175908 *
DB	0	0	0.001	-0.081977	0	0	0	0	0	-0.134092
SDB	0	0	0.001	-0.057224	0	0	0.001	-0.099693	0	-0.003566
FB	0.156	-0.379066 *	0.131	-0.169481 *	0.12	-0.155411 *	0.115	-0.287319 *	0.132	-0.228124 *
FC	0.423	-0.419702 *	0.409	-0.238136 *	0.429	-0.159672 *	0.387	-0.312508 *	0.414	-0.263565 *
LH	0.589	-0.00545	0.544	-0.013012	0.55	-0.073884	0.504	0.022436	0.551	-0.031731
SGAR	0.029	-0.141221	0.033	0.132974	0.043	-0.398353 *	0.049	0.021899	0.037	-0.010808
SPACE	0.019	-0.217107 *	0.026	0.052993	0.034	-0.500998 *	0.037	0.0151	0.028	-0.069924
NOPARK	0.948	-0.192381	0.936	0.039884	0.921	-0.430325 *	0.912	0.041091	0.932	-0.064896
AGE	92.467	0.002355 *	91.372	0.002388 *	91.882	0.002258 *	91.177	0.00045888	91.739	0.002047 *
NOCH	0.291	-0.155853 *	0.302	-0.138981 *	0.294	-0.10279 *	0.258	-0.10575 *	0.291	-0.132668 *
CHP	0.047	-0.061544 *	0.042	-0.052383 *	0.034	-0.073221 *	0.036	-0.083048	0.041	-0.066382 *
SIZE	830.765	0.00051206 *	843.428	0.00052679 *	846.26	0.00053522 *	873.874	0.00056770 *	845.125	0.00053000 *
BATH	1.026	0.125543 *	1.021	0.104154 *	1.014	0.225752 *	1.03	0.114507 *	1.022	0.138014 *
A	0	0	0	0	0	0	0	0	0	0
C	0.068	0.034597	0.072	0.011654	0.057	-0.016025	0.088	-0.178286 *	0.07	-0.028158
D	0.087	0.018586	0.078	-0.037416	0.081	-0.059824	0.091	-0.188619 *	0.083	-0.062287 *
E	0.023	0.059697	0.019	0.084193	0.021	-0.063174	0.013	-0.159495	0.02	-0.017102
F	0.026	0.033541	0.025	-0.038642	0.021	-0.021245	0.039	-0.088632	0.026	-0.029428
G	0.038	0.031648	0.024	-0.036324	0.038	-0.060653	0.031	-0.203367 *	0.032	-0.058608
H	0.303	-0.002439	0.341	-0.045035	0.33	-0.067403	0.366	-0.189168 *	0.332	-0.070245 *
I	0.293	0.141806 *	0.29	0.102651 *	0.264	0.086072	0.232	-0.025167	0.277	0.072418 *
J	0.072	0.100558	0.071	0.071984	0.079	0.106929 *	0.072	-0.149948	0.073	0.040455
K	0.081	0.150965 *	0.067	0.125048 *	0.09	0.106891 *	0.054	-0.024517	0.075	0.091386 *
P1	0.37	0.096828 *	0.34	0.133876 *	0.324	0.157297 *	0.322	0.150621 *	0.341	0.130436 *
P2	0	0	0	0	0	0	0	0	0	0
P3	0.237	-0.107106 *	0.223	-0.091079 *	0.245	-0.053439 *	0.241	-0.123592 *	0.234	-0.091088 *
P4	0.03	-0.059677	0.033	-0.035049	0.024	-0.024156	0.033	-0.013838	0.03	-0.042181 *
P5	0.036	-0.132286 *	0.026	-0.099218 *	0.033	-0.075681 *	0.04	-0.031739	0.032	-0.089724 *
P7	0.001	-0.72209 *	0	0	0.001	-0.512813 *	0	0	0	-0.556905 *
CONSTANT	1	10.496608 *	1	10.157832 *	1	10.577416 *	1	10.628905 *	1	10.363137 *

SAMPLE SIZE	1213	1883	1267	667	5030
ADJUSTED R-SQUARED	0.62262	0.65984	0.65221	0.63703	0.62480
F STATISTIC	75.06	131.38	88.93	44.29	289.78

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986			PRE-1919		
SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.175	-0.135472 *	SDH	0.165	-0.225334 *	SDH	0.159	-0.180928 *	SDH	0.112	-0.152967 *	SDH	0.158	-0.188983 *			
TH	0.557	-0.210569 *	TH	0.555	-0.300382 *	TH	0.581	-0.272887 *	TH	0.635	-0.331003 *	TH	0.574	-0.273027 *			
DB	0.005	0.113415	DB	0.006	0.073331	DB	0.002	0.410164 *	DB	0.004	-0.263095	DB	0.004	0.06219			
SDB	0	0	SDB	0.003	-0.273881	SDB	0.002	0.040477	SDB	0	0	SDB	0.002	-0.147784			
FB	0.003	-0.150437	FB	0.014	-0.288987 *	FB	0.013	-0.239383 *	FB	0.012	-0.52712 *	FB	0.011	-0.255587 *			
FC	0.154	-0.234937 *	FC	0.16	-0.340681 *	FC	0.139	-0.307207 *	FC	0.116	-0.451845 *	FC	0.147	-0.305868 *			
LH	0.159	-0.007168	LH	0.19	-0.038027	LH	0.157	-0.01002	LH	0.133	0.054455	LH	0.166	-0.024145			
SGAR	0.164	0.042808	SGAR	0.176	-0.097805	SGAR	0.195	0.018363	SGAR	0.178	-0.046299	SGAR	0.179	-0.047202			
SPACE	0.156	-0.023524	SPACE	0.145	-0.176518 *	SPACE	0.163	-0.030561	SPACE	0.129	-0.048608	SPACE	0.151	-0.106378 *			
NOPARK	0.653	-0.046113	NOPARK	0.659	-0.212305 *	NOPARK	0.627	-0.102446	NOPARK	0.664	-0.10119	NOPARK	0.649	-0.151163 *			
AGE	110.329	0.00086389 *	AGE	109.028	0.001613 *	AGE	107.723	0.00080942 *	AGE	110.801	0.00059921	AGE	109.151	0.001079 *			
NOCH	0.416	-0.139543 *	NOCH	0.379	-0.09742 *	NOCH	0.408	-0.137246 *	NOCH	0.461	-0.196107 *	NOCH	0.406	-0.129484 *			
CHP	0.106	-0.074549 *	CHP	0.15	-0.035514	CHP	0.099	-0.038891	CHP	0.091	-0.051794	CHP	0.118	-0.050208 *			
SIZE	1010.32	0.00040642 *	SIZE	1000.55	0.00030521 *	SIZE	1001.49	0.00030529 *	SIZE	1033.48	0.00032037 *	SIZE	1007.31	0.00033237 *			
BATH	1.021	0.143378 *	BATH	1.069	0.094488 *	BATH	1.039	0.229281 *	BATH	1.046	0.198585 *	BATH	1.047	0.143698 *			
A	0.053	0.011287	A	0.055	-0.042659	A	0.039	0.005202	A	0.058	0.070177	A	0.05	-0.023867			
C	0.493	-0.024926	C	0.442	-0.069587	C	0.442	-0.074067	C	0.448	-0.008171	C	0.454	-0.073458 *			
D	0.042	-0.187675 *	D	0.07	-0.117736 *	D	0.073	-0.196283 *	D	0.083	-0.121319	D	0.067	-0.162458 *			
E	0.029	-0.07939	E	0.012	-0.11146	E	0.032	-0.132006 *	E	0.029	-0.060788	E	0.024	-0.122431 *			
F	0.024	-0.043863	F	0.03	-0.133277 *	F	0.021	-0.199027 *	F	0.029	0.066042	F	0.026	-0.124474 *			
G	0.008	0.034017	G	0	0	G	0	0	G	0	0	G	0.002	-0.07014			
H	0.008	-0.173431	H	0.014	-0.259188 *	H	0.021	-0.284095 *	H	0.012	-0.173972	H	0.014	-0.247678 *			
I	0.119	0.012761	I	0.136	-0.033237	I	0.124	0.010434	I	0.091	0.085591	I	0.123	-0.013978			
J	0.103	0.11206	J	0.104	0.0726	J	0.11	-0.022844	J	0.12	0.053425	J	0.108	0.030575			
K	0.09	0.045577	K	0.089	0.043863	K	0.081	-0.079493	K	0.083	0.130083	K	0.086	0.001464			
P1	0.056	0.166054 *	P1	0.047	0.067703	P1	0.037	0.190692 *	P1	0.025	0.142992	P1	0.043	0.118806 *			
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0			
P3	0	0	P3	0.003	-0.308282 *	P3	0.002	-0.879589 *	P3	0.004	-0.326855	P3	0.002	-0.438256 *			
P4	0.095	-0.20447 *	P4	0.097	-0.202479 *	P4	0.084	-0.161759 *	P4	0.071	-0.077525	P4	0.089	-0.186122 *			
P5	0.093	0.020114	P5	0.137	-0.119306 *	P5	0.165	-0.049373	P5	0.187	0.062547	P5	0.143	-0.046789 *			
P7	0.692	0.035307	P7	0.656	-0.025726	P7	0.627	0.011397	P7	0.672	0.063897	P7	0.657	0.006791			
CONSTANT	1	9.9594 *	CONSTANT	1	10.398454 *	CONSTANT	1	10.226044 *	CONSTANT	1	10.229812 *	CONSTANT	1	10.282856 *			
SAMPLE SIZE	377		SAMPLE SIZE	642		SAMPLE SIZE	534		SAMPLE SIZE	241		SAMPLE SIZE	1794				
ADJUSTED R-SQUARED	0.67504		ADJUSTED R-SQUARED	0.72498		ADJUSTED R-SQUARED	0.67302		ADJUSTED R-SQUARED	0.69300		ADJUSTED R-SQUARED	0.68555				
F-STATISTIC	28.90		F-STATISTIC	59.270		F-STATISTIC	38.83		F-STATISTIC	20.35		F-STATISTIC	131.30				

	Q1 1986	Q2 1986	Q3 1986	Q4 1986	PRE-1919	PRE-1919	PRE-1919	PRE-1919	1986	PRE-1919
WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES
SDH	0.145	0.118	0.118	0.141	0.141	0.141	0.141	0.142	0.135	0.135
TH	0.71	0.778	0.778	0.771	0.771	0.771	0.771	0.7	0.749	0.749
DB	0.004	0.007	0.007	0.01	0.01	0.01	0.01	0.008	0.007	0.007
SDB	0.004	0.003	0.003	0	0	0	0	0	0.002	0.002
FB	0.008	0.007	0.007	0.003	0.003	0.003	0.003	0.008	0.006	0.006
FC	0.008	0.013	0.013	0.013	0.013	0.013	0.013	0.008	0.011	0.011
LH	0.108	0.062	0.062	0.064	0.064	0.064	0.064	0.058	0.074	0.074
SGAR	0.174	0.134	0.134	0.158	0.158	0.158	0.158	0.175	0.157	0.157
SPACE	0.187	0.245	0.245	0.205	0.205	0.205	0.205	0.2	0.213	0.213
NOPARK	0.631	0.605	0.605	0.62	0.62	0.62	0.62	0.592	0.614	0.614
AGE	89.071	90.366	90.366	89.32	89.32	89.32	89.32	93.417	90.1	90.1
NOCH	0.357	0.32	0.32	0.357	0.357	0.357	0.357	0.358	0.345	0.345
CHP	0.079	0.082	0.082	0.067	0.067	0.067	0.067	0.083	0.077	0.077
SIZE	1032.80	977.515	977.515	1008.00	1008.00	1008.00	1008.00	1064.19	1011.52	1011.52
BATH	1.012	1.007	1.007	1.013	1.013	1.013	1.013	1.05	1.016	1.016
A	0.037	0.029	0.029	0.024	0.024	0.024	0.024	0.042	0.031	0.031
C	0.398	0.444	0.444	0.411	0.411	0.411	0.411	0.408	0.418	0.418
D	0.22	0.219	0.219	0.259	0.259	0.259	0.259	0.192	0.228	0.228
E	0.071	0.042	0.042	0.047	0.047	0.047	0.047	0.058	0.053	0.053
F	0.021	0.02	0.02	0.013	0.013	0.013	0.013	0.05	0.022	0.022
G	0.004	0.01	0.01	0.017	0.017	0.017	0.017	0.017	0.011	0.011
H	0.004	0	0	0.01	0.01	0.01	0.01	0	0.004	0.004
I	0.066	0.085	0.085	0.061	0.061	0.061	0.061	0.017	0.064	0.064
J	0.087	0.059	0.059	0.094	0.094	0.094	0.094	0.117	0.084	0.084
K	0.037	0.02	0.02	0.044	0.044	0.044	0.044	0.042	0.034	0.034
P1	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0
P3	0.066	0.056	0.056	0.084	0.084	0.084	0.084	0.1	0.073	0.073
P4	0.295	0.337	0.337	0.3	0.3	0.3	0.3	0.217	0.3	0.3
P5	0.207	0.183	0.183	0.182	0.182	0.182	0.182	0.217	0.193	0.193
P7	0.261	0.212	0.212	0.232	0.232	0.232	0.232	0.333	0.246	0.246
CONSTANT	1	1	1	1	1	1	1	1	1	1
SAMPLE SIZE	241	306	297	297	297	297	297	120	964	964
ADJUSTED R-SQUARED	0.65883	0.58207	0.59787	0.59787	0.59787	0.59787	0.59787	0.64428	0.60828	0.60828
F STATISTIC	16.98	16.17	16.72	16.72	16.72	16.72	16.72	8.98	52.57	52.57

Q1 1986	PRE-1919	Q2 1986	PRE-1919	Q3 1986	PRE-1919	Q4 1986	PRE-1919	1986	PRE-1919
SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND	SCOTLAND
SDH	0.076	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
TH	0.098	0.086	0.086	0.127	0.210628 *	0.15	0.15	0.15	0.11
DB	0.006	0.014	0.014	0.024	0.077623	0.028	0.028	0.028	0.017
SDB	0.013	0.014	0.014	0.015	0.139881	0.019	0.019	0.019	0.015
FB	0.729	0.713	0.713	0.644	0.290804 *	0.65	0.65	0.65	0.688
FC	0.019	0.014	0.014	0.026	0.286762 *	0.028	0.028	0.028	0.021
LH	0.002	0.001	0.001	0	0	0	0	0	0.001
SGAR	0.108	0.144	0.144	0.128	0.130934	0.147	0.147	0.147	0.131
SPACE	0.087	0.066	0.066	0.068	0.139876	0.091	0.091	0.091	0.075
NOPARK	0.794	0.775	0.775	0.789	0.18707 *	0.759	0.759	0.759	0.781
AGE	92.18	92.082	92.082	94.4	0.00071616	94.419	94.419	94.419	93.111
NOCH	0.566	0.563	0.563	0.554	0.128643 *	0.544	0.544	0.544	0.558
CHP	0.047	0.037	0.037	0.065	0.055576	0.053	0.053	0.053	0.05
SIZE	861.134	877.286	877.286	874.729	0.00050735	892.825	892.825	892.825	874.973
BATH	1.03	1.034	1.034	1.021	0.143474 *	1.021	1.021	1.021	1.027
A	0.023	0.03	0.03	0.021	0.040117	0.031	0.031	0.031	0.026
C	0.133	0.123	0.123	0.145	0.02329	0.134	0.134	0.134	0.133
D	0.129	0.113	0.113	0.088	0.077279	0.103	0.103	0.103	0.108
E	0.117	0.144	0.144	0.11	0.058205	0.122	0.122	0.122	0.125
F	0.085	0.074	0.074	0.079	0.119354 *	0.072	0.072	0.072	0.078
G	0.044	0.036	0.036	0.044	0.029259	0.038	0.038	0.038	0.04
H	0.006	0.005	0.005	0.008	0.025337	0.009	0.009	0.009	0.007
I	0.068	0.101	0.101	0.082	0.108129 *	0.081	0.081	0.081	0.085
J	0.121	0.109	0.109	0.14	0.151259 *	0.169	0.169	0.169	0.13
K	0.227	0.211	0.211	0.243	0.032935	0.213	0.213	0.213	0.224
P1	0.1	0.105	0.105	0.086	0.073453	0.081	0.081	0.081	0.095
P2	0.814	0.791	0.791	0.82	0.294996 *	0.784	0.784	0.784	0.804
P3	0	0	0	0.002	0.450497 *	0	0	0	0
P4	0.002	0	0	0	0	0	0	0	0
P5	0.008	0.007	0.007	0.014	0.39159 *	0.031	0.031	0.031	0.012
P7	0	0	0	0	0	0	0	0	0
CONSTANT	1	1	1	1	10.485575 *	1	1	1	1
SAMPLE SIZE	528	759	759	662	662	320	320	320	2269
ADJUSTED R-SQUARED	0.74011	0.76580	0.76580	0.77274	0.77274	0.75792	0.75792	0.75792	0.75772
F STATISTIC	54.60	89.52	89.52	81.27	81.27	37.99	37.99	37.99	237.44

Q1 1986	PRE-1919	Q2 1986	PRE-1919	Q3 1986	PRE-1919	Q4 1986	PRE-1919	1986	PRE-1919
NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND	
	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT		WEIGHT
SDH	0.041	0.065	0.065	0.088	-0.155856	SDH	0.039	SDH	0.064
TH	0.795	0.797	0.746	0.746	-0.241598	TH	0.804	TH	0.781
DB	0.082	0.041	0.053	0.053	-0.071974	DB	0.059	DB	0.055
SDB	0	0.008	0	0	0	SDB	0	SDB	0.003
FB	0	0	0	0	0	FB	0	FB	0
FC	0.014	0.008	0.031026	0	0	FC	0	FC	0.006
LH	0.616	0.732	0.033802	0.693	-0.087192	LH	0.765	LH	0.701
SGAR	0.205	0.171	0.009464	0.219	0.007055	SGAR	0.196	SGAR	0.197
SPACE	0.123	0.114	0.035086	0.14	-0.027794	SPACE	0.176	SPACE	0.133
NOPARK	0.644	0.707	-0.156015	0.623	-0.106518	NOPARK	0.627	NOPARK	0.657
AGE	81.123	82.504	0.005626	84.816	0.003453	AGE	83.02	AGE	83.028
NOCH	0.479	0.341	-0.177163 *	0.439	-0.136562	NOCH	0.431	NOCH	0.413
CHP	0.137	0.211	-0.121998	0.211	0.00526	CHP	0.216	CHP	0.197
SIZE	984.271	1098.79	0.00040106 *	1094.39	0.00065359 *	SIZE	1012.78	SIZE	1062.09
BATH	1	1.041	0.06996	0.991	0.098164	BATH	0.98	BATH	1.008
CONSTANT	1	9.662008 *	9.338374 *	1	9.185577 *	CONSTANT	1	CONSTANT	1
SAMPLE SIZE	73	SAMPLE SIZE	123	SAMPLE SIZE	114	SAMPLE SIZE	51	SAMPLE SIZE	361
ADJUSTED R-SQUARED	0.60411	ADJUSTED R-SQUARED	0.54795	ADJUSTED R-SQUARED	0.64475	ADJUSTED R-SQUARED	0.68163	ADJUSTED R-SQUARED	0.61622
F STATISTIC	10.16	F STATISTIC	11.56	F STATISTIC	18.09	F STATISTIC	10.73	F STATISTIC	42.29

TABLE E8: FIRST-TIME BUYER HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

		FIRST-TIME BUYERS NORTH			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.972	104.606	102.038	
Q2	100.000	103.918	107.035	107.660	
Q3	100.000	103.889	107.991	107.543	
Q4	100.000	105.210	108.978	111.108	
1986	100.000	103.905	106.933	106.654	

		FIRST-TIME BUYERS YORKSHIRE & HUMBERSIDE			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	104.552	103.816	105.388	
Q2	100.000	106.725	105.313	107.611	
Q3	100.000	106.961	105.305	107.446	
Q4	100.000	106.590	104.964	108.085	
1986	100.000	106.307	104.989	107.160	

		FIRST-TIME BUYERS NORTH WEST			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.477	104.450	102.605	
Q2	100.000	101.935	103.804	102.278	
Q3	100.000	102.467	104.697	102.341	
Q4	100.000	102.377	104.836	103.064	
1986	100.000	102.274	104.352	102.460	

		FIRST-TIME BUYERS EAST MIDLANDS			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	105.904	106.149	112.158	
Q2	100.000	106.147	107.011	112.302	
Q3	100.000	105.987	106.771	112.215	
Q4	100.000	106.757	105.652	112.236	
1986	100.000	106.089	106.597	112.135	

		FIRST-TIME BUYERS WEST MIDLANDS			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.282	104.283	105.301	
Q2	100.000	101.730	103.896	104.279	
Q3	100.000	101.829	105.485	103.915	
Q4	100.000	101.675	103.389	105.202	
1986	100.000	101.856	103.873	104.305	

ALTERNATIVE WEIGHTS FIRST-TIME BUYERS EAST ANGLIA INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	107.974	111.986	118.780
Q2	100.000	108.387	111.053	120.066
Q3	100.000	108.250	111.586	119.755
Q4	100.000	108.198	112.344	118.035
1986	100.000	108.205	111.413	119.429

ALTERNATIVE WEIGHTS FIRST-TIME BUYERS OUTER SOUTH EAST INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	104.050	107.553	111.639
Q2	100.000	103.661	107.510	111.229
Q3	100.000	103.935	107.745	111.534
Q4	100.000	103.833	107.601	111.341
1986	100.000	103.822	107.618	111.426

ALTERNATIVE WEIGHTS FIRST-TIME BUYERS OUTER METROPOLITAN INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	99.359	104.723	110.587
Q2	100.000	102.976	108.731	114.682
Q3	100.000	103.024	108.604	114.859
Q4	100.000	102.950	108.462	118.530
1986	100.000	102.924	108.551	114.669

ALTERNATIVE WEIGHTS FIRST-TIME BUYERS GREATER LONDON INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	106.389	114.367	120.511
Q2	100.000	102.022	112.240	118.253
Q3	100.000	104.243	112.309	118.444
Q4	100.000	104.292	112.320	119.379
1986	100.000	104.302	112.262	118.321

ALTERNATIVE WEIGHTS FIRST-TIME BUYERS SOUTH WEST INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	103.899	107.439	108.464
Q2	100.000	103.876	107.779	109.488
Q3	100.000	103.589	107.037	108.960
Q4	100.000	104.242	107.889	109.588
1986	100.000	103.791	107.493	109.018

		FIRST-TIME BUYERS WALES			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	103.584	103.781	106.060	
Q2	100.000	102.847	103.482	106.498	
Q3	100.000	103.038	103.350	106.023	
Q4	100.000	103.203	103.183	103.403	
1986	100.000	103.095	103.452	105.912	

		FIRST-TIME BUYERS SCOTLAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	102.275	101.798	102.749	
Q2	100.000	102.108	101.646	102.642	
Q3	100.000	101.923	101.782	102.543	
Q4	100.000	101.890	101.723	102.077	
1986	100.000	102.110	101.712	102.627	

		FIRST-TIME BUYERS NORTHERN IRELAND			
ALTERNATIVE WEIGHTS		INDEX NUMBERS 1986			
		Q1	Q2	Q3	Q4
Q1	100.000	101.405	102.377	101.327	
Q2	100.000	101.701	102.563	100.999	
Q3	100.000	101.763	102.544	101.058	
Q4	100.000	101.180	102.669	100.992	
1986	100.000	101.570	102.523	101.088	

Q1 1986	FIRST-TIME BUYER	Q2 1986	FIRST-TIME BUYER	Q3 1986	FIRST-TIME BUYER	Q4 1986	FIRST-TIME BUYER	1986	FIRST-TIME BUYER	
NORTHERN		NORTHERN		NORTHERN		NORTHERN		NORTHERN		
	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT		WEIGHT	
	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF	COEFF		COEFF	
SDH	0.294	-0.265697	0.217	-0.143642	0.207	-0.381546	0.18	-0.779645	0.227	-0.208153
TH	0.566	-0.446183	0.622	-0.260176	0.553	-0.608538	0.64	-0.947981	0.591	-0.372963
DB	0.007	-0.1105	0.011	0.309384	0.028	-0.276237	0	0	0.014	-0.008512
SDB	0.028	-0.170699	0.011	-0.016759	0.05	-0.253571	0.011	-0.927816	0.027	-0.116457
FB	0.07	-0.487576	0.083	-0.527208	0.112	-0.616959	0.124	-0.887898	0.095	-0.470568
FC	0.014	0.104806	0.011	-0.063366	0.022	-0.724899	0.034	-0.972337	0.019	-0.306879
LH	0.175	-0.104838	0.2	0.042442	0.218	-0.009832	0.236	-0.051652	0.205	0.008111
SGAR	0.371	0.234583	0.267	-0.40427	0.335	-0.292346	0.247	-1.053541	0.31	-0.18656
SPACE	0.133	0.116935	0.228	-0.503665	0.112	-0.330957	0.124	-0.869467	0.154	-0.248985
NOPARK	0.476	0.172611	0.5	-0.500363	0.542	-0.398955	0.607	-1.052906	0.523	-0.283772
AGE	57.441	-0.003726	59.594	-0.003128	62.821	0.00076977	60.989	-0.00316	60.261	-0.001336
NOCH	0.371	-0.122636	0.317	-0.033483	0.307	-0.206144	0.258	-0.312324	0.318	-0.148871
CHP	0.182	-0.103786	0.094	-0.124952	0.106	-0.094955	0.135	-0.218379	0.125	-0.125933
SIZE	930.89	0.00056831	853.641	0.00047961	881.547	0.00036340	853.616	0.00061304	880.781	0.00038979
BATH	1.007	-0.39527	1.022	-0.016426	1.006	-0.06074	1	0	1.01	-0.157505
A	0.014	0.027893	0.017	-0.098879	0.006	-0.254367	0	0	0.01	-0.064039
C	0.287	-0.066034	0.306	-0.094684	0.318	-0.10115	0.247	-0.084552	0.296	-0.114804
D	0.091	-0.081869	0.133	-0.097085	0.112	-0.307495	0.146	-0.17567	0.118	-0.199024
E	0.077	-0.14264	0.067	-0.171678	0.095	-0.139732	0.067	-0.039411	0.078	-0.172121
F	0.133	-0.14923	0.128	-0.105104	0.078	-0.110019	0.135	-0.105149	0.115	-0.147765
G	0.014	-0.222465	0.028	-0.191303	0.017	-0.165527	0.034	-0.112014	0.022	-0.162454
H	0.014	-0.43109	0.006	-0.233376	0	0	0	0	0.005	-0.497534
I	0.035	-0.152617	0.028	0.035115	0.028	0.043463	0.079	0.178919	0.037	0.057455
J	0.105	-0.050815	0.1	0.152471	0.134	-0.016293	0.101	0.112646	0.112	0.042401
K	0.028	-0.103681	0.006	-0.217434	0.028	0.134795	0.022	0.101587	0.02	0.030442
P1	0	0	0	0	0	0	0	0	0	0
P2	0	0	0.006	0.083846	0.006	0.169137	0	0	0.003	0.176138
P3	0.133	-0.269923	0.144	-0.208905	0.173	-0.053354	0.27	-0.106649	0.169	-0.189378
P4	0.615	-0.203226	0.578	-0.226235	0.598	-0.127049	0.506	-0.185332	0.582	-0.224039
P5	0.154	-0.272603	0.183	-0.240314	0.162	-0.107426	0.146	-0.287402	0.164	-0.253369
P7	0.07	0.2866	0.061	-0.012976	0.039	0.097455	0.034	-0.724801	0.052	0.041574
CONSTANT	1	10.482455	1	10.621927	1	10.730372	1	11.802142	1	10.683849
SAMPLE SIZE	143		180		179		89		591	
ADJUSTED R-SQUARED	0.65966		0.69381		0.56403		0.64597		0.6084	
F STATISTIC	10.49		14.52		8.94		7.42		31.55	

Q1 1986	Q2 1986	Q3 1986	Q4 1986	1986	FIRST-TIME BUYER	FIRST-TIME BUYER	FIRST-TIME BUYER	FIRST-TIME BUYER	FIRST-TIME BUYER		
YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE		YORKSHIRE & HUMBERSIDE			
WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	COEFF	COEFF	COEFF	COEFF	COEFF		
SDH	0.253	0.29	0.255	0.282	-0.147606 *	-0.346732 *	-0.392801 *	-0.183437	SDH	0.27	-0.306862 *
TH	0.542	0.625	0.619	0.611	-0.276518 *	-0.503683 *	-0.492199 *	-0.417439 *	TH	0.625	-0.451935 *
DB	0.019	0.006	0.014	0.009	0.078309	0.082415	-0.169838	0.160016	DB	0.011	-0.004889
SDB	0.025	0.021	0.016	0.016	-0.07556	-0.300277 *	-0.296912 *	0.017286	SDB	0.021	-0.204385 *
FB	0.022	0.015	0.043	0.032	-0.38597 *	-0.574007 *	-0.633966 *	-0.382916 *	FB	0.028	-0.541287 *
FC	0	0.008	0.002	0	0	-0.441692 *	-0.199688	0	FC	0.003	-0.335015 *
LH	0.136	0.089	0.132	0.13	0.072557	0.126279 *	0.064255	0.022439	LH	0.118	0.077796 *
SGAR	0.284	0.277	0.267	0.31	-0.036637	-0.054398	0.048658	-0.35303 *	SGAR	0.28	-0.084064
SPACE	0.154	0.164	0.124	0.079	-0.177501	-0.175265	-0.098566	-0.416994 *	SPACE	0.137	-0.213534 *
NOPARK	0.556	0.547	0.591	0.597	-0.174071	-0.236605 *	-0.192304 *	-0.457599 *	NOPARK	0.57	-0.263459 *
AGE	58.019	64.727	64.678	67.745	-0.001872 *	-0.0000712	-0.0004512	-0.0001054	AGE	63.739	-0.0004065 *
NOCH	0.528	0.53	0.538	0.495	-0.100044 *	-0.071561 *	-0.116637 *	-0.155678 *	NOCH	0.527	-0.095473 *
CHP	0.062	0.064	0.079	0.069	-0.059306	-0.089578 *	-0.068838	-0.142712 *	CHP	0.069	-0.082628 *
SIZE	821.474	822.055	807.096	827.544	0.00043639 *	0.00040875 *	0.00033609 *	0.00045386 *	SIZE	817.83	0.00040486 *
BATH	1.012	1.008	1.002	1.005	0.344538 *	0.007843	0.130011	-0.241879	BATH	1.006	0.132787 *
A	0.009	0.008	0.014	0.019	-0.18043	0.32543 *	0.060698	-0.215323	A	0.011	0.036567
C	0.346	0.35	0.312	0.296	-0.00307	0.00066271	-0.029973	-0.041193	C	0.33	-0.017048
D	0.133	0.091	0.106	0.102	-0.06085	-0.090944 *	-0.174136 *	-0.056065	D	0.106	-0.118581 *
E	0.034	0.058	0.065	0.051	-0.056641	-0.06773	-0.107804 *	-0.056393	E	0.054	-0.080006 *
F	0.062	0.097	0.09	0.074	-0.138133 *	-0.095931 *	-0.153207 *	-0.085703	F	0.084	-0.127892 *
G	0.031	0.044	0.045	0.037	-0.147321	-0.19892 *	-0.195089 *	-0.170859	G	0.041	-0.193348 *
H	0.074	0.066	0.065	0.102	-0.218729 *	-0.258364 *	-0.247824 *	-0.156286 *	H	0.072	-0.239499 *
I	0.031	0.021	0.043	0.032	0.132154	-0.066524	0.0968	-0.060301	I	0.032	0.026681
J	0.12	0.089	0.094	0.134	0.063165	0.071718	0.083691 *	0.064823	J	0.103	0.062773 *
K	0.025	0.014	0.01	0.028	0.119356	0.020924	0.141012	0.110279	K	0.017	0.103825 *
P1	0	0	0.002	0	0	1.165193 *	1.165193 *	0	P1	0.001	1.071601 *
P2	0	0	0	0	0	0	0	0	P2	0	0
P3	0.154	0.168	0.242	0.227	-0.190163 *	-0.259494 *	-0.127407 *	-0.143481	P3	0.197	-0.196653 *
P4	0.506	0.528	0.472	0.472	-0.250068 *	-0.324076 *	-0.173254 *	-0.205767 *	P4	0.497	-0.254677 *
P5	0.099	0.133	0.108	0.079	-0.268801 *	-0.233222 *	-0.08777	-0.173252	P5	0.11	-0.187387 *
P7	0.179	0.095	0.116	0.144	-0.126784 *	-0.255529 *	-0.055154	-0.067706	P7	0.126	-0.15238 *
CONSTANT	1	1	1	1	9.83112 *	10.435159 *	10.233443 *	10.743648 *	CONSTANT	1	10.267798 *
SAMPLE SIZE	324	517	509	216					SAMPLE SIZE	1566	
ADJUSTED R-SQUARED	0.63728	0.61032	0.68368	0.6196					ADJUSTED R-SQUARED	0.63621	
F STATISTIC	21.27	28.87	37.6	13.51					F STATISTIC	92.23	

Q1 1986			Q2 1986			Q3 1986			Q4 1986			FIRST-TIME BUYER		
NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST			NORTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.347	-0.197598 *	SDH	0.31	-0.291654 *	SDH	0.278	-0.297833 *	SDH	0.31	-0.167371 *	SDH	0.308	-0.263177 *
TH	0.529	-0.415053 *	TH	0.571	-0.444117 *	TH	0.624	-0.437136 *	TH	0.575	-0.405004 *	TH	0.579	-0.433753 *
DB	0.014	0.136868	DB	0.012	-0.118391	DB	0.01	-0.120541	DB	0.011	-0.05467	DB	0.012	-0.04653
SDB	0.037	-0.237953 *	SDB	0.018	-0.179846 *	SDB	0.021	-0.297372 *	SDB	0.027	-0.104874	SDB	0.024	-0.233312 *
FB	0.037	-0.415092 *	FB	0.048	-0.500605 *	FB	0.032	-0.443849 *	FB	0.045	-0.330754 *	FB	0.041	-0.446371 *
FC	0.004	-0.085414	FC	0.006	-0.339342 *	FC	0.005	-0.700785 *	FC	0.005	-0.644392 *	FC	0.005	-0.427828 *
LH	0.414	0.01491	LH	0.469	-0.022821	LH	0.455	-0.007055	LH	0.42	-0.006219	LH	0.448	-0.009174
SGAR	0.259	-0.249917 *	SGAR	0.25	-0.460065 *	SGAR	0.233	-0.160136	SGAR	0.259	-0.2289	SGAR	0.248	-0.23755 *
SPACE	0.153	-0.296779 *	SPACE	0.147	-0.533603 *	SPACE	0.142	-0.230717	SPACE	0.11	-0.335166 *	SPACE	0.142	-0.306854 *
NOPARK	0.578	-0.345936 *	NOPARK	0.6	-0.586116 *	NOPARK	0.621	-0.301378 *	NOPARK	0.626	-0.341542 *	NOPARK	0.605	-0.360307 *
AGE	57.873	-0.0008323 *	AGE	59.668	-0.001078 *	AGE	63.442	-0.0008430 *	AGE	64.249	-0.0004621	AGE	61.002	-0.0008461 *
NOCH	0.457	-0.112231 *	NOCH	0.447	-0.125635 *	NOCH	0.424	-0.117682 *	NOCH	0.46	-0.119072 *	NOCH	0.444	-0.127206 *
CHP	0.044	-0.018599	CHP	0.058	-0.078148 *	CHP	0.048	-0.094488 *	CHP	0.037	-0.047632	CHP	0.049	-0.073779 *
SIZE	853.14	0.00043832 *	SIZE	829.162	0.00032573 *	SIZE	846.35	0.00048244 *	SIZE	853.75	0.00027278 *	SIZE	842.153	0.00038762 *
BATH	1.011	0.130049 *	BATH	1.006	0.145911 *	BATH	1.005	0.040491	BATH	1	0.156947	BATH	1.006	0.096298 *
A	0.007	0.26554 *	A	0.006	0.023604	A	0.009	0.073479	A	0.011	-0.128326	A	0.007	0.059452
C	0.265	-0.016476	C	0.28	-0.058563 *	C	0.292	-0.024478	C	0.251	-0.068465	C	0.277	-0.041664 *
D	0.15	-0.180463 *	D	0.167	-0.148027 *	D	0.182	-0.126762 *	D	0.211	-0.153215 *	D	0.174	-0.144327 *
E	0.048	-0.110506 *	E	0.06	-0.03557	E	0.057	-0.01093	E	0.037	-0.088303	E	0.054	-0.04408 *
F	0.055	-0.08568 *	F	0.082	-0.103066 *	F	0.07	-0.063065	F	0.067	-0.05906	F	0.071	-0.080562 *
G	0.03	-0.094116	G	0.032	-0.070105	G	0.034	-0.079924	G	0.037	-0.222661 *	G	0.033	-0.097688 *
H	0.032	-0.152373 *	H	0.032	-0.284717 *	H	0.015	-0.233857 *	H	0.024	-0.308531 *	H	0.026	-0.242011 *
I	0.035	-0.03459	I	0.041	0.00557	I	0.046	-0.043641	I	0.045	-0.115047	I	0.042	-0.016218
J	0.134	0.01711	J	0.11	0.070621 *	J	0.123	0.087428 *	J	0.12	-0.014034	J	0.12	0.053037 *
K	0.023	-0.050412	K	0.018	0.066677	K	0.022	0.096071	K	0.032	0.042048	K	0.022	0.063783 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.245	-0.153187 *	P3	0.25	-0.177321 *	P3	0.226	-0.238624 *	P3	0.201	-0.159901 *	P3	0.235	-0.187815 *
P4	0.203	-0.160747 *	P4	0.272	-0.183358 *	P4	0.267	-0.254478 *	P4	0.267	-0.18548 *	P4	0.256	-0.194349 *
P5	0.265	-0.124926 *	P5	0.229	-0.128111 *	P5	0.243	-0.153849 *	P5	0.217	-0.053704	P5	0.239	-0.119798 *
P7	0.067	-0.045148	P7	0.074	-0.101223 *	P7	0.081	-0.117017 *	P7	0.096	0.012	P7	0.078	-0.076638 *
CONSTANT	1	10.246917 *	CONSTANT	1	10.68578 *	CONSTANT	1	10.387106 *	CONSTANT	1	10.364956 *	CONSTANT	1	10.422966 *
SAMPLE SIZE	567		SAMPLE SIZE	1078		SAMPLE SIZE	819		SAMPLE SIZE	374		SAMPLE SIZE	2838	
ADJUSTED R-SQUARED	0.7178		ADJUSTED R-SQUARED	0.68005		ADJUSTED R-SQUARED	0.66731		ADJUSTED R-SQUARED	0.63145		ADJUSTED R-SQUARED	0.66999	
F STATISTIC	50.64		F STATISTIC	79.94		F STATISTIC	57.58		F STATISTIC	23.04		F STATISTIC	199.61	

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER		
EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.357	-0.178701 *	0.382	-0.230888 *	0.359	-0.185601 *	0.31	-0.291522 *	0.362	-0.207205 *	SDH	0.362	-0.207205 *	
TH	0.481	-0.336282 *	0.446	-0.390218 *	0.47	-0.334123 *	0.512	-0.399594 *	0.468	-0.355645 *	TH	0.468	-0.355645 *	
DB	0.037	-0.032244	0.036	-0.053869	0.048	-0.117264 *	0.047	-0.207215 *	0.041	-0.081552 *	DB	0.041	-0.081552 *	
SDB	0.028	-0.163765 *	0.027	-0.014261	0.011	-0.120823	0.028	-0.264452 *	0.023	-0.091591 *	SDB	0.023	-0.091591 *	
FB	0.02	-0.296154 *	0.031	-0.306432 *	0.033	-0.022228	0.033	-0.348081	0.029	-0.219813 *	FB	0.029	-0.219813 *	
FC	0.002	0.343506	0.003	-0.199959	0	0	0	0	0.002	0.018438	FC	0.002	0.018438	
LH	0.035	-0.07344	0.048	-0.19391 *	0.054	-0.316126 *	0.047	-0.055327	0.046	-0.192574 *	LH	0.046	-0.192574 *	
SGAR	0.333	-0.337897 *	0.342	-0.284864 *	0.325	0.16459 *	0.338	-0.259748 *	0.335	-0.315969 *	SGAR	0.335	-0.315969 *	
SPACE	0.172	-0.46533 *	0.151	-0.39131 *	0.151	0.023825	0.141	-0.404685 *	0.155	-0.442537 *	SPACE	0.155	-0.442537 *	
NOPARK	0.479	-0.49391 *	0.495	-0.437606 *	0.522	0	0.493	-0.414113 *	0.498	-0.476708 *	NOPARK	0.498	-0.476708 *	
AGE	47.455	-0.001008 *	48.618	0.00024395	50.08	-0.0005475	53.225	-0.0008451	49.24	-0.0003635 *	AGE	49.24	-0.0003635 *	
NOCH	0.279	-0.126692 *	0.292	-0.119301 *	0.258	-0.061393 *	0.291	-0.153387 *	0.28	-0.107087 *	NOCH	0.28	-0.107087 *	
CHP	0.076	-0.077811 *	0.086	-0.056153 *	0.113	-0.049826	0.07	-0.115156	0.089	-0.06145 *	CHP	0.089	-0.06145 *	
SIZE	850.459	0.00036937 *	840.248	0.00030302 *	852.479	0.00029079 *	851.312	0.00023618 *	847.144	0.00031492 *	SIZE	847.144	0.00031492 *	
BATH	1.024	0.042826	1.017	0.140835 *	1.015	0.026148	1.014	0.470983 *	1.018	0.127413 *	BATH	1.018	0.127413 *	
A	0.015	0.017976	0.025	0.018957	0.017	0.039481	0.023	-0.007246	0.021	0.006631	A	0.021	0.006631	
C	0.294	-0.013043	0.312	-0.02043	0.356	-0.038186	0.404	-0.031925	0.329	-0.022169	C	0.329	-0.022169	
D	0.092	-0.131623 *	0.088	-0.151311 *	0.086	-0.110522 *	0.061	-0.152282 *	0.085	-0.136597 *	D	0.085	-0.136597 *	
E	0.087	-0.10367 *	0.107	-0.054944	0.119	0.006607	0.089	-0.038384	0.104	-0.043364 *	E	0.104	-0.043364 *	
F	0.074	-0.0003160	0.046	-0.081608 *	0.071	-0.003575	0.042	-0.048161	0.059	-0.034257	F	0.059	-0.034257	
G	0.017	-0.12454	0.011	0.036922	0.013	0.068493	0.005	-0.266258	0.012	-0.036718	G	0.012	-0.036718	
H	0.041	-0.051095	0.057	-0.033767	0.033	0.044647	0.07	-0.108265	0.048	-0.03422	H	0.048	-0.03422	
I	0.031	0.014814	0.033	0.054708	0.029	0.037981	0.023	-0.102463	0.03	0.028497	I	0.03	0.028497	
J	0.087	0.086292 *	0.085	0.08176 *	0.075	0.1738 *	0.052	0.164727 *	0.079	0.116289 *	J	0.079	0.116289 *	
K	0.024	-0.033112	0.017	0.0401	0.017	0.041329	0.014	0.067809	0.018	0.01339	K	0.018	0.01339	
P1	0	0	0	0	0	0	0	0	0	0	P1	0	0	
P2	0	0	0	0	0	0	0	0	0	0	P2	0	0	
P3	0.166	-0.216038 *	0.142	-0.200639 *	0.143	-0.014967	0.174	-0.179436	0.151	-0.163775 *	P3	0.151	-0.163775 *	
P4	0.298	-0.266755 *	0.261	-0.238454 *	0.268	-0.125704	0.282	-0.254385 *	0.274	-0.229362 *	P4	0.274	-0.229362 *	
P5	0.39	-0.081503	0.395	-0.08637	0.382	0.090768	0.31	0.01464	0.381	-0.043703	P5	0.381	-0.043703	
P7	0.133	-0.217921 *	0.178	-0.177212 *	0.184	0.038283	0.202	-0.137229	0.171	-0.131624 *	P7	0.171	-0.131624 *	
CONSTANT	1	10.542875 *	1	10.4677 *	1	9.965066 *	1	10.288292 *	1	10.467713 *	CONSTANT	1	10.467713 *	
SAMPLE SIZE	459		754		523		213		1949		SAMPLE SIZE	1949		
ADJUSTED R-SQUARED	0.6324		0.60955		0.57753		0.6372		0.59755		ADJUSTED R-SQUARED	0.59755		
F STATISTIC	28.17		41.54		27.43		14.3		100.74		F STATISTIC	100.74		

Q1 1986 FIRST-TIME BUYER				Q2 1986 FIRST-TIME BUYER				Q3 1986 FIRST-TIME BUYER				Q4 1986 FIRST-TIME BUYER				1986 FIRST-TIME BUYER			
WEST MIDLANDS				WEST MIDLANDS				WEST MIDLANDS				WEST MIDLANDS				WEST MIDLANDS			
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		
SDH	0.386	-0.245051 *		0.383	-0.264543 *		0.369	-0.195332 *		0.374	-0.245902 *		0.378	-0.242082 *					
TH	0.445	-0.394225 *		0.449	-0.40123 *		0.459	-0.325555 *		0.433	-0.386029 *		0.449	-0.380449 *					
DB	0.007	-0.078123		0.013	0.040797		0.013	0.236234 *		0.006	-0.148673		0.011	0.074838					
SDB	0.013	-0.175652 *		0.01	-0.12698		0.013	-0.131894		0.006	-0.210978		0.011	-0.163362 *					
FB	0.076	-0.454908 *		0.081	-0.419291 *		0.077	-0.395258 *		0.096	-0.44125 *		0.081	-0.419171 *					
FC	0.007	-0.126439		0.011	-0.404111 *		0.009	-0.32408 *		0.012	-0.49993 *		0.01	-0.341353 *					
LH	0.254	0.019084		0.242	0.040037 *		0.205	0.030584		0.254	-0.017033		0.235	0.024559 *					
SGAR	0.447	-0.084729		0.403	-0.159363 *		0.402	-0.06776		0.386	-0.253047 *		0.41	-0.11748 *					
SPACE	0.119	-0.150503		0.119	-0.205033 *		0.122	-0.085969		0.117	-0.41464 *		0.12	-0.176117 *					
NOPARK	0.419	-0.187303 *		0.47	-0.270329 *		0.463	-0.217924 *		0.482	-0.405748 *		0.459	-0.241434 *					
AGE	44.95	0.00022863		47.274	-0.0003628		50.392	0.00006110		48.518	-0.0005946		47.841	-0.0001159					
NOCH	0.427	-0.140983 *		0.438	-0.076711 *		0.425	-0.104929 *		0.363	-0.10016 *		0.422	-0.10235 *					
CHP	0.111	-0.059688 *		0.096	-0.059165 *		0.093	-0.056927 *		0.117	-0.059414		0.101	-0.063756 *					
SIZE	821.313	0.00035863 *		822.931	0.00046476 *		841.748	0.00043907 *		850.416	0.00025486 *		831.506	0.00040916 *					
BATH	1.006	0.088058		1.005	0.081785		1.012	0.192834 *		1.018	0.122638		1.009	0.12431 *					
A	0.015	-0.030268		0.012	0.047131		0.013	0.04959		0.012	-0.208268		0.013	0.006937					
C	0.221	0.001589		0.234	-0.012928		0.254	-0.027948		0.228	0.009563		0.236	-0.010829					
D	0.078	-0.10003 *		0.087	-0.156404 *		0.074	-0.151772 *		0.058	-0.1921 *		0.078	-0.149408 *					
E	0.069	-0.010353		0.119	-0.050166 *		0.083	-0.042054		0.079	-0.032623		0.093	-0.036479 *					
F	0.072	-0.036954		0.063	-0.104429 *		0.059	-0.023405		0.056	-0.015031		0.063	-0.054799 *					
G	0.03	-0.090877		0.029	-0.088443 *		0.051	-0.120731 *		0.047	-0.125491		0.038	-0.108531 *					
H	0.093	-0.169968 *		0.082	-0.181294 *		0.082	-0.203039 *		0.096	-0.136964 *		0.086	-0.182014 *					
I	0.022	-0.0154		0.032	-0.007233		0.032	-0.013618		0.047	0.123287		0.032	0.00032066					
J	0.102	0.07696 *		0.093	0.067387 *		0.117	0.077815 *		0.111	0.089917		0.104	0.077531 *					
K	0.022	0.024408		0.016	0.095089		0.024	0.068955		0.018	0.259031 *		0.02	0.090549 *					
P1	0	0		0	0		0	0		0	0		0	0					
P2	0	0		0	0		0	0		0	0		0	0					
P3	0.217	-0.138429 *		0.208	-0.130374 *		0.214	-0.096552 *		0.231	-0.050969		0.214	-0.110879 *					
P4	0.165	-0.2127 *		0.191	-0.230269 *		0.199	-0.163648 *		0.202	-0.172563 *		0.189	-0.197568 *					
P5	0.393	-0.129036 *		0.395	-0.114568 *		0.366	-0.044319		0.374	-0.036588		0.384	-0.085786 *					
P7	0.13	-0.032451		0.122	0.022369		0.106	0.099985 *		0.096	0.16077 *		0.116	0.04979 *					
CONSTANT	1	10.197883 *		1	10.21902 *		1	9.944909 *		1	10.43554 *		1	10.146733 *					
SAMPLE SIZE	539			1001			743			342			2625						
ADJUSTED R-SQUARED	0.58147			0.59878			0.64463			0.62588			0.60835						
F STATISTIC	26.77			52.46			47.41			20.67			141.55						

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER		
EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.244	-0.178671 *	0.257	-0.222407 *	0.244	-0.305973 *	0.222	-0.3998 *	0.244	-0.305973 *	0.222	-0.3998 *	0.246	-0.254165 *
TH	0.456	-0.309515 *	0.492	-0.295798 *	0.525	-0.370762 *	0.532	-0.460835 *	0.525	-0.370762 *	0.532	-0.460835 *	0.5	-0.338543 *
DB	0.041	-0.080541	0.029	-0.064744	0.047	-0.220399 *	0.04	-0.211742	0.047	-0.220399 *	0.04	-0.211742	0.039	-0.125884 *
SDB	0.074	-0.157501 *	0.045	-0.220049 *	0.022	-0.257696 *	0.032	-0.552245 *	0.022	-0.257696 *	0.032	-0.552245 *	0.042	-0.265045 *
FB	0.065	-0.336558 *	0.074	-0.20884 *	0.07	-0.547935 *	0.095	-0.475043 *	0.07	-0.547935 *	0.095	-0.475043 *	0.073	-0.377987 *
FC	0.018	-0.190418	0.019	-0.22256	0.016	-0.7097 *	0	0	0.016	-0.7097 *	0	0	0.015	-0.442636 *
LH	0.078	-0.101272	0.093	-0.096075	0.089	0.098262	0.119	0.064351	0.089	0.098262	0.119	0.064351	0.092	-0.001191
SGAR	0.461	-0.09255	0.37	-0.169562 *	0.339	-0.021603	0.278	0.17687	0.339	-0.021603	0.278	0.17687	0.368	-0.049507
SPACE	0.175	-0.116567	0.13	-0.304195 *	0.174	-0.081078	0.167	0.14845	0.174	-0.081078	0.167	0.14845	0.157	-0.122607 *
NOPARK	0.35	-0.152695	0.481	-0.269308 *	0.472	-0.142473	0.54	0.098902	0.472	-0.142473	0.54	0.098902	0.458	-0.137316 *
AGE	42.747	0.0003026	50.423	0.00061212 *	56.997	0.00003842	55.579	0.00021972	56.997	0.00003842	55.579	0.00021972	51.446	0.00027885
NOCH	0.355	-0.177946 *	0.349	-0.101334 *	0.364	-0.112767 *	0.349	-0.087586	0.364	-0.112767 *	0.349	-0.087586	0.355	-0.12575 *
CHP	0.124	-0.12621 *	0.13	-0.053549	0.117	-0.058144	0.151	-0.0006441	0.117	-0.058144	0.151	-0.0006441	0.127	-0.060415 *
SIZE	815.599	0.0003588 *	801.67	0.00032432 *	813.251	0.00025479 *	790.624	0.00042249 *	813.251	0.00025479 *	790.624	0.00042249 *	806.772	0.00031728 *
BATH	1.009	0.304577 *	1.013	0.130761	1.006	0.010769	1	0.148206	1.006	0.010769	1	0.148206	1.009	0.127103 *
A	0.06	-0.031706	0.045	-0.053653	0.044	0.013411	0.04	-0.292839 *	0.044	0.013411	0.04	-0.292839 *	0.047	-0.066296
C	0.341	-0.055912	0.312	-0.134081 *	0.332	-0.01052	0.325	-0.141364 *	0.332	-0.01052	0.325	-0.141364 *	0.326	-0.083688 *
D	0.092	-0.060832	0.13	-0.188868 *	0.108	-0.141811 *	0.119	-0.090779	0.108	-0.141811 *	0.119	-0.090779	0.114	-0.128212 *
E	0.051	-0.074323	0.09	-0.129265 *	0.06	-0.062444	0.063	-0.132625	0.06	-0.062444	0.063	-0.132625	0.069	-0.099907 *
F	0.023	0.055148	0.026	-0.121743	0.041	-0.066603	0.04	-0.136037	0.041	-0.066603	0.04	-0.136037	0.032	-0.059631
G	0.009	0.057933	0.003	-0.584387 *	0.009	-0.462158 *	0.016	-0.194521	0.009	-0.462158 *	0.016	-0.194521	0.008	-0.294666 *
H	0	0	0.016	-0.317634 *	0.009	-0.420968 *	0	0	0.009	-0.420968 *	0	0	0.009	-0.339374 *
I	0.028	-0.043331	0.04	-0.194887 *	0.054	-0.004142	0.063	-0.269047 *	0.054	-0.004142	0.063	-0.269047 *	0.044	-0.096455 *
J	0.115	0.012462	0.071	-0.017174	0.108	-0.014031	0.071	0.015377	0.108	-0.014031	0.071	0.015377	0.092	-0.013714
K	0.032	-0.093116	0.032	-0.074753	0.035	-0.007882	0.063	-0.103176	0.035	-0.007882	0.063	-0.103176	0.037	-0.039033
P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P3	0	0	0.003	0.095858	0	0	0	0	0	0	0	0	0.001	0.221027
P4	0.171	-0.540079 *	0.209	-0.426143 *	0.237	-0.467998 *	0.254	-0.494917 *	0.237	-0.467998 *	0.254	-0.494917 *	0.215	-0.45667 *
P5	0.194	-0.58449 *	0.22	-0.432854 *	0.199	-0.431026 *	0.151	-0.313939	0.199	-0.431026 *	0.151	-0.313939	0.2	-0.436172 *
P7	0.594	-0.531371 *	0.521	-0.464445 *	0.535	-0.493566 *	0.579	-0.510122 *	0.535	-0.493566 *	0.579	-0.510122 *	0.548	-0.479961 *
CONSTANT	1	10.621225 *	1	10.901913 *	1	11.033063 *	1	10.70697 *	1	11.033063 *	1	10.70697 *	1	10.828699 *
SAMPLE SIZE	217		378		316		126		316		126		SAMPLE SIZE	1037
ADJUSTED R-SQUARED	0.62849		0.59431		0.55522		0.59389		0.55522		0.59389		ADJUSTED R-SQUARED	0.55507
F STATISTIC	14.53		20.04		15.04		8.03		15.04		8.03		F STATISTIC	45.57

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
FIRST-TIME BUYER		WEIGHT	FIRST-TIME BUYER		WEIGHT	FIRST-TIME BUYER		WEIGHT	FIRST-TIME BUYER		WEIGHT	FIRST-TIME BUYER		WEIGHT
OUTER SOUTH EAST	COEFF		OUTER SOUTH EAST	COEFF		OUTER SOUTH EAST	COEFF		OUTER SOUTH EAST	COEFF		OUTER SOUTH EAST	COEFF	
SDH	0.184	-0.249225 *	SDH	0.201	-0.209084 *	SDH	0.174	-0.237822 *	SDH	0.177	-0.235754 *	SDH	0.187	-0.232424 *
TH	0.528	-0.315766 *	TH	0.491	-0.264462 *	TH	0.491	-0.313361 *	TH	0.49	-0.281191 *	TH	0.5	-0.293788 *
DB	0.014	-0.121022 *	DB	0.017	-0.008169	DB	0.015	-0.015337	DB	0.02	0.168833 *	DB	0.016	-0.0009365
SDB	0.013	-0.245438 *	SDB	0.018	-0.165263 *	SDB	0.026	-0.227143 *	SDB	0.016	-0.236737 *	SDB	0.018	-0.20291 *
FB	0.164	-0.30088 *	FB	0.139	-0.248788 *	FB	0.138	-0.317445 *	FB	0.122	-0.279122 *	FB	0.143	-0.280837 *
FC	0.066	-0.346143 *	FC	0.097	-0.317899 *	FC	0.117	-0.371037 *	FC	0.12	-0.383895 *	FC	0.098	-0.334959 *
LH	0.236	-0.107571 *	LH	0.246	-0.075945 *	LH	0.265	-0.093237 *	LH	0.247	-0.065202	LH	0.249	-0.090666 *
SGAR	0.328	-0.185382 *	SGAR	0.31	-0.287138 *	SGAR	0.284	-0.180731 *	SGAR	0.303	-0.138524	SGAR	0.307	-0.197714 *
SPACE	0.146	-0.26353 *	SPACE	0.135	-0.34815 *	SPACE	0.151	-0.222628 *	SPACE	0.122	-0.183158 *	SPACE	0.14	-0.256663 *
NOPARK	0.512	-0.248717 *	NOPARK	0.549	-0.367751 *	NOPARK	0.559	-0.255063 *	NOPARK	0.564	-0.236093 *	NOPARK	0.545	-0.276986 *
AGE	46.045	-0.0003616 *	AGE	48.18	-0.0002856 *	AGE	55.334	0.00027248	AGE	53.474	0.00008930	AGE	50.243	-0.0000331
NOCH	0.372	-0.084214 *	NOCH	0.357	-0.115873 *	NOCH	0.38	-0.118768 *	NOCH	0.38	-0.103582 *	NOCH	0.37	-0.10846 *
CHP	0.131	-0.050711 *	CHP	0.14	-0.071336 *	CHP	0.108	-0.064467 *	CHP	0.122	-0.054873 *	CHP	0.127	-0.067045 *
SIZE	764.964	0.00029255 *	SIZE	771.492	0.00028142 *	SIZE	776.68	0.00021462 *	SIZE	790.809	0.00019336 *	SIZE	773.766	0.00025707 *
BATH	1.007	0.066995	BATH	1.001	0.082375	BATH	1.008	0.056875	BATH	1.016	0.109965	BATH	1.006	0.079065 *
A	0.01	0.027469	A	0.013	0.096644 *	A	0.011	0.125515 *	A	0.014	0.115596	A	0.012	0.091043 *
C	0.285	-0.041686 *	C	0.274	-0.041906 *	C	0.273	-0.059033 *	C	0.275	-0.049162 *	C	0.277	-0.047237 *
D	0.049	-0.101602 *	D	0.053	-0.083513 *	D	0.063	-0.129274 *	D	0.076	-0.166255 *	D	0.058	-0.107543 *
E	0.111	0.002608	E	0.094	-0.053832 *	E	0.091	-0.062396 *	E	0.11	-0.02567	E	0.099	-0.033961 *
F	0.029	-0.079371 *	F	0.023	-0.078266 *	F	0.03	-0.094396 *	F	0.026	-0.083659	F	0.027	-0.081994 *
G	0.002	0.423142 *	G	0.009	-0.035953	G	0.008	-0.097872	G	0.006	-0.156483	G	0.007	-0.024896
H	0.01	-0.207771 *	H	0.013	0.015111	H	0.009	0.097602	H	0.008	0.023496	H	0.011	-0.018689
I	0.063	-0.001501	I	0.079	-0.011698	I	0.08	-0.058481 *	I	0.072	-0.005832	I	0.075	-0.024653
J	0.111	0.055086 *	J	0.109	0.038452 *	J	0.113	0.017187	J	0.118	0.069866 *	J	0.112	0.043637 *
K	0.077	0.009136	K	0.098	0.016609	K	0.116	-0.010064	K	0.082	0.018086	K	0.096	0.007834
P1	0.003	0.388603 *	P1	0.001	0.841039 *	P1	0.001	0.373703 *	P1	0	0	P1	0.001	0.3998 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.004	0.208253 *	P3	0.004	0.213354 *	P3	0.001	0.298274	P3	0.002	0.231701	P3	0.003	0.20214 *
P4	0.022	-0.184787 *	P4	0.019	-0.12985 *	P4	0.034	-0.198714 *	P4	0.058	-0.143033 *	P4	0.029	-0.151563 *
P5	0.498	-0.015538	P5	0.474	-0.035309 *	P5	0.431	-0.060002 *	P5	0.418	-0.035283	P5	0.461	-0.038539 *
P7	0.271	-0.091867 *	P7	0.278	-0.08027 *	P7	0.283	-0.086836 *	P7	0.293	-0.056693 *	P7	0.279	-0.082768 *
CONSTANT	1	10.723792 *	CONSTANT	1	10.82864 *	CONSTANT	1	10.884514 *	CONSTANT	1	10.788866 *	CONSTANT	1	10.789904 *
SAMPLE SIZE	939		SAMPLE SIZE	1425		SAMPLE SIZE	1036		SAMPLE SIZE	498		SAMPLE SIZE	3898	
ADJUSTED R-SQUARED	0.56718		ADJUSTED R-SQUARED	0.52988		ADJUSTED R-SQUARED	0.49061		ADJUSTED R-SQUARED	0.55918		ADJUSTED R-SQUARED	0.51567	
F STATISTIC	41.97		F STATISTIC	54.5		F STATISTIC	34.22		F STATISTIC	22.74		F STATISTIC	139.30	

Q1 1986 FIRST-TIME BUYER			Q2 1986 FIRST-TIME BUYER			Q3 1986 FIRST-TIME BUYER			Q4 1986 FIRST-TIME BUYER			1986 FIRST-TIME BUYER		
OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN			OUTER METROPOLITAN		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.169	-0.243928 *	SDH	0.149	-0.29752 *	SDH	0.179	-0.260013 *	SDH	0.194	-0.199735 *	SDH	0.165	-0.26343 *
TH	0.437	-0.327162 *	TH	0.471	-0.373863 *	TH	0.415	-0.341787 *	TH	0.434	-0.311886 *	TH	0.446	-0.350183 *
DB	0.007	-0.157139 *	DB	0.01	-0.281448 *	DB	0.013	-0.27416 *	DB	0.015	-0.045417	DB	0.011	-0.214408 *
SDB	0.013	-0.263406 *	SDB	0.013	-0.285756 *	SDB	0.017	-0.263259 *	SDB	0.009	-0.126297	SDB	0.013	-0.255935 *
FB	0.269	-0.37646 *	FB	0.255	-0.377952 *	FB	0.244	-0.37923 *	FB	0.228	-0.387291 *	FB	0.254	-0.372601 *
FC	0.085	-0.403828 *	FC	0.074	-0.446389 *	FC	0.101	-0.431216 *	FC	0.084	-0.374817 *	FC	0.084	-0.419231 *
LH	0.361	0.006414	LH	0.332	-0.023826	LH	0.341	0.002112	LH	0.316	0.044043	LH	0.341	-0.006385
SGAR	0.288	-0.300048 *	SGAR	0.308	-0.134533 *	SGAR	0.306	-0.057143	SGAR	0.273	-0.288942 *	SGAR	0.299	-0.180028 *
SPACE	0.129	-0.341119 *	SPACE	0.103	-0.183094 *	SPACE	0.115	-0.102868	SPACE	0.118	-0.290691 *	SPACE	0.114	-0.219921 *
NOPARK	0.575	-0.330174 *	NOPARK	0.582	-0.18119 *	NOPARK	0.573	-0.10337	NOPARK	0.596	-0.30584 *	NOPARK	0.579	-0.219719 *
AGE	40.993	-0.0005380 *	AGE	42.073	-0.0002166	AGE	44.28	-0.0004896 *	AGE	46.181	-0.0003418	AGE	42.655	-0.0003367 *
NOCH	0.301	-0.074003 *	NOCH	0.304	-0.057649 *	NOCH	0.317	-0.05771 *	NOCH	0.26	-0.0551 *	NOCH	0.302	-0.063822 *
CHP	0.136	-0.018061	CHP	0.139	-0.031484 *	CHP	0.119	-0.009837	CHP	0.14	-0.00392	CHP	0.134	-0.019741 *
SIZE	709.003	0.00031320 *	SIZE	736.504	0.00030653 *	SIZE	728.342	0.00038114 *	SIZE	762.419	0.00042217 *	SIZE	729.602	0.00035114 *
BATH	1.002	0.056872 *	BATH	1.003	0.117055 *	BATH	1.005	0.054225	BATH	1.013	-0.022223	BATH	1.004	0.077214 *
A	0.004	0.0404	A	0.003	-0.012742	A	0.003	-0.018275	A	0	0	A	0.003	-0.005998
C	0.208	0.002159	C	0.186	-0.004122	C	0.191	-0.027009	C	0.215	-0.05118 *	C	0.196	-0.011352
D	0.062	-0.083688 *	D	0.061	-0.076037 *	D	0.068	-0.076696 *	D	0.065	-0.081014 *	D	0.063	-0.075487 *
E	0.145	-0.02136	E	0.153	-0.021178 *	E	0.132	-0.019641	E	0.146	-0.039462	E	0.145	-0.022715 *
F	0.022	-0.042021	F	0.016	-0.012662	F	0.021	-0.062656	F	0.028	-0.055247	F	0.02	-0.033231 *
G	0.009	-0.14181 *	G	0.009	-0.063307	G	0.005	-0.123359	G	0.006	-0.161499	G	0.008	-0.109137 *
H	0.062	-0.017518	H	0.06	-0.050012 *	H	0.062	-0.075662 *	H	0.071	-0.078332 *	H	0.062	-0.050473 *
I	0.054	0.0063	I	0.066	-0.010333	I	0.071	0.020347	I	0.054	-0.072167	I	0.063	-0.001757
J	0.14	0.054889 *	J	0.14	0.028121 *	J	0.148	0.035094 *	J	0.114	0.062395 *	J	0.14	0.041224 *
K	0.039	0.034265	K	0.037	0.010964	K	0.049	0.012401	K	0.045	0.005226	K	0.041	0.022134
P1	0.002	0.167549 *	P1	0.001	0.059357	P1	0.004	0.382013 *	P1	0.002	0.388057 *	P1	0.002	0.240559 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.108	-0.128662 *	P3	0.08	-0.144653 *	P3	0.102	-0.166758 *	P3	0.105	-0.185939 *	P3	0.095	-0.148787 *
P4	0.01	-0.229175 *	P4	0.014	-0.16076 *	P4	0.02	-0.235711 *	P4	0.019	-0.234799 *	P4	0.015	-0.192924 *
P5	0.563	-0.123345 *	P5	0.573	-0.146595 *	P5	0.548	-0.156282 *	P5	0.535	-0.147204 *	P5	0.561	-0.141555 *
P7	0.042	-0.325629 *	P7	0.064	-0.309861 *	P7	0.074	-0.334254 *	P7	0.06	-0.332757 *	P7	0.06	-0.319674 *
CONSTANT	1	11.049477 *	CONSTANT	1	10.917958 *	CONSTANT	1	10.89314 *	CONSTANT	1	11.158693 *	CONSTANT	1	10.956414 *
SAMPLE SIZE	1348		SAMPLE SIZE	2011		SAMPLE SIZE	1091		SAMPLE SIZE	465		SAMPLE SIZE	4915	
ADJUSTED R-SQUARED	0.62245		ADJUSTED R-SQUARED	0.61693		ADJUSTED R-SQUARED	0.64292		ADJUSTED R-SQUARED	0.63863		ADJUSTED R-SQUARED	0.60813	
F STATISTIC	75.02		F STATISTIC	108.9		F STATISTIC	66.42		F STATISTIC	29.28		F STATISTIC	255.19	

	Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
	FIRST-TIME BUYER GREATER LONDON			FIRST-TIME BUYER GREATER LONDON			FIRST-TIME BUYER GREATER LONDON			FIRST-TIME BUYER GREATER LONDON			FIRST-TIME BUYER GREATER LONDON		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.091	-0.21293 *		0.102	-0.083145 *		0.095	-0.123285 *		0.113	-0.009336		SDH	0.099	-0.119567 *
TH	0.26	-0.314606 *		0.282	-0.211717 *		0.289	-0.220123 *		0.296	-0.094883		TH	0.28	-0.226647 *
DB	0.002	-0.118134		0	0.00275		0.003	0.034149		0.004	0.123177		DB	0.002	0.027611
SDB	0.003	-0.209926 *		0.001	-0.065888		0.004	-0.109118		0.011	-0.005119		SDB	0.004	-0.09038
FB	0.364	-0.320118 *		0.325	-0.271305 *		0.301	-0.30465 *		0.288	-0.174853 *		FB	0.325	-0.276677 *
FC	0.272	-0.352718 *		0.281	-0.291178 *		0.301	-0.303264 *		0.281	-0.151338		FC	0.283	-0.281637 *
LH	0.649	-0.081547 *		0.61	-0.021429		0.604	0.005137		0.574	-0.021575		LH	0.615	-0.041772 *
SGAR	0.151	-0.066015		0.154	-0.127306 *		0.148	0.007477		0.167	-0.125792		SGAR	0.153	-0.066515 *
SPACE	0.062	-0.069105		0.056	-0.162914 *		0.069	-0.042316		0.074	-0.18673 *		SPACE	0.063	-0.09908 *
NOPARK	0.781	-0.107218 *		0.786	-0.187869 *		0.779	-0.073033		0.752	-0.184387 *		NOPARK	0.779	-0.129117 *
AGE	64.181	-0.0001508		64.379	-0.0003119 *		65.379	-0.0004204 *		64.131	-0.0007677 *		AGE	64.546	-0.0004107 *
NOCH	0.338	-0.108052 *		0.337	-0.099474 *		0.326	-0.083734 *		0.292	-0.083367 *		NOCH	0.329	-0.097932 *
CHP	0.068	-0.077831 *		0.07	-0.064541 *		0.059	-0.020349		0.069	-0.065119 *		CHP	0.067	-0.059643 *
SIZE	714.695	0.00040342 *		730.399	0.00042694 *		730.614	0.00050432 *		739.63	0.00049323 *		SIZE	727.484	0.00045248 *
BATH	1.007	0.167046 *		1.006	0.175697 *		0.998	0.120848 *		1	0.102978 *		BATH	1.004	0.134544 *
A	0	0		0	0		0	0		0	0		A	0	0
C	0.066	-0.037327		0.07	-0.018954		0.067	-0.031064		0.077	-0.044483		C	0.069	-0.0233
D	0.048	-0.054149 *		0.05	-0.062738 *		0.057	-0.056636 *		0.054	-0.08649 *		D	0.052	-0.053992 *
E	0.045	-0.068302		0.046	0.00070169		0.046	-0.060967 *		0.042	-0.128721 *		E	0.046	-0.044871 *
F	0.034	-0.040861 *		0.041	-0.090563 *		0.039	-0.053103		0.045	-0.064867		F	0.039	-0.061335 *
G	0.039	-0.032598		0.029	-0.039249		0.041	-0.054011		0.04	-0.066369		G	0.036	-0.034919 *
H	0.258	-0.03037		0.287	-0.024278		0.301	-0.029416		0.289	-0.055654		H	0.283	-0.025007 *
I	0.2	0.080861 *		0.203	0.074027 *		0.18	0.050654 *		0.175	-0.017344		I	0.193	0.059793 *
J	0.154	0.040464 *		0.134	0.049169 *		0.128	0.04953 *		0.15	0.02086		J	0.139	0.044954 *
K	0.091	0.024555		0.077	0.045402 *		0.087	0.031717		0.065	0.049721		K	0.081	0.038654 *
P1	0.233	0.083881 *		0.234	0.092594 *		0.238	0.122929 *		0.219	0.156498 *		P1	0.233	0.105651 *
P2	0	0		0	0		0	0		0	0		P2	0	0
P3	0.198	-0.063622 *		0.202	-0.071002 *		0.239	-0.057997 *		0.208	-0.067952 *		P3	0.211	-0.064367 *
P4	0.048	-0.040984		0.054	-0.055663 *		0.037	-0.042109		0.053	0.001422		P4	0.048	-0.045412 *
P5	0.113	-0.039507 *		0.087	-0.042758 *		0.086	-0.038836 *		0.095	-0.031928		P5	0.094	-0.045062 *
P7	0	0		0	0		0	0		0.001	-0.119189		P7	0	-0.050248
CONSTANT	1	10.700184 *		1	10.683985 *		1	10.640471 *		1	10.765998 *		CONSTANT	1	10.694622 *
SAMPLE SIZE	1674			2481			1603			754			SAMPLE SIZE	6512	
ADJUSTED R-SQUARED	0.53119			0.55001			0.55309			0.57892			ADJUSTED R-SQUARED	0.52695	
F STATISTIC	68.7			109.26			71.81			36.7			F STATISTIC	251.10	

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Q1 1986 FIRST-TIME BUYER			Q2 1986 FIRST-TIME BUYER			Q3 1986 FIRST-TIME BUYER			Q4 1986 FIRST-TIME BUYER			1986 SOUTH WEST		
SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.182	-0.188427 *	SDH	0.235	-0.21826 *	SDH	0.198	-0.190558 *	SDH	0.187	-0.13759 *	SDH	0.208	-0.188286 *
TH	0.502	-0.247845 *	TH	0.479	-0.289892 *	TH	0.51	-0.263889 *	TH	0.52	-0.290059 *	TH	0.497	-0.262585 *
DB	0.032	0.034691	DB	0.023	-0.045367	DB	0.019	0.01757	DB	0.027	-0.08598	DB	0.024	-0.014999
SDB	0.019	-0.123238	SDB	0.021	-0.222468 *	SDB	0.015	-0.17213 *	SDB	0.027	-0.151218	SDB	0.02	-0.169757 *
FB	0.089	-0.281054 *	FB	0.115	-0.352678 *	FB	0.118	-0.278778 *	FB	0.097	-0.360801 *	FB	0.109	-0.296975 *
FC	0.091	-0.296804 *	FC	0.084	-0.343569 *	FC	0.081	-0.303716 *	FC	0.087	-0.247954 *	FC	0.085	-0.294343 *
LH	0.184	-0.036964	LH	0.216	0.024291	LH	0.206	-0.031492	LH	0.183	0.061104	LH	0.203	-0.007982
SGAR	0.377	-0.065623	SGAR	0.368	-0.081651	SGAR	0.379	-0.171968 *	SGAR	0.39	-0.033637	SGAR	0.375	-0.103033 *
SPACE	0.156	-0.097726	SPACE	0.153	-0.153189 *	SPACE	0.159	-0.221188 *	SPACE	0.133	-0.05052	SPACE	0.153	-0.15382 *
NOPARK	0.451	-0.148686 *	NOPARK	0.466	-0.168419 *	NOPARK	0.45	-0.249299 *	NOPARK	0.467	-0.083966	NOPARK	0.458	-0.181068 *
AGE	52.039	0.00014026	AGE	48.479	-0.0000527	AGE	50.842	0.00000184	AGE	53.767	-0.0001801	AGE	50.502	-0.0000383
NOCH	0.444	-0.101235 *	NOCH	0.364	-0.079311 *	NOCH	0.413	-0.093437 *	NOCH	0.4	-0.113083 *	NOCH	0.399	-0.096243 *
CHP	0.16	-0.074735 *	CHP	0.163	-0.037345 *	CHP	0.116	-0.057825 *	CHP	0.133	-0.056918	CHP	0.145	-0.055461 *
SIZE	821.268	0.00032509 *	SIZE	796.095	0.00036132 *	SIZE	804.456	0.00027564 *	SIZE	829.867	0.00036449 *	SIZE	807.573	0.00033434 *
BATH	1.025	0.21801 *	BATH	1.017	0.130033 *	BATH	1.013	0.132024 *	BATH	1.003	0.085132	BATH	1.016	0.160429 *
A	0.033	-0.112006 *	A	0.041	-0.014891	A	0.029	0.004631	A	0.047	-0.064735	A	0.037	-0.038287 *
C	0.304	-0.062877 *	C	0.316	-0.042811 *	C	0.31	-0.037376	C	0.343	-0.02146	C	0.315	-0.041565 *
D	0.028	-0.21115 *	D	0.04	-0.106327 *	D	0.039	-0.161856 *	D	0.06	-0.180923 *	D	0.04	-0.143386 *
E	0.096	-0.046938	E	0.071	-0.057349 *	E	0.081	-0.025114	E	0.07	-0.009806	E	0.079	-0.041472 *
F	0.03	-0.087782	F	0.031	-0.075638 *	F	0.034	-0.12995 *	F	0.023	-0.005093	F	0.031	-0.09018 *
G	0.007	-0.139494	G	0.011	-0.094017	G	0.004	-0.017355	G	0.003	-0.215491	G	0.007	-0.098287 *
H	0.007	-0.235129 *	H	0.009	-0.277875 *	H	0.01	-0.252013 *	H	0.01	-0.195027	H	0.009	-0.246138 *
I	0.063	0.033359	I	0.072	-0.025843	I	0.071	0.066768 *	I	0.057	0.069831	I	0.068	0.021195
J	0.098	0.078111 *	J	0.083	0.056136 *	J	0.114	0.027077	J	0.103	0.075953	J	0.098	0.055384 *
K	0.077	0.049265	K	0.071	0.06317 *	K	0.071	0.05707	K	0.077	0.068394	K	0.073	0.056892 *
P1	0.03	0.074779	P1	0.021	0.031562	P1	0.018	0.204708 *	P1	0.027	-0.059748	P1	0.023	0.068341 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.002	-0.477156 *	P3	0.003	-0.380123 *	P3	0.003	-0.107143	P3	0.007	0.136162	P3	0.003	-0.171119 *
P4	0.098	-0.163267 *	P4	0.099	-0.176901 *	P4	0.083	-0.095552 *	P4	0.08	-0.093834	P4	0.092	-0.145637 *
P5	0.168	-0.068641	P5	0.188	-0.064526 *	P5	0.211	0.026354	P5	0.213	-0.002662	P5	0.193	-0.031393
P7	0.644	-0.011442	P7	0.637	-0.001099	P7	0.625	0.094339 *	P7	0.637	0.010952	P7	0.635	0.028354
CONSTANT	1	10.22838 *	CONSTANT	1	10.361343 *	CONSTANT	1	10.434123 *	CONSTANT	1	10.328785 *	CONSTANT	1	10.32573 *
SAMPLE SIZE	570		SAMPLE SIZE	1049		SAMPLE SIZE	787		SAMPLE SIZE	300		SAMPLE SIZE	2706	
ADJUSTED R-SQUARED	0.64948		ADJUSTED R-SQUARED	0.57978		ADJUSTED R-SQUARED	0.56105		ADJUSTED R-SQUARED	0.57101		ADJUSTED R-SQUARED	0.5815	
F STATISTIC	36.14		F STATISTIC	49.2		F STATISTIC	34.49		F STATISTIC	14.27		F STATISTIC	126.29	

	Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
	FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER		
	WEIGHT	COEFF	WALE	WEIGHT	COEFF	WALE	WEIGHT	COEFF	WALE	WEIGHT	COEFF	WALE	WEIGHT	COEFF	WALE
SDH	0.281	-0.313845 *	SDH	0.255	-0.220593 *	SDH	0.277	-0.187182 *	SDH	0.255	-0.06308	SDH	0.268	-0.222745 *	SDH
TH	0.559	-0.349728 *	TH	0.581	-0.334697 *	TH	0.582	-0.296427 *	TH	0.528	-0.148925 *	TH	0.57	-0.314341 *	TH
DB	0.044	-0.094484	DB	0.031	-0.123847	DB	0.025	-0.020964	DB	0.031	-0.010266	DB	0.032	-0.06912	DB
SDB	0.013	-0.231801	SDB	0.033	-0.195386 *	SDB	0.025	-0.145647	SDB	0.031	0.007407	SDB	0.026	-0.164243 *	SDB
FB	0.028	-0.446793 *	FB	0.035	-0.485185 *	FB	0.028	-0.280907 *	FB	0.019	-0.165978	FB	0.029	-0.378258 *	FB
FC	0.003	-0.034499	FC	0.004	0.004213	FC	0.009	-0.506728 *	FC	0.006	0.344213	FC	0.006	-0.229575 *	FC
LH	0.15	0.063797	LH	0.142	0.05293	LH	0.132	0.019712	LH	0.118	-0.004352	LH	0.138	0.0373	LH
SGAR	0.234	-0.01199	SGAR	0.26	-0.077761	SGAR	0.256	-0.141707	SGAR	0.255	0.324914	SGAR	0.252	-0.060297	SGAR
SPACE	0.2	-0.080081	SPACE	0.214	-0.17099 *	SPACE	0.199	-0.176946	SPACE	0.211	0.142482	SPACE	0.206	-0.127793 *	SPACE
NOPARK	0.553	-0.103381	NOPARK	0.509	-0.124014	NOPARK	0.536	-0.212327 *	NOPARK	0.528	0.125062	NOPARK	0.53	-0.13443 *	NOPARK
AGE	58.747	-0.00218 *	AGE	55.448	-0.001308 *	AGE	59.005	-0.001449 *	AGE	56.267	-0.0008980	AGE	57.436	-0.001509 *	AGE
NOCH	0.334	-0.118285 *	NOCH	0.341	-0.118071 *	NOCH	0.328	-0.098552 *	NOCH	0.328	-0.098552 *	NOCH	0.335	-0.116188 *	NOCH
CHP	0.063	-0.01343	CHP	0.063	-0.062721	CHP	0.083	-0.031656	CHP	0.083	-0.031656	CHP	0.075	-0.049973 *	CHP
SIZE	903.069	0.00041600 *	SIZE	857.866	0.00038462 *	SIZE	900.392	0.00045186 *	SIZE	907.516	0.00020824 *	SIZE	887.656	0.00039345 *	SIZE
BATH	1.009	0.018125	BATH	1	0.034626	BATH	1.009	-0.14385	BATH	1.012	0.232486	BATH	1.007	-0.01331	BATH
A	0.044	0.021267	A	0.026	0.009831	A	0.03	-0.102416	A	0.031	0.032063	A	0.032	-0.021992	A
C	0.309	-0.013752	C	0.33	-0.050378	C	0.309	-0.021653	C	0.329	0.031502	C	0.319	-0.026293	C
D	0.138	-0.074386	D	0.142	-0.133209 *	D	0.166	-0.118025 *	D	0.137	-0.091934	D	0.148	-0.115446 *	D
E	0.103	-0.057813	E	0.096	0.029243	E	0.079	-0.061599	E	0.143	0.104977	E	0.098	-0.011241	E
F	0.066	-0.079312	F	0.048	-0.025156	F	0.035	-0.038127	F	0.068	-0.076165	F	0.05	-0.063528 *	F
G	0.019	-0.086538	G	0.017	-0.096749	G	0.021	-0.008803	G	0.025	-0.041298	G	0.02	-0.064084	G
H	0.003	0.047104	H	0.002	0.842433 *	H	0.007	0.042493	H	0.006	-0.036907	H	0.004	0.15301	H
I	0.056	-0.009875	I	0.063	-0.026178	I	0.048	-0.093466	I	0.025	0.367196 *	I	0.052	-0.025557	I
J	0.113	0.09726 *	J	0.1	0.116608 *	J	0.111	0.078325	J	0.099	0.159347	J	0.106	0.097391 *	J
K	0.022	0.106786	K	0.015	-0.025085	K	0.03	0.069153	K	0.037	0.28075 *	K	0.024	0.045856	K
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2
P3	0.034	-0.181463 *	P3	0.031	-0.336055 *	P3	0.048	-0.218914 *	P3	0.056	-0.31255 *	P3	0.04	-0.250964 *	P3
P4	0.288	-0.16895 *	P4	0.332	-0.174804 *	P4	0.282	-0.177608 *	P4	0.248	-0.148697 *	P4	0.296	-0.173293 *	P4
P5	0.216	-0.197666 *	P5	0.181	-0.169365 *	P5	0.203	-0.164859 *	P5	0.199	-0.035688	P5	0.198	-0.16158 *	P5
P7	0.225	-0.157842 *	P7	0.253	-0.120407 *	P7	0.24	-0.148137 *	P7	0.329	-0.189529 *	P7	0.251	-0.145598 *	P7
CONSTANT	1	10.25769 *	CONSTANT	1	10.269421 *	CONSTANT	1	10.433341 *	CONSTANT	1	9.701459 *	CONSTANT	1	10.29205 *	CONSTANT
SAMPLE SIZE	320		SAMPLE SIZE	458		SAMPLE SIZE	433		SAMPLE SIZE	161		SAMPLE SIZE	1372		SAMPLE SIZE
ADJUSTED R-SQUARED	0.58328		ADJUSTED R-SQUARED	0.52472		ADJUSTED R-SQUARED	0.49355		ADJUSTED R-SQUARED	0.54053		ADJUSTED R-SQUARED	0.52097		ADJUSTED R-SQUARED
F STATISTIC	16.4		F STATISTIC	18.4		F STATISTIC	15.52		F STATISTIC	7.49		F STATISTIC	52.42		F STATISTIC

	Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
	FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			FIRST-TIME BUYER			SCOTLAND		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.123	-0.062848		0.147	-0.14951 *		0.143	-0.143214 *		0.114	-0.138355 *		0.136	-0.128801 *	
TH	0.141	-0.138167 *		0.14	-0.179864 *		0.149	-0.193121 *		0.168	-0.184913 *		0.147	-0.183503 *	
DB	0.037	0.003318		0.04	-0.08446 *		0.051	0.00355		0.032	0.02645		0.041	-0.024305	
SDB	0.047	-0.013416		0.036	-0.100786 *		0.045	-0.053724		0.044	-0.093857		0.042	-0.074027 *	
FB	0.601	-0.226322 *		0.583	-0.228503 *		0.557	-0.225145 *		0.573	-0.244179 *		0.578	-0.238759 *	
FC	0.011	-0.203312 *		0.008	-0.173355 *		0.014	-0.214533 *		0.02	-0.19805 *		0.012	-0.204317 *	
LH	0	0		0.001	0.305922		0.001	-0.03153		0	0		0.001	0.104829	
SGAR	0.187	-0.083572		0.206	0.01813		0.188	-0.037107		0.205	0.054344		0.196	-0.018831	
SPACE	0.126	-0.106403		0.134	-0.039478		0.131	-0.030516		0.143	-0.016746		0.133	-0.054761	
NOPARK	0.68	-0.140492		0.652	-0.042942		0.674	-0.0944		0.652	0		0.665	-0.077915	
AGE	56.13	-0.001432 *		54.696	-0.002192 *		58.583	-0.001427 *		58.247	-0.001704 *		56.646	-0.001718 *	
NOCH	0.465	-0.116017 *		0.464	-0.100581 *		0.445	-0.10063 *		0.454	-0.103582 *		0.458	-0.105593 *	
CHP	0.066	-0.081191 *		0.062	-0.07813 *		0.072	-0.058461 *		0.067	-0.030623		0.066	-0.063781 *	
SIZE	735.219	0.00046662 *		722.027	0.00058943 *		744.834	0.0005495 *		723.607	0.00048292 *		731.988	0.00052660 *	
BATH	1.006	0.069899		1.008	0.022607		1.007	-0.006011		1.007	0.07933		1.007	0.030331	
A	0.017	-0.123341		0.019	-0.007996		0.021	-0.058031		0.015	0.009635		0.018	-0.048832	
C	0.107	-0.029056		0.086	-0.045091		0.109	-0.030772		0.106	-0.099932 *		0.1	-0.041765 *	
D	0.089	0.005154		0.085	-0.032034		0.073	-0.049979		0.096	-0.012008		0.084	-0.025155	
E	0.147	0.009372		0.173	-0.047429 *		0.163	-0.051787 *		0.173	-0.04761		0.164	-0.035876 *	
F	0.075	-0.033746		0.076	0.00139		0.069	-0.084265 *		0.069	-0.080926		0.073	-0.04087 *	
G	0.075	-0.007231		0.074	-0.070114 *		0.068	-0.041202		0.086	-0.102101 *		0.074	-0.050278 *	
H	0.006	0.260295 *		0.005	0.142597		0.007	0.052467		0.005	0.052971		0.006	0.124002 *	
I	0.038	0.217793 *		0.057	0.133999 *		0.046	0.0984 *		0.044	0.124402 *		0.048	0.142716 *	
J	0.075	0.161491 *		0.061	0.119153 *		0.068	0.126841 *		0.081	0.07038		0.069	0.124058 *	
K	0.157	0.119133 *		0.135	0.074692 *		0.165	0.058388 *		0.141	0.098141 *		0.15	0.084277 *	
P1	0.055	-0.027427		0.069	-0.00235		0.065	-0.008404		0.057	0.063349		0.063	0.001928	
P2	0.854	-0.222618 *		0.811	-0.221807 *		0.823	-0.224138 *		0.842	-0.149838 *		0.829	-0.213938 *	
P3	0.003	-0.326863 *		0	0		0.001	-0.325659		0	0		0.001	-0.303759 *	
P4	0	0		0.001	-0.444994 *		0	0		0	0		0	-0.383915 *	
P5	0.017	-0.27335 *		0.02	-0.159421 *		0.015	-0.270138 *		0.022	-0.058679		0.018	-0.19957 *	
P7	0.001	0.199837		0	0		0.001	-0.52507 *		0	0		0.001	-0.16513 *	
CONSTANT	1	10.230238 *		1	10.200637 *		1	10.263551 *		1	10.109628 *		1	10.232779 *	
SAMPLE SIZE	707			1004			865			405			2981		
ADJUSTED R-SQUARED	0.63211			0.68345			0.67563			0.64952			0.66299		
F STATISTIC	42.83			75.67			60.99			29.8			190.11		

NORTHERN IRELAND			NORTHERN IRELAND			NORTHERN IRELAND			NORTHERN IRELAND			NORTHERN IRELAND		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.306	-0.077347	SDH	0.326	-0.180213 *	SDH	0.325	-0.09682 *	SDH	0.23	-0.226836 *	SDH	0.309	-0.125552 *
TH	0.362	-0.29047 *	TH	0.371	-0.410333 *	TH	0.376	-0.29045 *	TH	0.43	-0.34287 *	TH	0.378	-0.326099 *
DB	0.136	-0.059979	DB	0.131	-0.069236	DB	0.134	0.001585	DB	0.148	-0.178666 *	DB	0.135	-0.045089
SDB	0.107	-0.084262	SDB	0.097	-0.167653 *	SDB	0.081	-0.089109	SDB	0.122	-0.22769 *	SDB	0.098	-0.122302 *
FB	0.021	0.148885	FB	0.015	-0.126162	FB	0.02	0.150722	FB	0.017	-0.049668	FB	0.018	0.053097
FC	0.002	-0.051079	FC	0.003	-0.118442	FC	0	0	FC	0	0	FC	0.002	-0.04162
LH	0.724	-0.026475	LH	0.762	0.051624 *	LH	0.754	0.022158	LH	0.717	-0.001402	LH	0.745	0.019151
SGAR	0.266	-0.301649 *	SGAR	0.287	-0.050591	SGAR	0.327	-0.233248 *	SGAR	0.243	-0.0989	SGAR	0.289	-0.161575 *
SPACE	0.315	-0.40159 *	SPACE	0.306	-0.121076	SPACE	0.259	-0.331309 *	SPACE	0.261	-0.190547	SPACE	0.288	-0.251838 *
NOPARK	0.397	-0.469823 *	NOPARK	0.391	-0.180664 *	NOPARK	0.403	-0.364335 *	NOPARK	0.474	-0.288838 *	NOPARK	0.406	-0.311035 *
AGE	30.734	-0.002272 *	AGE	33.079	-0.001793 *	AGE	34.108	-0.002566 *	AGE	32.722	-0.004034 *	AGE	32.801	-0.002361 *
NOCH	0.241	-0.059868 *	NOCH	0.266	-0.148648 *	NOCH	0.255	-0.102363 *	NOCH	0.27	-0.136717 *	NOCH	0.257	-0.116584 *
CHP	0.194	-0.030958	CHP	0.219	-0.024288	CHP	0.239	-0.016888	CHP	0.204	0.00288	CHP	0.217	-0.020947
SIZE	918.843	0.00041301 *	SIZE	935.487	0.00047128 *	SIZE	926.008	0.00056107 *	SIZE	944.82	0.00041536 *	SIZE	929.987	0.00048404 *
BATH	1.007	0.132299	BATH	1.011	0.022693	BATH	1.009	-0.031759	BATH	1.03	0.106643	BATH	1.012	0.028715
CONSTANT	1	10.118023 *	CONSTANT	1	9.958667 *	CONSTANT	1	10.067752 *	CONSTANT	1	10.110844 *	CONSTANT	1	10.036278 *
SAMPLE SIZE	428		SAMPLE SIZE	647		SAMPLE SIZE	553		SAMPLE SIZE	230		SAMPLE SIZE	1858	
ADJUSTED R-SQUARED	0.68655		ADJUSTED R-SQUARED	0.66072		ADJUSTED R-SQUARED	0.64742		ADJUSTED R-SQUARED	0.68031		ADJUSTED R-SQUARED	0.66048	
F STATISTIC	63.35		F STATISTIC	84.87		F STATISTIC	73.4		F STATISTIC	35.81		F STATISTIC	241.84	

TABLE E9: FORMER OWNER-OCCUPIER HOUSES - INDEX NUMBERS, WEIGHTS AND REGRESSION COEFFICIENTS

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS NORTH INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	106.566	100.419	105.278
Q2	100.000	106.159	100.196	107.976
Q3	100.000	107.253	99.953	107.256
Q4	100.000	107.193	100.982	104.889
1986	100.000	106.713	100.320	106.703

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS YORKSHIRE & HUMBERSIDE INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.621	105.335	104.454
Q2	100.000	102.648	105.523	105.031
Q3	100.000	103.189	106.411	105.485
Q4	100.000	102.546	106.272	105.979
1986	100.000	102.778	105.835	105.144

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS NORTH WEST INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.216	105.009	106.522
Q2	100.000	102.105	104.997	106.520
Q3	100.000	102.319	105.019	106.493
Q4	100.000	101.771	104.744	105.954
1986	100.000	102.124	104.935	106.416

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS EAST MIDLANDS INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	101.126	105.012	106.137
Q2	100.000	102.215	105.072	107.327
Q3	100.000	101.704	104.988	106.768
Q4	100.000	101.021	104.692	105.970
1986	100.000	101.608	104.942	106.726

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS WEST MIDLANDS INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.008	104.657	108.869
Q2	100.000	102.706	105.614	109.136
Q3	100.000	102.507	105.964	108.811
Q4	100.000	101.871	105.362	108.749
1986	100.000	102.356	105.301	108.865

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS EAST ANGLIA
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	104.694	109.635	111.369
Q2	100.000	104.239	108.920	111.411
Q3	100.000	104.153	109.002	111.913
Q4	100.000	104.026	107.853	111.956
1986	100.000	104.311	108.964	111.587

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS OUTER SOUTH EAST
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	103.614	108.922	115.012
Q2	100.000	103.666	108.788	115.330
Q3	100.000	103.594	108.953	115.120
Q4	100.000	103.685	108.586	115.194
1986	100.000	103.649	108.817	115.217

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS OUTER METROPOLITAN
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	105.392	110.726	116.665
Q2	100.000	105.275	110.534	116.741
Q3	100.000	105.396	110.779	116.732
Q4	100.000	105.303	110.574	117.037
1986	100.000	105.333	110.617	116.753

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS GREATER LONDON
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	107.636	115.333	122.597
Q2	100.000	104.815	112.111	119.366
Q3	100.000	104.721	110.867	119.436
Q4	100.000	104.777	112.308	117.500
1986	100.000	104.819	112.299	119.374

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS SOUTH WEST
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	104.018	108.761	112.824
Q2	100.000	103.220	108.124	112.244
Q3	100.000	103.798	108.287	112.393
Q4	100.000	103.695	108.366	112.090
1986	100.000	103.531	108.278	112.341

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS WALES
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	104.427	105.563	111.419
Q2	100.000	104.060	105.853	112.037
Q3	100.000	103.927	104.653	111.011
Q4	100.000	103.284	105.075	109.211
1986	100.000	103.994	105.361	111.164

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS SCOTLAND
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	103.695	106.349	106.275
Q2	100.000	103.293	105.750	105.647
Q3	100.000	103.272	105.737	105.545
Q4	100.000	103.805	105.935	105.655
1986	100.000	103.344	105.826	105.674

ALTERNATIVE WEIGHTS FORMER OWNER OCCUPIERS NORTHERN IRELAND
INDEX NUMBERS 1986

	Q1	Q2	Q3	Q4
Q1	100.000	102.272	106.759	101.608
Q2	100.000	103.099	106.795	105.456
Q3	100.000	103.549	107.187	105.486
Q4	100.000	103.970	107.681	102.954
1986	100.000	103.192	107.048	104.255

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER		
NORTH			NORTH			NORTH			NORTH			NORTH		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.443	-0.272697 *	SDH	0.375	-0.172269 *	SDH	0.382	-0.299015 *	SDH	0.382	-0.331146 *	SDH	0.394	-0.265331 *
TH	0.261	-0.444409 *	TH	0.269	-0.378736 *	TH	0.259	-0.476811 *	TH	0.294	-0.492342 *	TH	0.268	-0.440342 *
DB	0.069	0.168022 *	DB	0.073	0.053157	DB	0.072	-0.014708	DB	0.066	0.073352	DB	0.071	0.036898
SDB	0.089	-0.205386 *	SDB	0.04	-0.123519	SDB	0.056	-0.114728	SDB	0.066	-0.187984 *	SDB	0.059	-0.165738 *
FB	0.015	-0.742492 *	FB	0.027	-0.37243 *	FB	0.012	-0.517006 *	FB	0.015	0.052511	FB	0.018	-0.442958 *
FC	0	0	FC	0	0	FC	0.008	-0.127709	FC	0	0	FC	0.002	-0.161136
LH	0.133	0.063918	LH	0.159	0.061235	LH	0.131	-0.001696	LH	0.14	-0.0002304	LH	0.143	0.034791
SGAR	0.596	-0.12985	SGAR	0.638	-0.131907 *	SGAR	0.598	-0.234662 *	SGAR	0.596	-0.096882	SGAR	0.611	-0.159094 *
SPACE	0.118	-0.200256 *	SPACE	0.116	-0.142316	SPACE	0.104	-0.424718 *	SPACE	0.125	-0.082486	SPACE	0.114	-0.242956 *
NOPARK	0.202	-0.274698 *	NOPARK	0.203	-0.221976 *	NOPARK	0.251	-0.401585 *	NOPARK	0.243	-0.240497 *	NOPARK	0.222	-0.305224 *
AGE	46.429	-0.001049	AGE	41.701	-0.0008725 *	AGE	47.661	-0.0009666 *	AGE	47.007	0.00019256	AGE	45.267	-0.0004051
NOCH	0.158	-0.120259 *	NOCH	0.12	-0.145072 *	NOCH	0.151	-0.076361	NOCH	0.221	-0.166899 *	NOCH	0.153	-0.142756 *
CHP	0.153	0.011546	CHP	0.096	-0.008516	CHP	0.139	-0.051767	CHP	0.088	-0.037435	CHP	0.12	-0.042324
SIZE	1110.76	0.00039926 *	SIZE	1040.22	0.00052270 *	SIZE	1113.20	0.00046107 *	SIZE	1049.71	0.00057585 *	SIZE	1078.30	0.00044715 *
BATH	1.03	0.065903	BATH	1.03	-0.055801	BATH	1.056	-0.028313	BATH	1.029	-0.076555	BATH	1.037	0.001369
A	0.015	-0.283193	A	0.02	0.058452	A	0.028	0.066417	A	0.037	0.076986	A	0.024	-0.003874
C	0.207	0.032895	C	0.206	-0.065161	C	0.203	-0.00227	C	0.169	-0.094932	C	0.2	-0.037825
D	0.03	-0.090913	D	0.05	-0.199746 *	D	0.056	-0.149644 *	D	0.037	-0.030423	D	0.045	-0.149585 *
E	0.064	-0.08204	E	0.103	-0.178051 *	E	0.08	-0.02088	E	0.044	-0.031491	E	0.079	-0.097017 *
F	0.064	-0.086829	F	0.05	-0.066014	F	0.08	-0.078056	F	0.059	-0.119635	F	0.063	-0.091901 *
G	0.034	-0.194719 *	G	0.02	-0.128423	G	0.012	0.109731	G	0.044	-0.286744 *	G	0.025	-0.138999 *
H	0	0	H	0	0	H	0	0	H	0	0	H	0	0
I	0.03	0.131292	I	0.033	0.199172 *	I	0.02	0.153821	I	0.015	0.110204	I	0.026	0.180882 *
J	0.236	0.188052 *	J	0.146	0.033237	J	0.163	0.092107 *	J	0.243	0.090987	J	0.186	0.103149 *
K	0.025	0.175059	K	0.023	0.304257 *	K	0.036	0.028592	K	0.029	0.199839	K	0.028	0.148249 *
P1	0	0	P1	0.003	0.265569	P1	0	0	P1	0	0	P1	0.001	0.486039 *
P2	0.005	0.281703	P2	0	0	P2	0	0	P2	0.007	0.070204	P2	0.002	0.170422
P3	0.182	-0.182164	P3	0.159	-0.21483	P3	0.131	-0.265466 *	P3	0.125	0.190861	P3	0.152	-0.089237
P4	0.507	-0.221473	P4	0.515	-0.184429	P4	0.526	-0.253294 *	P4	0.537	0.178023	P4	0.52	-0.080744
P5	0.182	-0.209089	P5	0.229	-0.218542	P5	0.207	-0.300304 *	P5	0.176	0.172755	P5	0.204	-0.108387
P7	0.094	0.009062	P7	0.083	0.115146	P7	0.116	-0.074272	P7	0.118	0.140347	P7	0.1	0.090759
CONSTANT	1	10.397561 *	CONSTANT	1	10.398333 *	CONSTANT	1	10.645378 *	CONSTANT	1	10.049274 *	CONSTANT	1	10.361821 *
SAMPLE SIZE	203		SAMPLE SIZE	301		SAMPLE SIZE	251		SAMPLE SIZE	136		SAMPLE SIZE	891	
ADJUSTED R-SQUARED	0.73547		ADJUSTED R-SQUARED	0.74812		ADJUSTED R-SQUARED	0.79843		ADJUSTED R-SQUARED	0.71821		ADJUSTED R-SQUARED	0.7434	
F STATISTIC	21.06		F STATISTIC	32.82		F STATISTIC	36.37		F STATISTIC	13.29		F STATISTIC	86.95	

Q1 1986 FORMER OWNER OCCUPIER			Q2 1986 FORMER OWNER OCCUPIER			Q3 1986 FORMER OWNER OCCUPIER			Q4 1986 FORMER OWNER OCCUPIER			1986 FORMER OWNER OCCUPIER		
YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE			YORKSHIRE & HUMBERSIDE		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.354	-0.260137 *	SDH	0.408	-0.254622 *	SDH	0.413	-0.272476 *	SDH	0.422	-0.232974 *	SDH	0.399	-0.254144 *
TH	0.258	-0.387767 *	TH	0.222	-0.453835 *	TH	0.251	-0.454242 *	TH	0.249	-0.416556 *	TH	0.243	-0.429592 *
DB	0.093	-0.0006446	DB	0.096	0.051586	DB	0.065	0.053016	DB	0.063	-0.061189	DB	0.081	0.024454
SDB	0.044	-0.15711 *	SDB	0.05	-0.17667 *	SDB	0.048	-0.217669 *	SDB	0.042	-0.264677 *	SDB	0.047	-0.19008 *
FB	0.023	-0.258899 *	FB	0.006	0.117214	FB	0.019	-0.259628 *	FB	0.008	-0.51627 *	FB	0.014	-0.208367 *
FC	0	0	FC	0	0	FC	0	0	FC	0	0	FC	0	0
LH	0.124	0.044135	LH	0.08	-0.005996	LH	0.084	-0.026425	LH	0.101	-0.061153	LH	0.095	-0.011591
SGAR	0.576	-0.134667 *	SGAR	0.642	-0.061607	SGAR	0.587	-0.096942	SGAR	0.57	-0.101158 *	SGAR	0.6	-0.09691 *
SPACE	0.124	-0.15926 *	SPACE	0.125	-0.162005 *	SPACE	0.115	-0.116977 *	SPACE	0.114	-0.136216 *	SPACE	0.12	-0.165825 *
NOPARK	0.248	-0.206726 *	NOPARK	0.17	-0.200233 *	NOPARK	0.258	-0.205771 *	NOPARK	0.236	-0.283014 *	NOPARK	0.224	-0.22485 *
AGE	39.801	-0.0006769	AGE	43.538	0.00051168	AGE	46.89	0.00054771 *	AGE	48.135	0.001065 *	AGE	44.279	0.00046662 *
NOCH	0.258	-0.1014 *	NOCH	0.201	-0.135675 *	NOCH	0.232	-0.126956 *	NOCH	0.211	-0.111747 *	NOCH	0.225	-0.120833 *
CHP	0.067	-0.097507 *	CHP	0.061	-0.123175 *	CHP	0.089	-0.029993	CHP	0.093	-0.081856	CHP	0.075	-0.07964 *
SIZE	985.083	0.00054532 *	SIZE	1057.44	0.00044552 *	SIZE	1005.52	0.00039867 *	SIZE	1001.20	0.00031698 *	SIZE	1016.82	0.00042734 *
BATH	1.036	-0.018381	BATH	1.04	-0.008118	BATH	1.043	0.140932 *	BATH	1.046	0.122548 *	BATH	1.041	0.077681 *
A	0.031	0.193864 *	A	0.021	-0.002919	A	0.024	-0.081119	A	0.034	-0.012224	A	0.026	-0.002986
C	0.279	-0.068378 *	C	0.266	-0.008249	C	0.258	-0.018014	C	0.232	-0.107079 *	C	0.262	-0.042686 *
D	0.049	-0.104721	D	0.021	-0.060226	D	0.035	-0.037561	D	0.025	-0.078393	D	0.032	-0.078969 *
E	0.067	-0.099821 *	E	0.084	-0.027608	E	0.061	-0.124025 *	E	0.021	-0.050029	E	0.064	-0.086125 *
F	0.034	-0.138261 *	F	0.052	-0.121743 *	F	0.058	-0.092968 *	F	0.089	-0.170699 *	F	0.055	-0.123211 *
G	0.016	-0.270784 *	G	0.023	-0.118234	G	0.009	-0.037511	G	0.017	0.092176	G	0.016	-0.117931 *
H	0.01	-0.308395 *	H	0.015	-0.217215 *	H	0.028	-0.174243 *	H	0.008	-0.189492	H	0.017	-0.201021 *
I	0.005	0.065292	I	0.017	0.09727	I	0.022	0.007521	I	0.017	-0.245709 *	I	0.016	0.010912
J	0.191	0.074664 *	J	0.207	0.090279 *	J	0.206	0.071591 *	J	0.224	0.000509	J	0.205	0.065859 *
K	0.039	0.155874 *	K	0.038	0.079882	K	0.032	0.007548	K	0.068	0.060331	K	0.041	0.073203 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0.002	-0.00936	P2	0	0	P2	0.001	-0.06255
P3	0.111	-0.17496 *	P3	0.092	-0.103312 *	P3	0.119	-0.127349 *	P3	0.127	-0.06502	P3	0.109	-0.120128 *
P4	0.377	-0.154263 *	P4	0.42	-0.202226 *	P4	0.405	-0.194775 *	P4	0.316	-0.171647 *	P4	0.39	-0.184685 *
P5	0.181	-0.079763	P5	0.126	-0.056072	P5	0.132	-0.076178	P5	0.118	-0.059331	P5	0.14	-0.075074 *
P7	0.23	-0.133562 *	P7	0.211	-0.085055 *	P7	0.203	-0.109642	P7	0.253	-0.085438 *	P7	0.22	-0.099747 *
CONSTANT	1	10.247708 *	CONSTANT	1	10.262717 *	CONSTANT	1	10.22985	CONSTANT	1	10.331233 *	CONSTANT	1	10.244439 *
SAMPLE SIZE	387		SAMPLE SIZE	522		SAMPLE SIZE	462		SAMPLE SIZE	237		SAMPLE SIZE	1608	
ADJUSTED R-SQUARED	0.10944		ADJUSTED R-SQUARED	0.77167		ADJUSTED R-SQUARED	0.75275		ADJUSTED R-SQUARED	0.74411		ADJUSTED R-SQUARED	0.75518	
F STATISTIC	47.01		F STATISTIC	63.88		F STATISTIC	49.4		F STATISTIC	25.51		F STATISTIC	171.93	

Q1 1986 FORMER OWNER OCCUPIER		Q2 1986 FORMER OWNER OCCUPIER		Q3 1986 FORMER OWNER OCCUPIER		Q4 1986 FORMER OWNER OCCUPIER		1986 NORTH WEST		FORMER OWNER OCCUPIER				
NORTH WEST		NORTH WEST		NORTH WEST		NORTH WEST		NORTH WEST		NORTH WEST				
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF			
SDH	0.426	-0.28442 *	0.415	-0.261689 *	0.433	-0.289167 *	0.459	-0.257864 *	SDH	0.43	-0.272796 *			
TH	0.2	-0.43108 *	0.206	-0.454535 *	TH	0.189	-0.454636 *	TH	0.192	-0.444672 *	TH	0.198	-0.445405 *	
DB	0.078	0.014745	0.064	-0.01424	DB	0.078	0.0361	DB	0.08	-0.041503	DB	0.074	0.003322	
SDB	0.052	-0.26162 *	0.052	-0.227066 *	SDB	0.043	-0.22921 *	SDB	0.04	-0.202821 *	SDB	0.048	-0.233964 *	
FB	0.014	-0.433305 *	0.013	-0.236106 *	FB	0.016	-0.375454 *	FB	0.019	-0.148529	FB	0.015	-0.310153 *	
FC	0.003	-0.65573 *	0.003	-0.155669	FC	0.001	0.374632	FC	0.002	-0.476455 *	FC	0.002	-0.271412 *	
LH	0.399	-0.02147	0.35	0.003788	LH	0.356	-0.010479	LH	0.376	-0.024667	LH	0.367	-0.014934	
SGAR	0.698	-0.101216 *	0.568	-0.116459 *	SGAR	0.544	-0.12599 *	SGAR	0.562	-0.226199 *	SGAR	0.545	-0.126009 *	
SPACE	0.149	-0.154917 *	0.122	-0.177858 *	SPACE	0.117	-0.217404 *	SPACE	0.14	-0.36413 *	SPACE	0.129	-0.211456 *	
NOPARK	0.275	-0.310313 *	0.243	-0.267738 *	NOPARK	0.263	-0.271757 *	NOPARK	0.247	-0.404651 *	NOPARK	0.256	-0.296666 *	
AGE	42.839	0.00033803	44.259	0.00010987	AGE	43.858	0.00012510	AGE	43.465	-0.0000425	AGE	43.696	0.00012770	
NOCH	0.216	-0.144712 *	0.168	-0.181045 *	NOCH	0.2	-0.125996 *	NOCH	0.214	-0.155787 *	NOCH	0.195	-0.150847 *	
CHP	0.056	-0.036271	0.049	-0.040428	CHP	0.051	-0.073811 *	CHP	0.059	-0.062323	CHP	0.053	-0.056493 *	
SIZE	1038.76	0.00043494 *	1050.98	0.00046454 *	SIZE	1073.00	0.00042350 *	SIZE	1035.95	0.00044063 *	SIZE	1052.00	0.00043574 *	
BATH	1.052	0.181128 *	1.063	0.093966 *	BATH	1.064	0.088489 *	BATH	1.072	-0.018169	BATH	1.062	0.092689 *	
A	0.013	0.186817 *	0.007	0.231203 *	A	0.012	0.205812 *	A	0.004	0.287342	A	0.009	0.221029 *	
C	0.214	-0.048832	0.203	-0.061558 *	C	0.185	-0.042548	C	0.216	-0.052519	C	0.203	-0.048263 *	
D	0.041	-0.084352	0.043	-0.078641 *	D	0.033	-0.093183 *	D	0.059	-0.015788	D	0.042	-0.071239 *	
E	0.047	-0.076361	0.045	-0.016628	E	0.056	-0.001595	E	0.032	-0.075056	E	0.046	-0.026945	
F	0.044	-0.107555 *	0.035	-0.098337 *	F	0.038	-0.093873 *	F	0.055	-0.037009	F	0.041	-0.084144 *	
G	0.022	0.015297	0.014	-0.084681	G	0.019	-0.231843 *	G	0.015	-0.160347	G	0.017	-0.110964 *	
H	0.013	-0.331834 *	0.005	-0.216092 *	H	0.005	-0.532106 *	H	0.004	-0.086934	H	0.007	-0.308663 *	
I	0.034	-0.003232	0.034	0.016449	I	0.041	0.002527	I	0.032	-0.179567 *	I	0.036	-0.010516	
J	0.249	0.078238 *	0.269	0.108301 *	J	0.283	0.083793 *	J	0.241	0.145657 *	J	0.264	0.102505 *	
K	0.03	0.081508	0.02	0.092068	K	0.042	0.098595 *	K	0.049	0.033452	K	0.033	0.081498 *	
P1	0	0	0	0	P1	0	0	P1	0	0	P1	0	0	
P2	0	0	0	0	P2	0	0	P2	0	0	P2	0	0	
P3	0.13	-0.144788 *	0.126	-0.194793 *	P3	0.121	-0.142949 *	P3	0.127	-0.208725 *	P3	0.126	-0.174993 *	
P4	0.203	-0.1348 *	0.19	-0.17583 *	P4	0.186	-0.159074 *	P4	0.205	-0.192657 *	P4	0.195	-0.16276 *	
P5	0.315	-0.087704 *	0.326	-0.114667 *	P5	0.322	-0.09449 *	P5	0.307	-0.13722 *	P5	0.319	-0.105888 *	
P7	0.153	-0.085746 *	0.112	-0.105429 *	P7	0.135	-0.109468 *	P7	0.133	-0.111434 *	P7	0.131	-0.106773 *	
CONSTANT	1	10.164486 *	CONSTANT	1	10.262897 *	CONSTANT	1	10.347081 *	CONSTANT	1	10.584846 *	CONSTANT	1	10.318261 *
SAMPLE SIZE	639		SAMPLE SIZE	936		SAMPLE SIZE	810		SAMPLE SIZE	473		SAMPLE SIZE	2858	
ADJUSTED R-SQUARED	0.78709		ADJUSTED R-SQUARED	0.79590		ADJUSTED R-SQUARED	0.78986		ADJUSTED R-SQUARED	0.76905		ADJUSTED R-SQUARED	0.78326	
F STATISTIC	82.33		F STATISTIC	126.73		F STATISTIC	105.86		F STATISTIC	65.2		F STATISTIC	357.02	

Q1 1986 FORMER OWNER OCCUPIER			Q2 1986 FORMER OWNER OCCUPIER			Q3 1986 FORMER OWNER OCCUPIER			Q4 1986 FORMER OWNER OCCUPIER			1986 FORMER OWNER OCCUPIER		
EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS			EAST MIDLANDS		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.383	-0.217128 *	SDH	0.327	-0.216034 *	SDH	0.356	-0.208544 *	SDH	0.346	-0.234261 *	SDH	0.35	-0.215564 *
TH	0.176	-0.335506 *	TH	0.158	-0.380666 *	TH	0.13	-0.297718 *	TH	0.162	-0.412081 *	TH	0.155	-0.355307 *
DB	0.098	0.073216 *	DB	0.096	0.045157	DB	0.117	0.016604	DB	0.102	0.02032	DB	0.103	0.04066 *
SDB	0.019	-0.144075 *	SDB	0.026	-0.079751	SDB	0.022	-0.073706	SDB	0.025	-0.166094 *	SDB	0.023	-0.092977 *
FB	0.005	-0.147553	FB	0.006	-0.283867 *	FB	0.003	-0.462595 *	FB	0	0	FB	0.004	-0.276153 *
FC	0.002	0.244331	FC	0	0	FC	0	0	FC	0.002	0.3113	FC	0.001	0.312452 *
LH	0.021	-0.033945	LH	0.019	-0.055143	LH	0.012	-0.050443	LH	0.025	-0.193212 *	LH	0.019	-0.076268 *
SGAR	0.573	-0.16908 *	SGAR	0.614	-0.110715 *	SGAR	0.633	-0.180546 *	SGAR	0.577	-0.142749 *	SGAR	0.603	-0.144429 *
SPACE	0.125	-0.247475 *	SPACE	0.117	-0.21853 *	SPACE	0.11	-0.254904 *	SPACE	0.109	-0.251817 *	SPACE	0.116	-0.236138 *
NOPARK	0.209	-0.369139 *	NOPARK	0.2	-0.238723 *	NOPARK	0.188	-0.352061 *	NOPARK	0.236	-0.237712 *	NOPARK	0.205	-0.293894 *
AGE	41.666	0.001098 *	AGE	37.726	0.00013639	AGE	37.915	0.00017535	AGE	42.132	0.00023425	AGE	39.419	0.0004352 *
NOCH	0.117	-0.125899 *	NOCH	0.117	-0.159728 *	NOCH	0.116	-0.09894 *	NOCH	0.106	-0.180369 *	NOCH	0.115	-0.140526 *
CHP	0.085	-0.100553 *	CHP	0.084	-0.079311 *	CHP	0.085	-0.02147	CHP	0.09	-0.127082 *	CHP	0.086	-0.080699 *
SIZE	1044.18	0.00044894 *	SIZE	1011.73	0.00048163 *	SIZE	1032.32	0.00053432 *	SIZE	1049.30	0.00036424 *	SIZE	1030.76	0.00046953 *
BATH	1.063	0.095171 *	BATH	1.056	0.144585 *	BATH	1.039	0.127646 *	BATH	1.051	0.208408 *	BATH	1.052	0.131393 *
A	0.044	-0.067988	A	0.039	0.104858 *	A	0.032	0.022198	A	0.018	0.014089	A	0.035	0.018909
C	0.293	-0.05199 *	C	0.259	-0.035102	C	0.287	0.004877	C	0.279	-0.006351	C	0.277	-0.023567 *
D	0.026	-0.121228 *	D	0.04	-0.014989	D	0.022	-0.141926 *	D	0.023	0.00163	D	0.029	-0.073335 *
E	0.106	-0.028892	E	0.089	0.005189	E	0.083	0.016858	E	0.072	-0.031512	E	0.088	-0.01238
F	0.03	-0.003437	F	0.032	-0.02576	F	0.034	-0.074296	F	0.039	-0.028136	F	0.033	-0.034638
G	0.003	-0.130442	G	0.011	-0.02761	G	0.014	-0.031439	G	0	0	G	0.008	-0.038811
H	0.012	0.041298	H	0.009	0.051465	H	0.023	-0.033745	H	0.012	0.222316	H	0.014	0.034472
I	0.017	0.020812	I	0.018	0.047048	I	0.02	0.16619 *	I	0.021	0.091098	I	0.019	0.076543 *
J	0.167	0.107652 *	J	0.189	0.127358 *	J	0.164	0.077207 *	J	0.208	0.099358 *	J	0.181	0.10288 *
K	0.017	0.030366	K	0.013	0.037518	K	0.012	0.036879	K	0.03	0.062724	K	0.017	0.033114
P1	0	0	P1	0.001	0.392821	P1	0	0	P1	0	0	P1	0	0.404846
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.078	-0.346246 *	P3	0.072	-0.181034 *	P3	0.088	-0.209347 *	P3	0.072	-0.194645 *	P3	0.077	-0.221102 *
P4	0.303	-0.337407 *	P4	0.23	-0.264181 *	P4	0.258	-0.278843 *	P4	0.266	-0.20606 *	P4	0.26	-0.267543 *
P5	0.427	-0.242155 *	P5	0.466	-0.105513 *	P5	0.429	-0.101864 *	P5	0.473	-0.020249	P5	0.449	-0.115701 *
P7	0.164	-0.360839 *	P7	0.204	-0.218962 *	P7	0.194	-0.268788 *	P7	0.148	-0.234554 *	P7	0.183	-0.260361 *
CONSTANT	1	10.415443 *	CONSTANT	1	10.189313 *	CONSTANT	1	10.246712 *	CONSTANT	1	10.28461 *	CONSTANT	1	10.269956 *
SAMPLE SIZE	574		SAMPLE SIZE	879		SAMPLE SIZE	648		SAMPLE SIZE	433		SAMPLE SIZE	2534	
ADJUSTED R-SQUARED			ADJUSTED R-SQUARED			ADJUSTED R-SQUARED			ADJUSTED R-SQUARED			ADJUSTED R-SQUARED		
SQUARED	0.71541		SQUARED	0.75990		SQUARED	0.72137		SQUARED	0.70588		SQUARED	0.72467	
F STATISTIC	50.67		F STATISTIC	96.82		F STATISTIC	60.82		F STATISTIC	39.4		F STATISTIC	233.22	

Q1 1986			Q2 1986			Q3 1986			Q4 1986			1986		
FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER			FORMER OWNER OCCUPIER			WEST MIDLANDS		
WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS			WEST MIDLANDS		
WEIGHT	WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF	WEIGHT	WEIGHT	COEFF
SDH	0.387	-0.228315 *	SDH	0.424	-0.201313 *	SDH	0.413	-0.222225 *	SDH	0.4	-0.293094 *	SDH	0.409	-0.227537 *
TH	0.153	-0.363522 *	TH	0.139	-0.343097 *	TH	0.134	-0.412287 *	TH	0.133	-0.458025 *	TH	0.14	-0.38307 *
DB	0.048	0.102651 *	DB	0.045	0.132461 *	DB	0.044	0.129311 *	DB	0.06	-0.094505	DB	0.048	0.083169 *
SDB	0.014	-0.135818	SDB	0.01	-0.223938 *	SDB	0.011	-0.049448	SDB	0.02	-0.270237 *	SDB	0.013	-0.149136 *
FB	0.032	-0.4225 *	FB	0.027	-0.336489 *	FB	0.027	-0.396338 *	FB	0.024	-0.531488 *	FB	0.028	-0.404461 *
FC	0.002	-0.621479 *	FC	0.002	-0.547242 *	FC	0.003	-0.4288 *	FC	0.002	-0.662111 *	FC	0.002	-0.506492 *
LH	0.167	0.041194	LH	0.157	-0.019989	LH	0.156	0.025958	LH	0.164	-0.023408	LH	0.16	0.006531
SGAR	0.643	-0.112419 *	SGAR	0.692	-0.10238 *	SGAR	0.694	-0.126354 *	SGAR	0.644	-0.086518 *	SGAR	0.674	-0.107653 *
SPACE	0.115	-0.20529 *	SPACE	0.074	-0.187056 *	SPACE	0.089	-0.238421 *	SPACE	0.087	-0.092594	SPACE	0.089	-0.195583 *
NOPARK	0.146	-0.245721 *	NOPARK	0.156	-0.247935 *	NOPARK	0.166	-0.211901 *	NOPARK	0.171	-0.164404 *	NOPARK	0.159	-0.22616 *
AGE	35.659	-0.0001547	AGE	38.54	0.00041312 *	AGE	39.937	0.00090612 *	AGE	37.129	-0.0001964	AGE	38.052	0.00040780 *
NOCH	0.171	-0.095835 *	NOCH	0.166	-0.118618 *	NOCH	0.189	-0.124881 *	NOCH	0.173	-0.153182 *	NOCH	0.174	-0.116259 *
CHP	0.08	-0.063308 *	CHP	0.099	-0.07543 *	CHP	0.09	-0.096685 *	CHP	0.076	-0.02946	CHP	0.088	-0.077849 *
SIZE	1024.17	0.00052914 *	SIZE	1023.92	0.00051887 *	SIZE	1050.65	0.00041390 *	SIZE	1061.90	0.00044625 *	SIZE	1037.61	0.00047746 *
BATH	1.064	0.033661	BATH	1.058	0.0781 *	BATH	1.052	0.130202 *	BATH	1.073	0.081489 *	BATH	1.06	0.088704 *
A	0.021	0.046358	A	0.034	0.02507	A	0.019	0.010339	A	0.027	0.168281 *	A	0.026	0.058081 *
C	0.183	0.032484	C	0.183	-0.024852	C	0.197	0.023933	C	0.202	0.026807	C	0.19	0.009492
D	0.043	-0.1085 *	D	0.023	-0.062444	D	0.031	-0.165494 *	D	0.022	-0.201403 *	D	0.029	-0.134838 *
E	0.073	-0.040827	E	0.08	-0.035605	E	0.077	0.018159	E	0.093	-0.048995	E	0.08	-0.020395
F	0.043	-0.06783	F	0.023	-0.145053 *	F	0.046	-0.061275	F	0.044	-0.054459	F	0.037	-0.078581 *
G	0.011	-0.031274	G	0.011	-0.181153 *	G	0.016	-0.10289	G	0.022	-0.115935	G	0.014	-0.102777 *
H	0.027	-0.112883 *	H	0.02	-0.232653 *	H	0.02	-0.261029 *	H	0.016	-0.174102	H	0.021	-0.205603 *
I	0.011	-0.008789	I	0.031	0.021368	I	0.04	0.013281	I	0.022	-0.037099	I	0.027	0.03258
J	0.256	0.167039 *	J	0.237	0.079856 *	J	0.223	0.094797 *	J	0.242	0.138211 *	J	0.238	0.115269 *
K	0.012	0.077587	K	0.022	0.216112 *	K	0.017	0.169566 *	K	0.02	0.098391	K	0.018	0.164147 *
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0.091	-0.118961 *	P3	0.1	-0.15332 *	P3	0.106	-0.14125 *	P3	0.122	-0.125881 *	P3	0.103	-0.140705 *
P4	0.165	-0.211325 *	P4	0.144	-0.211256 *	P4	0.146	-0.253366 *	P4	0.142	-0.176034 *	P4	0.149	-0.21492 *
P5	0.455	-0.085377 *	P5	0.461	-0.098828 *	P5	0.452	-0.088176 *	P5	0.451	-0.067159	P5	0.456	-0.085349 *
P7	0.163	0.011553	P7	0.16	-0.057372 *	P7	0.156	-0.047187	P7	0.164	-0.040593	P7	0.161	-0.035024 *
CONSTANT	1	10.16214 *	CONSTANT	1	10.172771 *	CONSTANT	1	10.246477 *	CONSTANT	1	10.32099 *	CONSTANT	10.431	10.205564 *
SAMPLE SIZE	563		SAMPLE SIZE	911		SAMPLE SIZE	699		SAMPLE SIZE	450		SAMPLE SIZE	2623	
ADJUSTED R-SQUARED	0.78716		ADJUSTED R-SQUARED	0.76038		ADJUSTED R-SQUARED	0.74370		ADJUSTED R-SQUARED	0.75530		ADJUSTED R-SQUARED	0.75621	
F STATISTIC	72.67		F STATISTIC	100.57		F STATISTIC	70.84		F STATISTIC	48.79		F STATISTIC	281.46	

Q1 1986 FORMER OWNER OCCUPIER			Q2 1986 FORMER OWNER OCCUPIER			Q3 1986 FORMER OWNER OCCUPIER			Q4 1986 FORMER OWNER OCCUPIER			1986 FORMER OWNER OCCUPIER		
EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA			EAST ANGLIA		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.262	-0.245306 *	SDH	0.301	-0.161921 *	SDH	0.281	-0.155722 *	SDH	0.246	-0.207749 *	SDH	0.278	-0.190133 *
TH	0.17	-0.312752 *	TH	0.172	-0.221962 *	TH	0.196	-0.293017 *	TH	0.217	-0.301194 *	TH	0.186	-0.274507 *
DB	0.111	-0.01533	DB	0.131	0.014449	DB	0.117	-0.033102	DB	0.15	-0.005497	DB	0.126	-0.001899
SDB	0.059	-0.166975 *	SDB	0.045	-0.193359 *	SDB	0.037	-0.127045 *	SDB	0.029	-0.156839	SDB	0.043	-0.182191 *
FB	0.013	-0.235766	FB	0.02	-0.285095 *	FB	0.015	-0.772853 *	FB	0.017	0	FB	0.016	-0.351888 *
FC	0	0	FC	0.002	-0.246517	FC	0.002	-1.178859 *	FC	0	0	FC	0.001	-0.490244 *
LH	0.03	0.083868	LH	0.035	0.054209	LH	0.02	0.547473 *	LH	0.017	-0.527996 *	LH	0.027	0.07738
SGAR	0.63	-0.076844 *	SGAR	0.646	-0.095392 *	SGAR	0.579	-0.112239 *	SGAR	0.571	-0.096837	SGAR	0.612	-0.095585 *
SPACE	0.108	-0.159449 *	SPACE	0.105	-0.204459 *	SPACE	0.117	-0.137473 *	SPACE	0.154	-0.145152 *	SPACE	0.117	-0.159956 *
NOPARK	0.134	-0.190214 *	NOPARK	0.182	-0.181363 *	NOPARK	0.191	-0.141489 *	NOPARK	0.192	-0.139558 *	NOPARK	0.176	-0.158379 *
AGE	38.63	0.00035362	AGE	39.959	0.00022847	AGE	46.751	0.00038179	AGE	44.008	0.00052284 *	AGE	42.24	0.00041852 *
NOCH	0.138	-0.126788 *	NOCH	0.137	-0.126387 *	NOCH	0.169	-0.151873 *	NOCH	0.154	-0.068781	NOCH	0.149	-0.128861 *
CHP	0.118	-0.094741 *	CHP	0.104	-0.049089	CHP	0.09	-0.063991	CHP	0.096	-0.077553	CHP	0.102	-0.066446 *
SIZE	1052.01	0.00042973 *	SIZE	1027.24	0.00043609 *	SIZE	1085.41	0.00050788 *	SIZE	1012.88	0.00032668 *	SIZE	1046.27	0.00043329 *
BATH	1.098	0.044756	BATH	1.053	0.102353 *	BATH	1.098	0.054724	BATH	1.063	0.155145 *	BATH	1.076	0.091042 *
A	0.082	0.014146	A	0.063	0.027295	A	0.059	-0.013817	A	0.079	-0.020233	A	0.068	-0.004844
C	0.272	-0.041498	C	0.291	-0.042734	C	0.264	-0.051391	C	0.254	-0.019747	C	0.274	-0.047608 *
D	0.043	-0.195357 *	D	0.033	-0.102303	D	0.046	-0.158738 *	D	0.038	-0.106326	D	0.04	-0.152257 *
E	0.066	0.00068276	E	0.086	-0.110599 *	E	0.083	-0.074906	E	0.075	0.006467	E	0.079	-0.06143 *
F	0.01	-0.167224	F	0.014	-0.113272	F	0.024	-0.028053	F	0.008	-0.015306	F	0.015	-0.075126
G	0.003	0.05881	G	0.002	-0.512396 *	G	0.005	0.086048	G	0.004	-0.287886	G	0.003	-0.098118
H	0.003	-0.662548 *	H	0.002	-0.666647 *	H	0	0	H	0	0	H	0.001	-0.735151 *
I	0.013	0.331436 *	I	0.031	0.08113	I	0.042	0.128798 *	I	0.038	0.076509	I	0.031	0.134057 *
J	0.187	0.074274 *	J	0.16	0.036821	J	0.191	0.084989 *	J	0.146	0.037726	J	0.172	0.054531 *
K	0.052	0.012881	K	0.029	-0.034099	K	0.046	-0.017353	K	0.046	-0.026591	K	0.042	-0.019597
P1	0	0	P1	0	0	P1	0	0	P1	0	0	P1	0	0
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0	0	P3	0	0	P3	0.002	-0.007255	P3	0	0	P3	0.001	-0.026024
P4	0.167	-0.341069 *	P4	0.146	-0.405712 *	P4	0.166	-0.465978 *	P4	0.179	-0.50282 *	P4	0.162	-0.448863 *
P5	0.187	-0.242404 *	P5	0.209	-0.292378 *	P5	0.186	-0.352907 *	P5	0.146	-0.286556 *	P5	0.188	-0.331173 *
P7	0.616	-0.324998 *	P7	0.613	-0.428772 *	P7	0.609	-0.458959 *	P7	0.633	-0.44117 *	P7	0.616	-0.440262 *
CONSTANT	1	10.624194 *	CONSTANT	1	10.677945 *	CONSTANT	1	10.732214 *	CONSTANT	1	10.817822 *	CONSTANT	1	10.728841 *
SAMPLE SIZE	305		SAMPLE SIZE	512		SAMPLE SIZE	409		SAMPLE SIZE	240		SAMPLE SIZE	1466	
ADJUSTED R-SQUARED	0.76542		ADJUSTED R-SQUARED	0.68481		ADJUSTED R-SQUARED	0.76013		ADJUSTED R-SQUARED	0.66342		ADJUSTED R-SQUARED	0.71352	
F STATISTIC	37.74		F STATISTIC	40.65		F STATISTIC	47.18		F STATISTIC	19.84		F STATISTIC	126.82	

Q1 1986 FORMER OWNER OCCUPIER			Q2 1986 FORMER OWNER OCCUPIER			Q3 1986 FORMER OWNER OCCUPIER			Q4 1986 FORMER OWNER OCCUPIER			1986 FORMER OWNER OCCUPIER		
SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST			OUTER SOUTH EAST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.332	-0.216226 *	SDH	0.316	-0.225471 *	SDH	0.316	-0.225471 *	SDH	0.308	-0.225977 *	SDH	0.318	-0.219018 *
TH	0.243	-0.289571 *	TH	0.224	-0.291438 *	TH	0.233	-0.336989 *	TH	0.256	-0.303812 *	TH	0.236	-0.305499 *
DB	0.088	-0.034779	DB	0.091	-0.008541	DB	0.097	-0.019393	DB	0.081	-0.020499	DB	0.091	-0.020083
SDB	0.029	-0.132309 *	SDB	0.034	-0.170497 *	SDB	0.034	-0.209558 *	SDB	0.039	-0.18142 *	SDB	0.033	-0.174088 *
FB	0.03	-0.249046 *	FB	0.026	-0.179604 *	FB	0.021	-0.305986 *	FB	0.028	-0.207451 *	FB	0.026	-0.241085 *
FC	0.02	-0.349249 *	FC	0.01	-0.290378 *	FC	0.019	-0.349187 *	FC	0.021	-0.247535 *	FC	0.017	-0.30833 *
LH	0.063	-0.100171 *	LH	0.043	-0.152196 *	LH	0.052	-0.10152 *	LH	0.059	-0.180626 *	LH	0.053	-0.125976 *
SGAR	0.624	-0.136452 *	SGAR	0.621	-0.131881 *	SGAR	0.616	-0.082933 *	SGAR	0.623	-0.099341 *	SGAR	0.621	-0.111509 *
SPACE	0.077	-0.181054 *	SPACE	0.095	-0.168016 *	SPACE	0.097	-0.12161 *	SPACE	0.073	-0.159026 *	SPACE	0.088	-0.152232 *
NOPARK	0.237	-0.215469 *	NOPARK	0.22	-0.222005 *	NOPARK	0.235	-0.215658 *	NOPARK	0.246	-0.200864 *	NOPARK	0.232	-0.213024 *
AGE	39.777	0.00062396 *	AGE	38.979	0.00052912 *	AGE	43.742	0.00073459 *	AGE	40.837	0.00061772 *	AGE	40.805	0.00062726 *
NOCH	0.162	-0.125632 *	NOCH	0.139	-0.11794 *	NOCH	0.14	-0.089545 *	NOCH	0.141	-0.090925 *	NOCH	0.144	-0.10896 *
CHP	0.105	-0.060987 *	CHP	0.104	-0.024062	CHP	0.102	-0.053915 *	CHP	0.12	-0.035191	CHP	0.106	-0.041194 *
SIZE	1003.48	0.00040046 *	SIZE	1043.83	0.00039668 *	SIZE	1042.45	0.00029692 *	SIZE	1040.57	0.00039816 *	SIZE	1034.24	0.00036934 *
BATH	1.051	0.067189 *	BATH	1.069	0.078106 *	BATH	1.075	0.120564 *	BATH	1.067	0.124275 *	BATH	1.066	0.097336 *
A	0.012	0.109087 *	A	0.019	0.072117 *	A	0.021	0.149256 *	A	0.018	0.138487 *	A	0.018	0.120436 *
C	0.203	-0.060743 *	C	0.215	-0.038274 *	C	0.207	-0.051271 *	C	0.219	-0.068173 *	C	0.211	-0.0505 *
D	0.02	-0.14192 *	D	0.011	-0.028185	D	0.022	-0.073891 *	D	0.018	-0.132397 *	D	0.017	-0.078904 *
E	0.094	-0.037242 *	E	0.087	-0.042314 *	E	0.068	-0.053548 *	E	0.069	-0.004933	E	0.081	-0.042425 *
F	0.015	-0.036084	F	0.014	-0.134523 *	F	0.014	-0.135213 *	F	0.017	-0.044723	F	0.015	-0.091838 *
G	0.003	-0.148053	G	0.005	-0.104622	G	0.004	-0.026264	G	0.007	-0.059808	G	0.005	-0.068275
H	0.001	-0.31257	H	0.004	-0.061791	H	0.003	-0.023244	H	0.006	-0.113778	H	0.003	-0.050585
I	0.029	-0.01604	I	0.03	-0.03066	I	0.039	-0.010496	I	0.036	0.010868	I	0.033	-0.008973
J	0.207	0.042519 *	J	0.22	0.06751 *	J	0.218	0.042504 *	J	0.226	0.05804 *	J	0.217	0.056668 *
K	0.1	-0.006511	K	0.104	0.040568 *	K	0.122	0.024438	K	0.103	-0.012241	K	0.108	0.022203 *
P1	0.001	0.129656	P1	0.001	0.729733 *	P1	0	0	P1	0.001	0.599572 *	P1	0.001	0.506174 *
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0
P3	0	0	P3	0.003	0.149146	P3	0.001	0.117765	P3	0.001	0.471867 *	P3	0.002	0.176477 *
P4	0.009	-0.1722 *	P4	0.018	-0.206457 *	P4	0.031	-0.19682 *	P4	0.019	-0.181284 *	P4	0.02	-0.188586 *
P5	0.503	-0.087504 *	P5	0.493	-0.071229 *	P5	0.481	-0.066578 *	P5	0.488	-0.083493 *	P5	0.491	-0.073927 *
P7	0.311	-0.117979 *	P7	0.309	-0.123799 *	P7	0.299	-0.124534 *	P7	0.322	-0.118482 *	P7	0.308	-0.121188 *
CONSTANT	1	10.654028 *	CONSTANT	1	10.653633 *	CONSTANT	1	10.742725 *	CONSTANT	1	10.700254 *	CONSTANT	1	10.679399 *
SAMPLE SIZE	1220		SAMPLE SIZE	1935		SAMPLE SIZE	1621		SAMPLE SIZE	900		SAMPLE SIZE	5676	
ADJUSTED R-SQUARED	0.71755		ADJUSTED R-SQUARED	0.70562		ADJUSTED R-SQUARED	0.66322		ADJUSTED R-SQUARED	0.70558		ADJUSTED R-SQUARED	0.68302	
F STATISTIC	107279		F STATISTIC	155.52		F STATISTIC	111.01		F STATISTIC	72.82		F STATISTIC	408.61	

Q1 1986	FORMER OWNER OCCUPIER	Q2 1986	FORMER OWNER OCCUPIER	Q3 1986	FORMER OWNER OCCUPIER	Q4 1986	FORMER OWNER OCCUPIER	1986	FORMER OWNER OCCUPIER		
OUTER METROPOLITAN		OUTER METROPOLITAN		OUTER METROPOLITAN		OUTER METROPOLITAN		OUTER METROPOLITAN			
WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF		
SDH	0.334	-0.221333 *	0.368	-0.206482 *	0.376	-0.211355 *	0.373	-0.218336 *	SDH	0.364	-0.20847 *
TH	0.271	-0.294208 *	0.246	-0.284084 *	0.245	-0.292582 *	0.256	-0.319891 *	TH	0.252	-0.291734 *
DB	0.052	-0.002073	0.043	0.013817	0.053	0.022159	0.059	0.002097	DB	0.05	0.017453
SDB	0.024	-0.177155 *	0.025	-0.171875 *	0.029	-0.198166 *	0.024	-0.219604 *	SDB	0.026	-0.182302 *
FB	0.04	-0.411121 *	0.038	-0.309092 *	0.028	-0.351995 *	0.044	-0.362301 *	FB	0.037	-0.344906 *
FC	0.01	-0.467757 *	0.009	-0.461963 *	0.008	-0.373018 *	0.013	-0.409024 *	FC	0.01	-0.421448 *
LH	0.057	0.036267	0.058	-0.0034	0.045	-0.002989	0.065	0.00721	LH	0.055	0.004481
SGAR	0.626	-0.104764 *	0.617	-0.078075 *	0.613	-0.082458 *	0.588	-0.099617 *	SGAR	0.614	-0.085015 *
SPACE	0.059	-0.134366 *	0.068	-0.128856 *	0.074	-0.147633 *	0.096	-0.114034 *	SPACE	0.072	-0.120487 *
NOPARK	0.237	-0.172141 *	0.247	-0.154656 *	0.246	-0.157508 *	0.259	-0.148129 *	NOPARK	0.246	-0.151839 *
AGE	37.173	0.0004289 *	37.019	0.00062688 *	38.104	0.00055679 *	38.414	0.00018971	AGE	37.551	0.00048004 *
NOCH	0.087	-0.079895 *	0.084	-0.080321 *	0.103	-0.09395 *	0.087	-0.119456 *	NOCH	0.09	-0.090284 *
CHP	0.102	-0.053147 *	0.094	-0.043225 *	0.078	-0.036592 *	0.101	-0.039418 *	CHP	0.093	-0.045127 *
SIZE	1006.59	0.00042656 *	1000.89	0.00045781 *	1021.38	0.00043779 *	1001.05	0.00046002 *	SIZE	1007.56	0.00044893 *
BATH	1.077	0.067666 *	1.063	0.067648 *	1.078	0.113488 *	1.06	0.04494	BATH	1.069	0.076629 *
A	0.004	0.091472	0.007	0.079841 *	0.006	0.12369 *	0.005	0.113792	A	0.006	0.104215 *
C	0.135	-0.003302	0.139	-0.027921 *	0.151	-0.008332	0.151	-0.031966 *	C	0.143	-0.015905 *
D	0.014	-0.042642	0.013	-0.071122 *	0.013	-0.053815	0.02	-0.095966 *	D	0.014	-0.059997 *
E	0.11	-0.038444 *	0.117	-0.022806 *	0.105	0.007621	0.1	-0.056379 *	E	0.11	-0.025339 *
F	0.017	-0.048715	0.011	-0.041704	0.011	-0.075007 *	0.013	-0.071776	F	0.013	-0.062867 *
G	0.003	-0.300063 *	0.002	-0.031383	0.005	-0.103255	0.003	-0.003681	G	0.003	-0.106904 *
H	0.015	-0.094658 *	0.016	-0.096103 *	0.011	-0.088258 *	0.009	-0.121388 *	H	0.013	-0.109069 *
I	0.025	0.072736 *	0.024	-0.002158	0.026	-0.005234	0.025	0.007125	I	0.025	0.013275
J	0.279	0.09132 *	0.258	0.082063 *	0.286	0.092394 *	0.276	0.07272 *	J	0.273	0.087515 *
K	0.032	-0.005798	0.023	0.034042	0.028	0.075061 *	0.04	0.055119 *	K	0.029	0.044604 *
P1	0.001	0.126835	0	0.527445 *	0	0.368337	0	0	P1	0	0.337969 *
P2	0	0	0	0	0	0	0	0	P2	0	0
P3	0.038	-0.131837 *	0.043	-0.137972 *	0.04	-0.164083 *	0.044	-0.170957 *	P3	0.042	-0.145659 *
P4	0.005	-0.368391 *	0.006	-0.219697 *	0.009	-0.23696 *	0.006	-0.294558 *	P4	0.007	-0.255655 *
P5	0.541	-0.143618 *	0.54	-0.141727 *	0.541	-0.148359 *	0.513	-0.165253 *	P5	0.536	-0.148477 *
P7	0.037	-0.297137 *	0.034	-0.344027 *	0.03	-0.341223 *	0.042	-0.336133 *	P7	0.035	-0.331731 *
CONSTANT	1	10.807149 *	1	10.7927 *	1	10.82029 *	1	10.984849 *	CONSTANT	1	10.822942 *
SAMPLE SIZE	1689		SAMPLE SIZE	2889		SAMPLE SIZE	2072		SAMPLE SIZE	1193	
ADJUSTED R-SQUARED	0.76983		ADJUSTED R-SQUARED	0.75238		ADJUSTED R-SQUARED	0.76459		ADJUSTED R-SQUARED	0.77182	
F STATISTIC	189.19		F STATISTIC	293.5		F STATISTIC	225.22		F STATISTIC	140.03	

	Q1 1986 FORMER OWNER OCCUPIER GREATER LONDON			Q2 1986 FORMER OWNER OCCUPIER GREATER LONDON			Q3 1986 FORMER OWNER OCCUPIER GREATER LONDON			Q4 1986 FORMER OWNER OCCUPIER GREATER LONDON			1986 FORMER OWNER OCCUPIER GREATER LONDON		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.317	-0.230779 *	SDH	0.341	-0.231391 *	SDH	0.338	-0.219427 *	SDH	0.322	-0.209229 *	SDH	0.332	-0.226644 *	
TH	0.373	-0.308765 *	TH	0.366	-0.311291 *	TH	0.367	-0.286424 *	TH	0.378	-0.268978 *	TH	0.37	-0.298068 *	
DB	0.017	-0.072934	DB	0.014	-0.069875	DB	0.019	0.008991	DB	0.017	-0.017445	DB	0.017	-0.041698	
SDB	0.01	-0.19045 *	SDB	0.014	-0.187785 *	SDB	0.013	-0.22857 *	SDB	0.012	-0.069473	SDB	0.013	-0.181493 *	
FB	0.123	-0.455502 *	FB	0.099	-0.439564 *	FB	0.103	-0.401564 *	FB	0.111	-0.397384 *	FB	0.107	-0.428139 *	
FC	0.091	-0.462072 *	FC	0.082	-0.479133 *	FC	0.076	-0.365863 *	FC	0.081	-0.420825 *	FC	0.082	-0.431107 *	
LH	0.222	0.041121	LH	0.19	0.068714	LH	0.185	0.064182	LH	0.196	0.041946	LH	0.196	0.053791 *	
SGAR	0.396	-0.001475	SGAR	0.413	0.00241	SGAR	0.396	-0.033131	SGAR	0.406	-0.001757	SGAR	0.404	-0.016573	
SPACE	0.048	-0.039037	SPACE	0.057	-0.075734 *	SPACE	0.065	-0.120831 *	SPACE	0.072	-0.041951	SPACE	0.06	-0.074157 *	
NOPARK	0.533	-0.085673 *	NOPARK	0.506	-0.092353 *	NOPARK	0.508	-0.115901 *	NOPARK	0.494	-0.061095	NOPARK	0.51	-0.097813 *	
AGE	60.053	0.00072339 *	AGE	59.065	0.00047936 *	AGE	57.412	0.00034373	AGE	57.261	0.00008569	AGE	58.525	0.00037103 *	
NOCH	0.188	-0.092047 *	NOCH	0.153	-0.122828 *	NOCH	0.168	-0.110683 *	NOCH	0.175	-0.113821 *	NOCH	0.168	-0.110443 *	
CHP	0.044	-0.042433	CHP	0.063	-0.071574 *	CHP	0.077	-0.052309 *	CHP	0.057	-0.095269 *	CHP	0.062	-0.056812 *	
SIZE	993.215	0.00045140 *	SIZE	1011.50	0.00046962 *	SIZE	1007.66	0.00047557 *	SIZE	988.187	0.00050189 *	SIZE	1002.66	0.00046867 *	
BATH	1.038	0.089303 *	BATH	1.04	0.116987 *	BATH	1.054	0.176798 *	BATH	1.047	0.122051 *	BATH	1.045	0.143166 *	
A	0	0	A	0	-0.284371	A	0.001	-0.195797	A	0	0	A	0	-0.244421	
C	0.073	0.00168	C	0.076	-0.00786	C	0.067	-0.054979 *	C	0.085	-0.016268	C	0.074	-0.015475	
D	0.035	-0.051899	D	0.025	-0.012873	D	0.026	-0.022435	D	0.031	-0.065296	D	0.029	-0.036195	
E	0.054	0.012134	E	0.051	-0.017708	E	0.044	-0.034686	E	0.06	-0.0278	E	0.051	-0.017774	
F	0.033	-0.024773	F	0.02	-0.019153	F	0.022	-0.036562	F	0.027	-0.020338	F	0.024	-0.028851	
G	0.018	0.093937	G	0.016	0.006342	G	0.012	0.049761	G	0.018	-0.018549	G	0.016	0.036686	
H	0.123	-0.040522	H	0.137	-0.054906 *	H	0.125	-0.05343 *	H	0.133	-0.056365 *	H	0.13	-0.049633 *	
I	0.16	0.131585 *	I	0.15	0.081402 *	I	0.141	0.099792 *	I	0.12	0.143145 *	I	0.144	0.107398 *	
J	0.323	0.070038 *	J	0.322	0.052753 *	J	0.347	0.063031 *	J	0.342	0.053085 *	J	0.333	0.062065 *	
K	0.058	0.109817 *	K	0.053	0.102725 *	K	0.066	0.115581 *	K	0.057	0.064877 *	K	0.058	0.109636 *	
P1	0.17	0.148838 *	P1	0.145	0.20254 *	P1	0.125	0.160406 *	P1	0.123	0.174311 *	P1	0.141	0.165487 *	
P2	0	0	P2	0	0	P2	0	0	P2	0	0	P2	0	0	
P3	0.102	-0.081611 *	P3	0.101	-0.060916 *	P3	0.1	-0.074024 *	P3	0.105	-0.097097 *	P3	0.101	-0.075389 *	
P4	0.035	-0.066371 *	P4	0.035	-0.041399	P4	0.041	-0.028786	P4	0.047	-0.024788	P4	0.039	-0.033861 *	
P5	0.122	-0.066928 *	P5	0.105	-0.068945 *	P5	0.102	-0.034192 *	P5	0.129	-0.065657 *	P5	0.112	-0.058485 *	
P7	0.002	-0.478356 *	P7	0.001	-0.460843 *	P7	0.002	-0.447728	P7	0	0	P7	0.001	-0.495355 *	
CONSTANT	1	10.712691 *	CONSTANT	1	10.740387 *	CONSTANT	1	10.748381 *	CONSTANT	1	10.812605 *	CONSTANT	1	10.747369 *	
SAMPLE SIZE	1200		SAMPLE SIZE	2036		SAMPLE SIZE	1517		SAMPLE SIZE	985		SAMPLE SIZE	5738		
ADJUSTED R-SQUARED	0.64558		ADJUSTED R-SQUARED	0.70043		ADJUSTED R-SQUARED	0.67124		ADJUSTED R-SQUARED	0.68585		ADJUSTED R-SQUARED	0.65876		
F STATISTIC	76.31		F STATISTIC	159.6		F STATISTIC	104.17		F STATISTIC	77.72		F STATISTIC	370.18		

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Q1 1986 FORMER OWNER OCCUPIER			Q2 1986 FORMER OWNER OCCUPIER			Q3 1986 FORMER OWNER OCCUPIER			Q4 1986 FORMER OWNER OCCUPIER			1986 FORMER OWNER OCCUPIER		
SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST			SOUTH WEST		
WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.305	-0.195125 *	0.33	-0.227142 *	0.314	-0.192807 *	0.311	-0.176497 *	0.317	-0.202283 *	SDH	0.317	-0.202283 *	
TH	0.227	-0.301649 *	0.221	-0.313851 *	0.239	-0.300396 *	0.247	-0.265421 *	0.231	-0.298485 *	TH	0.231	-0.298485 *	
DB	0.107	-0.011457	0.108	-0.014726	0.111	0.04268 *	0.121	0.018023	0.111	0.011302	DB	0.111	0.011302	
SDB	0.025	-0.191016 *	0.027	-0.157599 *	0.027	-0.193822 *	0.041	-0.088482 *	0.029	-0.154053 *	SDB	0.029	-0.154053 *	
FB	0.025	-0.158365 *	0.02	-0.323719 *	0.025	-0.345833 *	0.021	-0.189005 *	0.023	-0.261916 *	FB	0.023	-0.261916 *	
FC	0.019	-0.287749 *	0.023	-0.460847 *	0.023	-0.325984 *	0.025	-0.49951 *	0.022	-0.390303 *	FC	0.022	-0.390303 *	
LH	0.058	-0.035144	0.053	0.036983	0.066	0.011886	0.055	0.030349	0.058	0.008638	LH	0.058	0.008638	
SGAR	0.624	-0.04324	0.64	-0.152771 *	0.607	-0.124878 *	0.653	-0.072627	0.63	-0.108277 *	SGAR	0.63	-0.108277 *	
SPACE	0.115	-0.094976 *	0.106	-0.219369 *	0.106	-0.194057 *	0.078	-0.092364	0.104	-0.168942 *	SPACE	0.104	-0.168942 *	
NOPARK	0.203	-0.13055 *	0.21	-0.253267 *	0.24	-0.198599 *	0.222	-0.138736 *	0.218	-0.194837 *	NOPARK	0.218	-0.194837 *	
AGE	42.242	-0.0000512	44.939	0.00073176 *	46.799	0.00023443	44.918	-0.0002034	44.826	0.00032677 *	AGE	44.826	0.00032677 *	
NOCH	0.216	-0.11633 *	0.19	-0.10269 *	0.23	-0.111088 *	0.214	-0.155367 *	0.21	-0.118021 *	NOCH	0.21	-0.118021 *	
CHP	0.125	-0.04587 *	0.133	-0.092421 *	0.113	-0.06781 *	0.11	-0.070009 *	0.123	-0.076348 *	CHP	0.123	-0.076348 *	
SIZE	1023.27	0.0004735 *	1033.43	0.00032601 *	1021.81	0.00037990 *	1020.94	0.00039431 *	1026.11	0.00036760 *	SIZE	1026.11	0.00036760 *	
BATH	1.069	0.149016 *	1.084	0.139689 *	1.056	0.165259 *	1.066	0.152249 *	1.07	0.147412 *	BATH	1.07	0.147412 *	
A	0.044	0.065055	0.056	0.017679	0.043	0.008166	0.044	0.074021	0.048	0.032188 *	A	0.048	0.032188 *	
C	0.291	-0.044719 *	0.279	-0.034365 *	0.301	-0.023939	0.279	-0.009815	0.288	-0.027182 *	C	0.288	-0.027182 *	
D	0.005	-0.274048 *	0.011	-0.146257 *	0.012	-0.152095 *	0.012	-0.142751	0.01	-0.15445 *	D	0.01	-0.15445 *	
E	0.072	-0.01029	0.052	-0.020884	0.075	-0.048182 *	0.078	-0.019737	0.067	-0.019318	E	0.067	-0.019318	
F	0.019	-0.063676	0.025	-0.061283	0.017	-0.094609 *	0.023	-0.015752	0.021	-0.064144 *	F	0.021	-0.064144 *	
G	0.003	0.102701	0.002	0.083106	0.001	0.090994	0.005	-0.090268	0.002	0.031183	G	0.002	0.031183	
H	0	0	0.001	-0.148037	0.003	-0.358051 *	0	0	0.001	-0.272988 *	H	0.001	-0.272988 *	
I	0.04	-0.030349	0.039	0.014487	0.041	0.090077 *	0.034	-0.014571	0.039	0.023039	I	0.039	0.023039	
J	0.212	0.040948 *	0.187	0.084438 *	0.19	0.068007 *	0.185	0.116703 *	0.193	0.073359 *	J	0.193	0.073359 *	
K	0.084	0.102185 *	0.1	0.10928 *	0.089	0.050454 *	0.094	0.127523 *	0.093	0.096463 *	K	0.093	0.096463 *	
P1	0.02	0.190294 *	0.02	0.079813	0.018	0.115776 *	0.011	0.142617	0.018	0.134364 *	P1	0.018	0.134364 *	
P2	0	0	0	0	0	0	0	0	0	P2	0	0		
P3	0	0	0.002	-0.178814	0	0	0	0	0.001	-0.211041	P3	0.001	-0.211041	
P4	0.051	-0.176765 *	0.05	-0.094696 *	0.051	-0.098782 *	0.046	-0.173565 *	0.05	-0.125562 *	P4	0.05	-0.125562 *	
P5	0.146	-0.024894	0.162	-0.046642	0.164	-0.042571	0.174	-0.047004	0.161	-0.037166 *	P5	0.161	-0.037166 *	
P7	0.723	-0.03137	0.712	-0.013956	0.701	-0.014466	0.715	-0.052457	0.712	-0.020719	P7	0.712	-0.020719	
CONSTANT	1	10.289118 *	1	10.496999 *	1	10.432785 *	1	10.434619 *	1	10.424177 *	CONSTANT	1	10.424177 *	
SAMPLE SIZE	797		1260		946		562		3565		SAMPLE SIZE	3565		
ADJUSTED R-SQUARED	0.74239		0.7142		0.71912		0.69974		ADJUSTED R-SQUARED	0.70362		ADJUSTED R-SQUARED	0.70362	
F STATISTIC	82.93		105.87		84.43		47.69		F STATISTIC	283.04		F STATISTIC	283.04	

Q1 1986	FORMER OWNER OCCUPIER	Q2 1986	FORMER OWNER OCCUPIER	Q3 1986	FORMER OWNER OCCUPIER	Q4 1986	FORMER OWNER OCCUPIER	1986	FORMER OWNER OCCUPIER		
WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES	WALES		
SDH	0.367	-0.184859 *	0.373	-0.175182 *	0.369	-0.220762 *	0.387	-0.143214 *	SDH	0.373	-0.194134 *
TH	0.227	-0.308223 *	0.236	-0.291355 *	0.21	-0.318912 *	0.221	-0.251905 *	TH	0.225	-0.308736 *
DB	0.077	-0.036108	0.08	-0.016436	0.123	0.014125	0.069	0.153178 *	DB	0.088	-0.001812
SDB	0.033	-0.192386 *	0.042	-0.253182 *	0.029	-0.029114	0.029	0.007966	SDB	0.035	-0.167414 *
FB	0.01	-0.447494 *	0.017	-0.310162 *	0.006	-0.555832 *	0	0	FB	0.01	-0.390606 *
FC	0.003	-0.843193 *	0.005	-0.630154 *	0.003	-0.041804	0	0	FC	0.003	-0.548774 *
LH	0.183	0.01482	0.17	0.053849	0.139	-0.016755	0.157	-0.00548	LH	0.163	0.013304
SGAR	0.54	-0.195726 *	0.545	-0.155781 *	0.482	-0.199778 *	0.549	-0.075374	SGAR	0.529	-0.170308 *
SPACE	0.167	-0.253627 *	0.193	-0.267894 *	0.188	-0.327404 *	0.113	-0.132961	SPACE	0.172	-0.258988 *
NOPARK	0.257	-0.256734 *	0.233	-0.29172 *	0.269	-0.358543 *	0.27	-0.265075 *	NOPARK	0.254	-0.29208 *
AGE	43.513	-0.001661 *	40.639	0.0005872	44.142	-0.0007307	41.103	-0.0000599	AGE	42.288	-0.0006010 *
NOCH	0.197	-0.103377 *	0.153	-0.164477 *	0.217	-0.124948 *	0.137	-0.128963 *	NOCH	0.177	-0.133732 *
CHP	0.07	-0.009534	0.059	-0.05013	0.049	-0.007599	0.083	-0.127025 *	CHP	0.063	-0.048217
SIZE	1062.48	0.00047437 *	1060.79	0.00041346 *	1094.48	0.00037300 *	1105.4	0.00051380 *	SIZE	1076.97	0.00041979 *
BATH	1.023	0.097447	1.042	0.133802 *	1.039	0.030169	1.044	-0.009466	BATH	1.037	0.092546
A	0.023	0.064278	0.026	0.078006	0.026	0.096342	0.025	-0.001449	A	0.025	0.075381 *
C	0.25	-0.034796	0.257	-0.036509	0.272	-0.012885	0.279	-0.049436	C	0.263	-0.027696
D	0.08	-0.135568 *	0.073	-0.071021	0.068	-0.181273 *	0.054	-0.016574	D	0.07	-0.127898 *
E	0.093	-0.034474	0.087	-0.036255	0.104	0.008394	0.088	-0.035958	E	0.093	-0.025862
F	0.027	-0.098367	0.026	-0.059745	0.019	0.07387	0.034	-0.012289	F	0.026	-0.046526
G	0.003	-0.211612	0.007	-0.013341	0.01	-0.182071	0	0	G	0.006	-0.128173
H	0	0	0	0	0	0	0	0	H	0	0
I	0.027	0.012336	0.045	-0.001916	0.016	-0.017708	0.02	0.250235 *	I	0.029	0.022739
J	0.2	0.082841 *	0.208	0.094964 *	0.201	0.116971 *	0.211	0.053274	J	0.205	0.09266 *
K	0.037	0.140122	0.045	0.060241	0.074	-0.004372	0.039	-0.017338	K	0.049	0.054333
P1	0	0	0	0	0	0	0	0	P1	0	0
P2	0	0	0	0	0	0	0	0	P2	0	0
P3	0.053	-0.303866 *	0.052	-0.184203 *	0.049	-0.301724 *	0.029	-0.375511 *	P3	0.048	-0.254406 *
P4	0.18	-0.224815 *	0.198	-0.170246 *	0.188	-0.251594 *	0.147	-0.255365 *	P4	0.183	-0.206791 *
P5	0.337	-0.207217 *	0.302	-0.103691 *	0.366	-0.259259 *	0.338	-0.127183 *	P5	0.332	-0.168489 *
P7	0.223	-0.144462 *	0.205	-0.11317 *	0.217	-0.275294 *	0.24	-0.062248	P7	0.218	-0.150661 *
CONSTANT	1	10.337705 *	1	10.258718 *	1	10.622951 *	1	10.283504 *	CONSTANT	1	10.378402 *
SAMPLE SIZE	300		424		309		204		SAMPLE SIZE	1237	
ADJUSTED R-SQUARED	0.72802		0.68821		0.69382		0.67197		ADJUSTED R-SQUARED	0.69065	
F STATISTIC	29.58		34.35		25.93		17.63		F STATISTIC	99.55	

	Q1 1986 FORMER OWNER OCCUPIER			Q2 1986 FORMER OWNER OCCUPIER			Q3 1986 FORMER OWNER OCCUPIER			Q4 1986 FORMER OWNER OCCUPIER			1986 FORMER OWNER OCCUPIER		
	SCOTLAND			SCOTLAND			SCOTLAND			SCOTLAND			SCOTLAND		
	WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF		WEIGHT	COEFF	
SDH	0.255	-0.11458 *	SDH	0.289	-0.136872 *	SDH	0.256	-0.110798 *	SDH	0.244	-0.154388 *	SDH	0.265	-0.126311 *	
TH	0.157	-0.183118 *	TH	0.11	-0.169283 *	TH	0.154	-0.15288 *	TH	0.147	-0.183013 *	TH	0.139	-0.17003 *	
DB	0.14	0.005169	DB	0.111	-0.001761	DB	0.14	0.030109	DB	0.185	-0.030907	DB	0.137	0.008248	
SDB	0.065	-0.11383 *	SDB	0.053	-0.119994 *	SDB	0.07	-0.107229 *	SDB	0.067	-0.118702 *	SDB	0.063	-0.114497 *	
FB	0.209	-0.271262 *	FB	0.206	-0.221207 *	FB	0.165	-0.220519 *	FB	0.162	-0.269576 *	FB	0.188	-0.245173 *	
FC	0.007	-0.254196 *	FC	0.007	-0.06527	FC	0.01	-0.274563 *	FC	0.008	-0.272315 *	FC	0.008	-0.211536 *	
LH	0.002	0	LH	0.001	0.021664	LH	0.001	-0.355588 *	LH	0	0	LH	0.001	-0.191692	
SGAR	0.483	-0.091601 *	SGAR	0.507	-0.049488	SGAR	0.491	-0.072898 *	SGAR	0.512	-0.118995 *	SGAR	0.498	-0.078307 *	
SPACE	0.164	-0.156399 *	SPACE	0.141	-0.103199 *	SPACE	0.17	-0.13959 *	SPACE	0.167	-0.169786 *	SPACE	0.158	-0.138937 *	
NOPARK	0.318	-0.170195 *	NOPARK	0.303	-0.143806 *	NOPARK	0.281	-0.167925 *	NOPARK	0.28	-0.179817 *	NOPARK	0.296	-0.165959 *	
AGE	42.182	-0.00113 *	AGE	41.609	-0.001159 *	AGE	43.226	-0.0005525 *	AGE	44.075	-0.0004058	AGE	42.583	-0.0007721 *	
NOCH	0.222	-0.078458 *	NOCH	0.199	-0.096959 *	NOCH	0.226	-0.099714 *	NOCH	0.216	-0.091926 *	NOCH	0.215	-0.091546 *	
CHP	0.052	-0.065132	CHP	0.068	-0.05193 *	CHP	0.073	-0.081142 *	CHP	0.062	-0.036518	CHP	0.065	-0.061158 *	
SIZE	1038.71	0.00038988 *	SIZE	1081.33	0.00042073 *	SIZE	1073.32	0.00041321 *	SIZE	1107.40	0.00036353 *	SIZE	1073.52	0.00040306 *	
BATH	1.063	0.072062 *	BATH	1.078	0.087602 *	BATH	1.068	0.043666 *	BATH	1.067	0.079682 *	BATH	1.07	0.069248 *	
A	0.014	0.064289	A	0.024	-0.004512	A	0.015	-0.03494	A	0.028	-0.041832	A	0.02	-0.002691	
C	0.079	-0.024703	C	0.071	-0.014167	C	0.078	-0.004735	C	0.082	-0.019894	C	0.076	-0.016629	
D	0.031	-0.043109	D	0.023	-0.071733	D	0.023	-0.115563 *	D	0.018	-0.160551 *	D	0.024	-0.08537 *	
E	0.117	-0.050955	E	0.107	-0.032891	E	0.113	-0.070257 *	E	0.116	-0.073008 *	E	0.112	-0.055627 *	
F	0.047	-0.002843	F	0.037	-0.073271 *	F	0.045	-0.022153	F	0.036	-0.055934	F	0.042	-0.03962 *	
G	0.033	-0.0007495	G	0.046	-0.100439 *	G	0.043	-0.040867	G	0.021	-0.135765	G	0.038	-0.061935 *	
H	0	0	H	0.002	0.026479	H	0.001	0.103767	H	0.003	-0.142771	H	0.002	0.01941	
I	0.035	0.138831 *	I	0.032	0.200109 *	I	0.028	0.160773 *	I	0.028	0.27696 *	I	0.031	0.187423 *	
J	0.194	0.144319 *	J	0.207	0.144192 *	J	0.205	0.104144 *	J	0.257	0.101077 *	J	0.211	0.123219 *	
K	0.051	0.022257	K	0.06	0.090928 *	K	0.065	0.052655	K	0.08	0.046693	K	0.062	0.060421 *	
P1	0.047	0.086602	P1	0.036	-0.035113	P1	0.04	-0.017754	P1	0.033	-0.039618	P1	0.039	-0.008877	
P2	0.791	-0.159597 *	P2	0.791	-0.151548 *	P2	0.81	-0.154925 *	P2	0.799	-0.110133 *	P2	0.798	-0.15092 *	
P3	0	0	P3	0	0	P3	0.003	-0.434264 *	P3	0.003	-0.889916 *	P3	0.001	-0.590447 *	
P4	0.002	-0.459906 *	P4	0.001	-0.432092 *	P4	0	0	P4	0	0	P4	0.001	-0.359706 *	
P5	0.012	-0.069823	P5	0.019	-0.064496	P5	0.015	-0.078123	P5	0.023	0.006116	P5	0.017	-0.049683	
P7	0	0	P7	0.002	-0.312303 *	P7	0	0	P7	0	0	P7	0.001	-0.310718 *	
CONSTANT	1	10.379946 *	CONSTANT	1	10.32295 *	CONSTANT	1	10.405086 *	CONSTANT	1	10.442286 *	CONSTANT	1	10.380763 *	
SAMPLE SIZE	573		SAMPLE SIZE	888		SAMPLE SIZE	800		SAMPLE SIZE	389		SAMPLE SIZE	2650		
ADJUSTED R-SQUARED	0.73584		ADJUSTED R-SQUARED	0.74904		ADJUSTED R-SQUARED	0.72571		ADJUSTED R-SQUARED	0.70071		ADJUSTED R-SQUARED	0.73325		
F STATISTIC	60.01		F STATISTIC	89.25		F STATISTIC	73.9		F STATISTIC	33.44		F STATISTIC	235.89		

	Q1 1986 FORMER OWNER OCCUPIER		Q2 1986 FORMER OWNER OCCUPIER		Q3 1986 FORMER OWNER OCCUPIER		Q4 1986 FORMER OWNER OCCUPIER		1986 FORMER OWNER OCCUPIER		
	NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		NORTHERN IRELAND		
	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	WEIGHT	COEFF	
SDH	0.288	-0.18824 *	0.255	-0.238573 *	0.236	-0.283665 *	0.237	-0.060166	SDH	0.253	-0.222183 *
TH	0.153	-0.401095 *	0.118	-0.330129 *	0.099	-0.502477 *	0.16	-0.298128 *	TH	0.126	-0.406513 *
DB	0.297	0.051487	0.362	-0.042388	0.358	-0.036488	0.254	0.071738	DB	0.331	-0.007239 *
SDB	0.095	-0.203436 *	0.058	-0.214801 *	0.099	-0.272892 *	0.124	-0.107273	SDB	0.088	-0.214759 *
FB	0.005	0.022336	0.01	0.129535	0.006	0.177881	0.03	0.116303	FB	0.011	0.064807
FC	0	0	0	0	0	0	0	0	FC	0	0
LH	0.712	0.065146 *	0.772	0.074802 *	0.725	0.056137 *	0.781	0.108055 *	LH	0.747	0.068652 *
SGAR	0.532	0.015378	0.635	-0.049729	0.617	-0.094003	0.544	0.015942	SGAR	0.594	-0.04586
SPACE	0.189	-0.079717	0.184	-0.157284 *	0.22	-0.142772 *	0.213	-0.081138	SPACE	0.2	-0.133267 *
NOPARK	0.252	-0.095261	0.144	-0.228171 *	0.105	-0.11266	0.213	-0.152593	NOPARK	0.166	-0.177643 *
AGE	27.761	-0.0009428	22.289	-0.001774 *	22.994	-0.0002688	23.882	-0.001835 *	AGE	23.86	-0.001095 *
NOCH	0.18	-0.135841 *	0.118	-0.040379	0.118	-0.157221 *	0.112	-0.195081 *	NOCH	0.13	-0.107828 *
CHP	0.113	-0.045537	0.136	0.002904	0.166	-0.05325	0.213	-0.028858	CHP	0.152	-0.02435
SIZE	1067.01	0.00048082 *	1148.05	0.00055329 *	1163.97	0.00058731 *	1093.77	0.00077270 *	SIZE	1127.61	0.00057380 *
BATH	1.05	0.010305	1.073	0.001066	1.058	-0.009767	1.018	0.242717 *	BATH	1.055	0.012446
CONSTANT	1	9.90347 *	1	9.966697 *	1	10.018175 *	1	9.313096 *	CONSTANT	1	9.915807 *
SAMPLE SIZE	222		381		313		169		SAMPLE SIZE	1085	
ADJUSTED R-SQUARED	0.75375		0.76549		0.74046		0.73705		ADJUSTED R-SQUARED	0.74661	
F STATISTIC	49.32		89.6		64.58		34.64		F STATISTIC	229.15	

**APPENDIX G: STATEMENT OF OPERATING PROCEDURES FOR
COMPUTATION OF NABS STANDARDISED INDEXES**

This Appendix summarises the procedures that have been followed in this project in order to derive the NABS index numbers. These are explained in two parts:

- (1) computation of regional index numbers and
- (2) computation of the subsequent UK index numbers.

1. Computation of Regional Index Numbers

For each of the 13 standard regions we have computed nine sets of indexes covering the following house and buyer categories:

- all houses
- new houses
- modern (post-1970) houses
- older (pre-1971) houses
- 1945-1970 houses
- 1919-1974 houses
- pre-1919 houses
- first-time buyer houses
- former owner-occupier houses

Preliminary action was taken to set up the data base in an appropriate format and to code the variables (these codes are presented in Appendix D). For each of the above sets, with price (expressed in natural logarithms) taken as the dependent variable, a regression is then run each quarter, including in the model as

independent variables only those variables selected according to the criteria set out in Appendix B and which are specified in Appendix D. Having obtained regression results for each of the nine sets, the next stage is to compute the regional numbers.

The above procedure can be summarised as follows:

- (a) cases are selected for inclusion in the analysis on the basis of a number of criteria, as set out in detail in Appendix B. These apply to the following variables:
 - number of reception rooms
 - number of bedrooms
 - number of bathrooms
 - total number of rooms
 - tenure type
 - non-market price cases
 - floor area
- (b) the dependent variable, price, is expressed in natural logarithmic form;
- (c) the independent variables included follow the specifications set out in Appendices B and D (taking care to omit the following dummy variables

in their respective sets: DH, CHF, FFVP, DGAR, B and P6) and;

- (d) regress log price against the independent variables specified in (c) above.

The final step is the derivation of the regional index numbers (I_{t_n}) for each of the nine sets, calculated as the ratio between the exponent of the sum of weighted coefficients for the current period and the exponent of the sum of weighted coefficients for the chosen reference period (expressed as a percentage). That is, calculate:

$$I_{t_n} = \frac{\exp \sum b_{jt_n} Q_{jt_n}}{\exp \sum b_{jt_0} Q_{jt_0}} \times 100$$

where b_{jt_0} and b_{jt_n} denote regression coefficients for the j explanatory variables in the reference period and the current period respectively, and Q_{jt_0} and Q_{jt_n} denote weights - these weights representing the proportions of the qualitative variables and the means of the quantitative variables in the reference and current time periods respectively.

If fixed weights are employed, the denominator in the expression above remains unchanged and thus there is no need to compute it afresh each time. On the other hand, if a non-fixed set of characteristics weights are to be used, but a fixed reference period is to be retained for expressing the index (that is, reference date

equals 100), then the results of successive calculations using the formula above will need to be *chained* to the earlier series in order to maintain the chosen reference date.

2. Computation of the UK Index Numbers

The computation procedure to derive the UK index numbers is simply to take a weighted average of the regional index numbers. The Society will need to decide which is the most appropriate set of regional weights for this purpose. We have discussed this in detail in Section 3.2.2 and have examined the results using alternative regional weights in Section 4.2

Given the alternatives available, our preference is the use of weights derived from the DOE 5% sample survey of all building societies. But, as explained earlier, their use would demand the alteration of the age groups used for classifying non-new house purchase transactions by NABS.

APPENDIX H: NABS TAPE FILE RECORD LAYOUT

Field	Record	Description	Code
1 - 3	District Council Code (County Borough for Northern Ireland)	3 digit code: South West West Midlands Outer South East Outer Metropolitan East Anglia East Midlands Yorks & Humberside North West Northern Wales Scotland Northern Ireland	201-247 250-285 290-334 340-392 400-419 420-459 460-485 490-526 530-559 601-637 640-696 701-707
4 - 9	Grid Reference	1 or 2 letters and 4 digits	
10 - 11	Decision Month	01 - 12	
12 - 13	Decision Year	Last 2 digits of year	
14 - 15	Approval Month	01 - 12	
16 - 17	Approval Year	Last 2 digits of year	
18 - 19	Completion Month	01 - 12	
20 - 21	Completion Year	Last 2 digits of year	
22	House Type	Detached house Semi-detached house Terraced house Detached bungalow Semi-detached bungalow Flat or maisonette (built) Flat or maisonette (converted)	1 2 3 4 5 6 7
23	New Property	Y or N	
24	Instalment-AC	Y or N	
25	Instalment class	1 digit	1, 2 or 3

Field	Record	Description	Code
26	Tenure	Freehold with vacant possession	1
		Feuhold with vacant possession	2
		Leasehold	3
		Freehold not vacant possession	4
		Feuhold not vacant possession	5
		Part freehold part feuhold	6
27	Previous Accommodation	Owner-occupied	1
		Rented (private)	2
		Rented (council)	3
		Housing Society	4
		Provided by employer	5
		With parents/relatives	6
		Other	7
28	Garage	Single garage	1
		Double garage	2
		Parking space	3
		None	4
29	Central Heating	None	0
		Full - gas	1
		Full - electric	2
		Full - oil	3
		Full - solid fuel	4
		Part - gas	5
		Part - electric	6
		Part - oil	7
Part - solid fuel	8		
30 - 31	Reception rooms	Number of rooms (00 - 99)	
32 - 33	Bedrooms	Number of rooms (00 - 99)	
34	Bathrooms	Number of rooms (0 - 9)	
35	Borrower Type	Partly occupied	N
		Wholly occupied	O
		Community leasehold	P
36 - 41	Price	Selling price to nearest £ 7 digits including leading zeros eg 050575 = £50,575	

Field	Record	Description	Code
42 - 43	Market or non-market price sale	Market price	00
		Sitting tenant	01
		Council tenant	02
		Inter family sale	03
		Divorce settlement	04
		Direct labour (self build)	05
		Land already owned	06
		Connection with building firm	07
		Valuation allows for improvements	08
		Property already owned (not a house sale)	09
		Other	10
		Community leasehold	11
		Surveyors' rounding	12
		Cost sale	13
Housing Society sale	14		
44 - 47	Property area (superficial floor area)	4 digits (0000 - 9999)	
48	Type of area measurement	Square ft	1
		Square m	2
		Not given	0
49 - 54	Site area (new properties only)	6 digits (000000 - 999999)	
55	Type of site area measurement	Not given	0
		Square ft	1
		Square yd	2
		Square m	3
56 - 59	Construction date	Year (4 digits)	
60 - 65	Site valuation (new properties only)	Value in £ (6 digits including leading zeros)	
66 - 71	Valuation of dwelling	As for 60 - 65	
72	Filler		
73	Marital status	Married	M
		Single/divorced	S
74	Sex (first named buyer)	Male	M
		Female	F
75 - 76	Age (first named buyer)	2 digits	
77 - 78	Age (second named buyer)	2 digits	
79 - 82	Income (gross weekly of first buyer)	Amount in £ (4 digits)	
83 - 86	Income (gross weekly of second buyer)	As for 79 - 82	
87	Joint income	Y or N	

Field	Record	Description	Code												
88 - 89	Term of years	2 digits (05 - 35)													
90 - 93	Monthly repayment	Amount in £ (4 digits)													
94 - 96	Rates - monthly repayment	3 digits													
97 - 101	Interest rate (percentage)	5 digits (12250 = 12.250%)													
102	Mortgage type	Repayment	1												
		Full endowment	2												
		Low cost endowment	3												
		Part and part	4												
		Other	5												
103	Option	Y or N													
104	Filler														
105	SMA (Scheme for Maximum Advance)	Y or N													
106 - 109	SMA Rate	4 digits													
110	MGS insurance scheme	Y or N													
111 - 113	MGS premium	3 digits													
114 - 116	Endowment premium	3 digits													
117 - 122	Endowment advance	6 digits													
123 - 127	Children (Accumulate the total number of children categorised by age bands)	<table border="1"> <thead> <tr> <th>Field</th> <th>Age Band</th> </tr> </thead> <tbody> <tr> <td>123</td> <td>0 to 5</td> </tr> <tr> <td>124</td> <td>6 to 10</td> </tr> <tr> <td>125</td> <td>11 to 15</td> </tr> <tr> <td>126</td> <td>16 to 20</td> </tr> <tr> <td>127</td> <td>21+</td> </tr> </tbody> </table>	Field	Age Band	123	0 to 5	124	6 to 10	125	11 to 15	126	16 to 20	127	21+	
Field	Age Band														
123	0 to 5														
124	6 to 10														
125	11 to 15														
126	16 to 20														
127	21+														
128	Filler														
129 - 131	Occupation code	3 digits													
132 - 134	Shared ownership percentage	3 digits													
135	Questionnaire present	1 digit													
136 - 144	Not used														
145 - 146	Previous length of occupation	Number of years													
147	Previous distance moved	Not recorded	0												
		Up to 5 miles	1												
		6 - 10 miles	2												
		11 - 25 miles	3												
		26 - 50 miles	4												
		51 - 100 miles	5												
		Over 100 miles	6												

Field	Record	Description	Code
148 - 182	Not used		
183	Council house purchase	0 or 1	
184	HPA member	0 or 1	
185	HPA scheme	0 or 1	
186 - 187	Filler		
188 - 193	Deposit	Amount in £ (6 digits)	
194 - 197	Household income (weekly)	Amount in £ (4 digits)	
198 - 199	Total number of rooms	00 - 99	
200 - 201	Not used		
202 - 203	Total number of children	2 digits	
204 - 207	Total outgoings	3 digits	
208 - 213	Basic advance	Amount in £ (6 digits)	
214 - 219	Total advance	Amount in £ (6 digits)	
220 - 222	Percentage of price advanced	eg 045 = 45.0%	
223	Family cycle	0 - 6	
224	Family type	Not recorded	0
		Single	1
		Single + children	2
		Married no children	3
		Married 1 child	4
		Married 2 children	5
		Married 3 children	6
		Married 3< children	7
225 - 227	Filler		
228 - 235	Post Code	8 fields occupied, including blanks in variable positions. eg SM3_9NJ_ E8_IPA__ CW12_3LU	
<i>Records appended to NABS tape</i>			
236 - 238	Acorn Code	1 letter followed by 2 digits eg B04, C11	
239-240	Parliamentary constituency Code	2 digits	

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FINAL REPORT

**THE NEW NATIONWIDE ANGLIA MIX-ADJUSTED
HOUSE PRICE SYSTEM**

Quarterly Series for the Period 1983(Q1)-1989(Q1)

by

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Report submitted to

NATIONWIDE ANGLIA BUILDING SOCIETY

April 1989

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APPENDIX F Mixed-Adjusted House Prices 1983 Q1 - 1989 Q1	50

FINAL REPORT

THE NEW NATIONWIDE ANGLIA MIX-ADJUSTED HOUSE PRICE SYSTEM

Quarterly Series for the Period 1983(Q1)-1989(Q1)

1. INTRODUCTION

This report presents the final results of the new Nationwide Anglia Mix-Adjusted House Price System covering the period 1983(Q1)-1989(Q1). It follows two earlier reports submitted to the Society (for internal consumption) which have provided a detailed account of the methodology behind the new house price system and preliminary results for the period 1986(Q1)-1987(Q4). These reports are:

- **Analysis of House Price Movements:**
A study of NABS data incorporating house and neighbourhood location characteristics (submitted January 1988).

- **Analysis of House Price Movements:**
A Supplement (submitted April 1988).

In addition, we have prepared two Special Bulletins to be published and circulated by the Society. These provide a layman's guide and a technical guide to the new house price system, suitable for general consumption. These are entitled:

- **The New Nationwide Anglia House Price Index:**
A Layman's Guide

- **The New Nationwide Anglia House Price Index:
A Technical Guide**

In this, the Final Report, we cover the following matters:

- the operational steps behind the final mix-adjusted house price series for the regions and the UK.
- full sets of quarterly results for mix-adjusted index numbers for each region and for the UK as a whole covering the period 1983(Q1)-1989(Q1), for the following six house and buyer groupings:
 - All Houses
 - New Houses
 - Modern (Post-1944) Houses
 - Older (Pre-1945) Houses
 - Houses bought by First-Time Buyers
 - Houses bought by Former Owner-Occupiers
- full sets of equivalent quarterly results, again for each region and the UK as a whole, for the mix-adjusted house prices.

2. COMPUTATION OF THE NEW SERIES

In this section we explain the procedures followed for the computation of:

- mix-adjusted Index Series for
 - (a) each of the 13 regions
 - (b) the UK as a whole

- mix-adjusted House Prices for
 - (a) each of the 13 regions
 - (b) the UK as a whole

2.1 Mix-Adjusted Index Series - Regions

The methodology used to derive the regional mix-adjusted index series was described in full in the first interim report, named above, submitted to the Society in January 1988. The procedure may be summarised in five steps as follows:

- Step 1** With house prices expressed in natural logarithms, regression coefficients (b_j) are computed for the j explanatory variables (physical and locational characteristics). This procedure is carried out for every quarterly time period for each of the six groupings across each region (to generate b_{jt}).
- Step 2** Weights for the j explanatory variables are calculated for each time period (W_{jt}). These weights correspond to the proportions of the qualitative variables (e.g. house type), and the arithmetic means of the quantitative variables (e.g. floor area).

It will be appreciated that it is not feasible to reproduce the full sets of these regression coefficients and corresponding weights in this report. This would involve some 1,950 tables (13 regions x 6 groupings x 25 time periods)! For the Society's convenience, therefore, all of these results are attached separately on floppy disks. However, for the sake of illustration, we attach as Appendix A to this report a specimen copy of the results for All Houses for one time period (Q1 1986) for each of the 13 regions only. This shows the following:

Column 1.	Variable Labels
Column 2.	Variable Weights
Column 3.	Variable Regression Coefficients
Column 4.	Significance Values for the Regression Coefficients
Column 5.	Asterisks (*) to denote significance at the 5 per cent level.

In addition, definitions of the variable labels (as shown in Column 1) are attached as Appendix B.

Step 3 Again for each region and for each of the six groupings, the average weight for each of the explanatory regression variables is computed over the 24 time periods from 1983 Q1 to 1988 Q4. This determines \bar{W}_j for each of the explanatory variables and describes the concept of a 'rolling average weight' to represent the pattern of house and locational variables employed in the new system.

The full set of resultant variable weights (\bar{W}_j for each variable) for the six house and buyer groupings are presented in Appendix C (Tables C1 to C6).

Step 4 For each quarterly time period, the sum of weighted regression coefficients is computed for each region (and for each grouping) as follows:

$$\Sigma b_{jtn} \bar{W}_j$$

Step 5 A price index for the current time period (I_{tn}) is then calculated as the ratio between $exp \sum b_{jtn} \bar{W}_j$ and the same expression for a chosen reference period ($exp \sum b_{jto} \bar{W}_j$); that is:

$$I_{tn} = \frac{exp \sum b_{jtn} \bar{W}_j}{exp \sum b_{jto} \bar{W}_j} \times 100$$

where 'exp' denotes 'exponent'

This procedure is carried out for each of the regions across the six groupings to derive corresponding sets of index numbers. The reference period chosen for the new system is 1983 Q1.

Full sets of index numbers for the quarterly time periods from 1983 Q1 to 1989 Q1 are presented in six tables in Appendix D, as follows:

Table D1	Mix-Adjusted Index Numbers - All Houses
Table D2	Mix-Adjusted Index Numbers - New Houses
Table D3	Mix-Adjusted Index Numbers - Modern Houses
Table D4	Mix-Adjusted Index Numbers - Older Houses
Table D5	Mix-Adjusted Index Numbers - First Time Buyers
Table D6	Mix-Adjusted Index Numbers - Former Owner-Occupiers

2.2 Mix-Adjusted Index Series - UK

The UK index numbers for each time period are readily computed as weighted averages of the corresponding 13 regional indexes for each of the six house and buyer groupings. For this purpose, a set of regional weights must be employed which represent the pattern of housing transactions across the whole of the UK. The regional pattern of transactions financed by any single building society may not necessarily be representative of all house-purchase transactions. To overcome this potential shortcoming, therefore,

the new system employs a set of regional weights based on the pattern of all building society mortgage transactions, as revealed in the official Department of Environment Five Per Cent Sample Survey of building society mortgages.

Because the NABS regional series includes a sub-division of the South East region into Outer South East and Outer Metropolitan, it is necessary to subdivide the official DOE weight for this region accordingly (again, for each of the six groups). For this purpose, the weight is subdivided in the proportions obtained from the numbers of NABS transactions over the six-year period 1983-88 for these two sub-regions. These data on NABS transactions are given in Appendix E.

It should also be noted that we take the DOE weights for the two categories of non-new houses - 'pre 1940' and 'post 1939' - as corresponding to the NABS categories: 'Older - pre 1945' and 'Modern - post 1944'.

The final regional weights correspond to the regional pattern over a rolling period of six years (from 1983 to 1988), based on the annual totals as provided by the DOE.

The six sets of final regional weights (corresponding to the six house and buyer groupings) are also presented in Appendix E. For the Society's future reference (in order to carry the rolling period forward in time), we also present in this Appendix the 'raw' regional lending data supplied by the DOE which has formed the basis for these final weights.

The resultant UK index series, for the six groupings, are reported in the final columns of Table D1 to Table D6 (Appendix D).

2.3 Mix-Adjusted House Prices - Regions

In addition to the series of mix-adjusted index numbers for each region reported in section 2.1 above, corresponding mix-adjusted house prices have also been generated. These are derived directly by moving the sample average house price for each region in the chosen reference period forward by the corresponding index series. As noted earlier, the chosen reference period is Q1 1983. This procedure is conducted for each of the six groupings to provide 78 sets of mix-adjusted regional house prices (13 regions x 6 groupings). These are reported in Appendix F as follows:

Table F1	Mix-Adjusted House Prices - All Houses
Table F2	Mix-Adjusted House Prices - New Houses
Table F3	Mix-Adjusted House Prices - Modern Houses
Table F4	Mix-Adjusted House Prices - Older Houses
Table F5	Mix-Adjusted House Prices - First Time Buyers
Table F6	Mix-Adjusted House Prices - Former Owner-Occupiers

It will be appreciated that the prices shown in the first row of each of these tables - that is, corresponding to Q1 1983 - represent the chosen reference average prices.

2.4 Mix-Adjusted House Prices - UK

The UK mix-adjusted house prices are simply computed as weighted averages of the corresponding regional mix-adjusted prices, again for each house and buyer grouping. The regional weights are those used above to compute the UK index numbers, derived from the DOE Five Per Cent Sample Survey data - see Appendix E.

The six sets of UK mix-adjusted prices for the full time period are also reported as the final columns in Tables F1 to F6 (Appendix F).

3. GENERATION OF FUTURE MIX-ADJUSTED SERIES

Continuation of the mix-adjusted series (both index numbers and prices) over future time periods requires a decision to be taken with regard to the time span of the rolling weights with regard to both the mix of the explanatory variables used in the regression analyses and the regional pattern of lending to obtain the UK series.

As reported above, in both cases we have taken a period of six years (24 quarters in the case of regression variables and six annual periods in the case of the DOE regional weights). We make the following recommendations to the Society for consideration:

- With regard to the calculation of \bar{W}_j (that is, the average weight of each of the physical and locational characteristics), we would suggest that revision be carried out annually, rather than quarterly.
- With regard to the regional weights, using of data supplied by the DOE, we would again suggest that revision be carried out annually.

In both cases, it is considered that an annual revision exercise will be much more convenient. This is especially so in the case of the regional weights because of the inevitable time lags before the DOE data become available. With regard to the characteristics-weights, although these are internal to the Society and are thus readily available, it would seem desirable to maintain consistency across the two systems of weights in terms of the timing of revisions and of the periods covered.

APPENDIX A

**SPECIMEN REGRESSION RESULTS FOR
ALL HOUSES 1986 Q1 - ALL REGIONS**

APPENDIX A1

Specimen Regression Results for 1986 Q1: ALL HOUSES
Northern Region

Variable	Mean	Coefficient	Significance
SDH	0.359	-0.24181	0.0000 *
TH	0.361	-0.44434	0.0000 *
DB	0.044	0.16409	0.0158 *
SDB	0.061	-0.16072	0.0127 *
FB	0.034	-0.56584	0.0000 *
FC	0.005	-0.13827	0.4642
LH	0.165	0.02361	0.5407
DGAR	0.514	-0.12519	0.0307 *
SPACE	0.123	-0.18852	0.0070 *
NOPARK	0.297	-0.25729	0.0002 *
AGE	46.840	-0.00163	0.0003 *
NOCH	0.229	-0.14022	0.0000 *
CHP	0.147	-0.04119	0.2591
SIZE	1032.364	0.00044	0.0000 *
BATH	1.042	-0.02177	0.6714
A	0.015	-0.15779	0.1749
C	0.221	-0.02037	0.5954
D	0.052	-0.08586	0.1768
E	0.064	-0.09255	0.0864
F	0.084	-0.09201	0.0658
G	0.022	-0.18026	0.0362 *
H	0.005	-0.53597	0.0025 *
I	0.027	0.03768	0.6537
J	0.162	0.13041	0.0011 *
K	0.022	0.12715	0.1489
P1	0.000	0.00000	
P2	0.002	0.26704	0.3190
P3	0.138	-0.06847	0.1614
P4	0.469	-0.09074	0.0226 *
P5	0.145	-0.13631	0.0023 *
P7	0.071	0.19204	0.0010 *
Constant	1.000	10.33722	0.0000 *

Sample Size	407
Adjusted R ²	0.7582
F Statistic	43.4443

APPENDIX A2

Specimen Regression Results for 1986 Q1: ALL HOUSES
Yorks & Humberside Region

Variable	Mean	Coefficient	Significance
SDH	0.297	-0.22631	0.0000 *
TH	0.397	-0.39508	0.0000 *
DB	0.066	0.03412	0.3285
SDB	0.039	-0.14579	0.0012 *
FB	0.022	-0.28777	0.0000 *
FC	0.000	0.00000	
LH	0.118	0.05534	0.0359 *
DGAR	0.458	-0.18212	0.0001 *
SPACE	0.141	-0.25719	0.0000 *
NOPARK	0.367	-0.28679	0.0000 *
AGE	45.076	-0.00158	0.0000 *
NOCH	0.360	-0.10609	0.0000 *
CHP	0.061	-0.07439	0.0225 *
SIZE	919.327	0.00052	0.0000 *
BATH	1.036	0.06875	0.1247
A	0.020	0.18897	0.0010 *
C	0.255	0.00985	0.6608
D	0.071	-0.04910	0.1664
E	0.044	-0.03610	0.3553
F	0.038	-0.11870	0.0050 *
G	0.018	-0.17355	0.0034 *
H	0.033	-0.22865	0.0000 *
I	0.014	0.14377	0.0295 *
J	0.130	0.11920	0.0000 *
K	0.028	0.19143	0.0001 *
P1	0.000	0.00000	
P2	0.000	0.00000	
P3	0.103	-0.06102	0.0455 *
P4	0.345	-0.09177	0.0000 *
P5	0.113	-0.03205	0.2443
P7	0.164	-0.03236	0.2099
Constant	1.000	10.11388	0.0000 *

Sample Size	899
Adjusted R ²	0.7664
F Statistic	106.1914

APPENDIX A3

Specimen Regression Results for 1986 Q1: ALL HOUSES
North West Region

Variable	Mean	Coefficient	Significance
SDH	0.371	-0.26770	0.0000 *
TH	0.335	-0.47155	0.0000 *
DB	0.054	0.03112	0.2701
SDB	0.043	-0.24994	0.0000 *
FB	0.028	-0.38907	0.0000 *
FC	0.006	-0.35177	0.0000 *
LH	0.398	-0.00746	0.5362
DGAR	0.396	-0.10320	0.0004 *
SPACE	0.155	-0.14434	0.0000 *
NOPARK	0.398	-0.25979	0.0000 *
AGE	46.647	-0.00029	0.1593
NOCH	0.316	-0.13876	0.0000 *
CHP	0.053	-0.04687	0.0643
SIZE	948.026	0.00048	0.0000 *
BATH	1.049	0.15807	0.0000 *
A	0.008	0.22145	0.0004 *
C	0.204	-0.02159	0.1996
D	0.079	-0.14092	0.0000 *
E	0.047	-0.08743	0.0013 *
F	0.043	-0.08957	0.0019 *
G	0.023	-0.03104	0.4125
H	0.018	-0.19530	0.0000 *
I	0.028	0.00634	0.8569
J	0.171	0.07773	0.0000 *
K	0.024	0.04798	0.2091
P1	0.000	0.00000	
P2	0.000	0.00000	
P3	0.152	-0.13121	0.0000 *
P4	0.166	-0.11026	0.0000 *
P5	0.239	-0.07968	0.0000 *
P7	0.092	-0.05097	0.0188 *
Constant	1.000	10.10044	0.0000 *

Sample Size	1476
Adjusted R ²	0.7990
F Statistic	203.1450

APPENDIX A4
 Specimen Regression Results for 1986 Q1: ALL HOUSES
 East Midlands Region

Variable	Mean	Coefficient	Significance
SDH	0.368	-0.21194	0.0000 *
TH	0.290	-0.38438	0.0000 *
DB	0.070	0.03713	0.1887
SDB	0.022	-0.17006	0.0002 *
FB	0.012	-0.13750	0.0804
FC	0.002	0.30370	0.0747
LH	0.030	-0.13024	0.0101 *
DGAR	0.458	-0.17785	0.0000 *
SPACE	0.162	-0.28300	0.0000 *
NOPARK	0.312	-0.38296	0.0000 *
AGE	41.761	0.00037	0.0397 *
NOCH	0.186	-0.10823	0.0000 *
CHP	0.079	-0.07650	0.0013 *
SIZE	960.001	0.00047	0.0000 *
BATH	1.054	0.08021	0.0097 *
A	0.027	-0.03029	0.4748
C	0.246	-0.02407	0.1950
D	0.045	-0.15881	0.0000 *
E	0.085	-0.03770	0.1288
F	0.042	-0.02481	0.4661
G	0.008	-0.06995	0.3218
H	0.023	-0.02794	0.5453
I	0.019	0.01843	0.7038
J	0.112	0.11114	0.0000 *
K	0.018	-0.00271	0.9559
P1	0.000	0.00000	
P2	0.000	0.00000	
P3	0.093	-0.13165	0.0000 *
P4	0.239	-0.13872	0.0000 *
P5	0.326	-0.00439	0.8140
P7	0.119	-0.13786	0.0000 *
Constant	1.000	10.19065	0.0000 *

Sample Size	1299
Adjusted R ²	0.7353
F Statistic	125.3396

APPENDIX A5

Specimen Regression Results for 1986 Q1: ALL HOUSES
West Midlands Region

Variable	Mean	Coefficient	Significance
SDH	0.374	-0.28572	0.0000 *
TH	0.250	-0.42474	0.0000 *
DB	0.027	0.07163	0.0543
SDB	0.013	-0.19968	0.0001 *
FB	0.054	-0.42270	0.0000 *
FC	0.009	-0.15114	0.0276 *
LH	0.226	-0.02221	0.1778
DGAR	0.555	-0.12127	0.0000 *
SPACE	0.119	-0.18263	0.0000 *
NOPARK	0.254	-0.23179	0.0000 *
AGE	35.741	-0.00012	0.5253
NOCH	0.271	-0.11655	0.0000 *
CHP	0.082	-0.06272	0.0044 *
SIZE	932.018	0.00050	0.0000 *
BATH	1.058	0.09933	0.0005 *
A	0.016	0.02610	0.5861
C	0.163	0.01257	0.4929
D	0.045	-0.10180	0.0009 *
E	0.060	-0.01869	0.4655
F	0.045	-0.04215	0.1519
G	0.015	-0.07099	0.1428
H	0.044	-0.17101	0.0000 *
I	0.013	0.00050	0.9923
J	0.144	0.14719	0.0000 *
K	0.014	0.06956	0.1735
P1	0.000	0.00000	
P2	0.000	0.00000	
P3	0.111	-0.09209	0.0001 *
P4	0.121	-0.16956	0.0000 *
P5	0.310	-0.05803	0.0001 *
P7	0.107	0.02279	0.2955
Constant	1.000	10.11448	0.0000 *

Sample Size 1509
Adjusted R² 0.7617
F Statistic 167.2483

APPENDIX A6
 Specimen Regression Results for 1986 Q1: ALL HOUSES
 East Anglia Region

Variable	Mean	Coefficient	Significance
SDH	0.238	-0.20440	0.0000 *
TH	0.258	-0.27226	0.0000 *
DB	0.088	-0.01581	0.6074
SDB	0.053	-0.14006	0.0004 *
FB	0.038	-0.21813	0.0077 *
FC	0.006	-0.40127	0.0014 *
LH	0.047	-0.03341	0.6373
DGAR	0.570	-0.08819	0.0049 *
SPACE	0.132	-0.16395	0.0000 *
NOPARK	0.202	-0.17890	0.0000 *
AGE	34.526	0.00016	0.4561
NOCH	0.199	-0.16716	0.0000 *
CHP	0.112	-0.11685	0.0000 *
SIZE	970.995	0.00043	0.0000 *
BATH	1.079	0.07780	0.0082 *
A	0.061	0.01025	0.7707
C	0.240	-0.03818	0.0855
D	0.049	-0.12510	0.0026 *
E	0.043	0.00968	0.8073
F	0.013	-0.02207	0.7539
G	0.006	-0.05183	0.6134
H	0.001	-0.60393	0.0034 *
I	0.015	0.21025	0.0018 *
J	0.119	0.08919	0.0012 *
K	0.035	0.02846	0.5308
P1	0.000	0.00000	
P2	0.000	0.00000	
P3	0.000	0.00000	
P4	0.123	-0.13049	0.0000 *
P5	0.141	-0.09608	0.0002 *
P7	0.444	-0.11801	0.0000 *
Constant	1.000	10.35398	0.0000 *

Sample Size	717
Adjusted R ²	0.7343
F Statistic	71.6654

APPENDIX A7

Specimen Regression Results for 1986 Q1: ALL HOUSES
Outer SE Region

Variable	Mean	Coefficient	Significance
SDH	0.260	-0.22396	0.0000 *
TH	0.348	-0.30888	0.0000 *
DB	0.049	-0.03144	0.0662
SDB	0.019	-0.16148	0.0000 *
FB	0.093	-0.27970	0.0000 *
FC	0.038	-0.38036	0.0000 *
LH	0.139	-0.09273	0.0001 *
DGAR	0.496	-0.16340	0.0000 *
SPACE	0.110	-0.23626	0.0000 *
NOPARK	0.340	-0.24695	0.0000 *
AGE	37.928	0.00034	0.0003 *
NOCH	0.234	-0.10182	0.0000 *
CHP	0.105	-0.06112	0.0000 *
SIZE	901.336	0.00037	0.0000 *
BATH	1.049	0.10231	0.0000 *
A	0.009	0.08550	0.0163 *
C	0.193	-0.05677	0.0000 *
D	0.026	-0.14195	0.0000 *
E	0.085	-0.01998	0.1097
F	0.018	-0.06375	0.0118 *
G	0.002	0.06628	0.3607
H	0.004	-0.30238	0.0000 *
I	0.037	0.00853	0.6592
J	0.132	0.05700	0.0000 *
K	0.071	0.00051	0.9728
P1	0.001	0.31732	0.0005 *
P2	0.000	0.00000	
P3	0.001	0.18780	0.0362 *
P4	0.011	-0.18104	0.0000 *
P5	0.368	-0.03498	0.0000 *
P7	0.216	-0.08603	0.0000 *
Constant	1.000	10.62045	0.0000 *

Sample Size	2942
Adjusted R ²	0.7546
F Statistic	302.5130

APPENDIX A8

Specimen Regression Results for 1986 Q1: ALL HOUSES
Outer Metropolitan Region

Variable	Mean	Coefficient	Significance
SDH	0.251	-0.24219	0.0000 *
TH	0.339	-0.33090	0.0000 *
DB	0.029	0.00819	0.6284
SDB	0.016	-0.20567	0.0000 *
FB	0.162	-0.35840	0.0000 *
FC	0.040	-0.43737	0.0000 *
LH	0.207	-0.00700	0.7357
DGAR	0.456	-0.13304	0.0000 *
SPACE	0.103	-0.18749	0.0000 *
NOPARK	0.392	-0.19891	0.0000 *
AGE	34.880	0.00023	0.0068 *
NOCH	0.181	-0.08566	0.0000 *
CHP	0.117	-0.02650	0.0016 *
SIZE	854.736	0.00042	0.0000 *
BATH	1.047	0.08093	0.0000 *
A	0.004	0.03375	0.4384
C	0.132	0.00406	0.6423
D	0.028	-0.09376	0.0000 *
E	0.104	-0.01411	0.1225
F	0.015	-0.03144	0.1435
G	0.005	-0.20105	0.0000 *
H	0.029	-0.05469	0.0019 *
I	0.031	0.01721	0.2823
J	0.177	0.10830	0.0000 *
K	0.027	0.04531	0.0065 *
P1	0.001	0.24059	0.0063 *
P2	0.000	0.00000	
P3	0.048	-0.09177	0.0000 *
P4	0.005	-0.24829	0.0000 *
P5	0.381	-0.09205	0.0000 *
P7	0.027	-0.27466	0.0000 *
Constant	1.000	10.77144	0.0000 *

Sample Size	4402
Adjusted R ²	0.7750
F Statistic	506.3094

APPENDIX A9
 Specimen Regression Results for 1986 Q1: ALL HOUSES
 Greater London Region

Variable	Mean	Coefficient	Significance
SDH	0.174	-0.22686	0.0000 *
TH	0.308	-0.31028	0.0000 *
DB	0.008	-0.05948	0.1501
SDB	0.006	-0.15335	0.0010 *
FB	0.268	-0.35817	0.0000 *
FC	0.202	-0.38511	0.0000 *
LH	0.481	-0.03633	0.1161
DGAR	0.244	-0.01315	0.6567
SPACE	0.062	-0.03202	0.3185
NOFARK	0.682	-0.07472	0.0123 *
AGE	60.722	-0.00010	0.4251
NOCH	0.272	-0.10580	0.0000 *
CHP	0.063	-0.07365	0.0000 *
SIZE	815.173	0.00050	0.0000 *
BATH	1.019	0.13328	0.0000 *
A	0.000	0.00000	
C	0.061	-0.05315	0.0005 *
D	0.038	-0.08364	0.0000 *
E	0.046	-0.07129	0.0000 *
F	0.032	-0.07692	0.0001 *
G	0.027	-0.02267	0.2944
H	0.185	-0.07084	0.0000 *
I	0.160	0.06303	0.0000 *
J	0.197	0.02437	0.0198 *
K	0.066	0.01601	0.2915
P1	0.150	0.11121	0.0000 *
P2	0.000	0.00000	
P3	0.114	-0.07690	0.0000 *
P4	0.031	-0.06042	0.0015 *
P5	0.084	-0.05909	0.0000 *
P7	0.001	-0.47680	0.0010 *
Constant	1.000	10.67375	0.0000 *

Sample Size	3997
Adjusted R ²	0.6485
F Statistic	255.2513

APPENDIX A10

Specimen Regression Results for 1986 Q1: ALL HOUSES
South West Region

Variable	Mean	Coefficient	Significance
SDH	0.253	-0.20448	0.0000 *
TH	0.319	-0.30312	0.0000 *
DB	0.074	-0.03243	0.0837
SDB	0.020	-0.18233	0.0000 *
FB	0.057	-0.26242	0.0000 *
FC	0.042	-0.30114	0.0000 *
LH	0.109	-0.05002	0.0985
DGAR	0.535	-0.07958	0.0006 *
SPACE	0.132	-0.12339	0.0000 *
NOPARK	0.290	-0.17751	0.0000 *
AGE	41.623	0.00008	0.4591
NOCH	0.304	-0.12270	0.0000 *
CHP	0.124	-0.07934	0.0000 *
SIZE	932.209	0.00039	0.0000 *
BATH	1.063	0.14729	0.0000 *
A	0.040	0.00929	0.6890
C	0.237	-0.03574	0.0058 *
D	0.011	-0.22130	0.0000 *
E	0.066	-0.01490	0.4233
F	0.019	-0.06234	0.0489 *
G	0.004	-0.05949	0.3868
H	0.003	-0.23700	0.0037 *
I	0.040	0.01845	0.4857
J	0.137	0.06394	0.0000 *
K	0.067	0.10309	0.0000 *
P1	0.018	0.14717	0.0001 *
P2	0.000	0.00000	
P3	0.001	-0.55911	0.0021 *
P4	0.053	-0.15295	0.0000 *
P5	0.116	-0.02760	0.0685
P7	0.518	-0.00181	0.8707
Constant	1.000	10.31376	0.0000 *

Sample Size

1820

Adjusted R²

0.7510

F Statistic

183.8485

APPENDIX A11
 Specimen Regression Results for 1986 Q1: ALL HOUSES
 Wales Region

Variable	Mean	Coefficient	Significance
SDH	0.300	-0.22577	0.0000 *
TH	0.360	-0.36292	0.0000 *
DB	0.059	-0.03474	0.3811
SDB	0.026	-0.19160	0.0006 *
FB	0.043	-0.22804	0.0000 *
FC	0.004	-0.37764	0.0089 *
LH	0.179	0.03152	0.1969
DGAR	0.387	-0.15447	0.0011 *
SPACE	0.193	-0.23650	0.0000 *
NOPARK	0.385	-0.27401	0.0000 *
AGE	46.147	-0.00152	0.0000 *
NOCH	0.250	-0.11212	0.0000 *
CHP	0.061	-0.03697	0.2915
SIZE	971.437	0.00047	0.0000 *
BATH	1.028	0.04943	0.2932
A	0.026	0.02031	0.7129
C	0.215	0.01908	0.4719
D	0.088	-0.01961	0.5784
E	0.079	-0.02010	0.5505
F	0.036	-0.07624	0.0926
G	0.009	-0.05797	0.5019
H	0.001	0.08161	0.7313
I	0.030	0.05666	0.2566
J	0.121	0.14364	0.0000 *
K	0.022	0.16326	0.0060 *
P1	0.000	0.00000	
P2	0.000	0.00000	
P3	0.032	-0.20286	0.0001 *
P4	0.171	-0.14267	0.0000 *
P5	0.199	-0.14153	0.0000 *
P7	0.164	-0.11008	0.0001 *
Constant	1.000	10.25181	0.0000 *

Sample Size	853
Adjusted R ²	0.6805
F Statistic	63.5595

APPENDIX A12

Specimen Regression Results for 1986 Q1: ALL HOUSES
Scotland Region

Variable	Mean	Coefficient	Significance
SDH	0.191	-0.08223	0.0000 *
TH	0.148	-0.18184	0.0000 *
DB	0.083	0.01709	0.4384
SDB	0.049	-0.08119	0.0025 *
FB	0.404	-0.26401	0.0000 *
FC	0.008	-0.24012	0.0000 *
LH	0.000	0.00000	
DGAR	0.308	-0.06802	0.0525
SPACE	0.166	-0.13485	0.0002 *
NOPARK	0.504	-0.14809	0.0001 *
AGE	45.826	-0.00132	0.0000 *
NOCH	0.352	-0.10422	0.0000 *
CHP	0.061	-0.09674	0.0000 *
SIZE	866.067	0.00046	0.0000 *
BATH	1.035	0.08169	0.0007 *
A	0.013	-0.08667	0.0448 *
C	0.078	-0.03956	0.0484 *
D	0.051	-0.01819	0.4613
E	0.107	-0.01981	0.2667
F	0.052	-0.03440	0.1414
G	0.046	-0.01386	0.5696
H	0.002	0.22138	0.0246 *
I	0.030	0.20611	0.0000 *
J	0.101	0.16399	0.0000 *
K	0.089	0.09028	0.0000 *
P1	0.039	0.07476	0.0089 *
P2	0.634	-0.13006	0.0000 *
P3	0.001	-0.23343	0.0934
P4	0.001	-0.33332	0.0882
P5	0.011	-0.12485	0.0065 *
P7	0.001	0.23142	0.2368
Constant	1.000	10.20286	0.0000 *

Sample Size	1677
Adjusted R ²	0.7476
F Statistic	166.4804

APPENDIX A13

Specimen Regression Results for 1986 Q1: ALL HOUSES
Northern Ireland Region

Variable	Mean	Coefficient	Significance
SDH	0.300	-0.12136	0.0001 *
TH	0.291	-0.34849	0.0000 *
DB	0.191	0.01493	0.6322
SDB	0.103	-0.12660	0.0007 *
FB	0.015	0.09675	0.1816
FC	0.002	-0.16403	0.4112
LH	0.720	0.01929	0.3022
DGAR	0.357	-0.11990	0.0262 *
SPACE	0.272	-0.24134	0.0000 *
NOPARK	0.348	-0.28667	0.0000 *
AGE	29.718	-0.00173	0.0000 *
NOCH	0.220	-0.08766	0.0001 *
CHP	0.166	-0.04608	0.0361 *
SIZE	969.448	0.00046	0.0000 *
BATH	1.022	0.08739	0.0743
Constant	1.000	9.96971	0.0000 *
Sample Size		650	
Adjusted R ²		0.7283	
F Statistic		116.9673	

APPENDIX B

DEFINITIONS OF VARIABLE LABELS

HOUSE-TYPE CATEGORIES (HTYPE)

DH*	Detached house
SDH	Semi-detached house
TH	Terraced house
DB	Detached bungalow
SDB	Semi-detached bungalow
FB	Purpose-built flat
FC	Converted flat

TENURE

FFVP*	Freehold or feuhold with vacant possession
LH	Leasehold

GARAGE

SGAR	Single garage
DGAR*	Double garage
SPACE	Parking space
NOPARK	No garage and no parking space

AGE	Age of property in years
-----	--------------------------

CENTRAL HEATING (CH)

NOCH	No central heating
CHF*	Full central heating
CHP	Partial central heating

SIZE	Property area in square feet
------	------------------------------

BATH	Number of bathrooms
------	---------------------

ACORN CODES

A
B*
C
D
E
F
G
H
I
J
K

PARLIAMENTARY CONSTITUENCY CODES (PARL)

P1
P2
P3
P4
P5
P6*
P7

* Indicates dummy variables omitted from the analyses.

APPENDIX C

**AVERAGE VARIABLE WEIGHTS, \bar{w}_j , FOR
THE PERIOD 1983 Q1 TO 1988 Q4**

APPENDIX D

MIX-ADJUSTED INDEX NUMBERS

1983 Q1 - 1989 Q1

TABLE D1: ALL HOUSES - MIX-ADJUSTED INDEX NUMBERS

DATE	REGIONS											UK	
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland
1983 Q1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Q2	104.7	104.2	104.5	101.7	102.0	103.5	104.3	104.4	103.5	104.2	104.7	100.2	103.7
Q3	107.5	105.9	105.1	103.0	105.6	105.3	107.1	107.9	106.7	107.2	106.8	102.5	105.8
Q4	107.6	106.4	106.4	102.9	106.6	108.2	110.7	110.9	107.7	105.8	107.1	101.2	107.0
1984 Q1	110.5	110.3	108.2	107.1	109.2	112.8	114.9	116.9	112.1	109.4	111.1	104.1	111.0
Q2	115.3	113.8	114.8	109.1	115.6	117.8	119.8	122.7	114.4	114.7	115.0	105.3	115.3
Q3	116.1	111.7	114.2	109.9	119.3	119.8	122.9	125.4	116.2	116.8	117.6	107.3	116.5
Q4	118.5	118.4	119.0	111.9	121.0	122.8	125.4	130.1	120.5	116.3	119.4	110.2	119.6
1985 Q1	121.1	118.8	121.6	115.9	124.7	127.3	130.7	135.7	123.5	117.6	122.4	112.7	123.1
Q2	124.4	123.9	124.3	118.1	130.3	131.6	135.6	141.8	127.0	121.5	125.4	111.9	127.0
Q3	125.3	123.6	125.7	119.3	131.4	134.7	140.4	147.0	130.1	121.4	124.8	115.8	129.0
Q4	128.0	127.5	127.7	120.8	135.0	137.6	145.0	152.6	132.0	125.5	125.3	115.8	131.7
1986 Q1	125.7	124.9	130.1	119.8	135.1	141.3	146.3	158.9	135.4	123.8	123.8	114.5	132.6
Q2	131.7	128.1	134.8	122.6	142.0	147.3	153.3	166.7	140.7	127.0	127.7	117.6	137.5
Q3	126.9	129.6	137.1	124.8	146.2	153.7	162.9	179.5	147.0	128.0	128.3	120.1	141.8
Q4	133.1	131.0	141.9	128.9	154.4	161.6	173.0	191.3	150.9	132.9	129.0	118.2	147.0
1987 Q1	134.1	136.4	147.6	134.7	160.6	169.8	186.8	203.9	156.7	133.5	130.4	115.1	153.4
Q2	136.2	143.2	153.9	142.3	176.8	182.0	198.1	219.1	165.5	139.0	131.1	123.0	161.4
Q3	137.2	142.3	154.2	148.8	186.5	192.7	209.5	231.3	173.7	139.0	131.6	121.0	166.8
Q4	131.1	140.1	156.4	149.4	192.2	194.4	209.3	228.3	175.2	134.9	128.6	114.8	166.0
1988 Q1	131.1	138.5	161.1	156.1	209.0	207.1	217.9	232.5	186.9	140.8	125.2	115.4	171.4
Q2	135.2	151.1	181.9	177.8	238.6	227.2	230.6	246.2	212.3	147.8	129.2	117.3	186.0
Q3	143.3	169.1	212.4	209.8	274.2	253.2	250.5	262.8	246.7	167.0	134.8	113.9	206.6
Q4	154.7	192.7	235.2	222.6	267.7	261.9	256.1	265.3	253.2	192.7	139.9	117.3	217.6
1989 Q1	171.1	211.4	248.8	231.3	272.6	264.8	262.3	268.7	250.8	210.5	146.3	116.7	226.3

TABLE D2: NEW HOUSES - MIX-ADJUSTED INDEX NUMBERS

DATE	REGIONS											UK	
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland
1983 Q1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Q2	101.6	100.3	102.7	100.6	104.6	104.7	103.7	105.1	104.8	112.9	100.7	96.2	102.4
Q3	99.6	102.0	105.1	104.5	103.4	106.8	106.8	111.6	108.5	105.1	103.0	104.2	105.0
Q4	104.7	102.5	106.3	112.7	111.9	107.5	111.5	108.7	108.8	113.9	105.2	105.3	107.7
1984 Q1	112.5	108.5	106.9	107.8	114.1	114.9	113.6	119.2	113.6	114.5	106.7	105.3	110.7
Q2	112.4	112.9	113.7	111.5	118.1	117.2	120.5	123.6	114.8	119.5	113.8	108.3	114.9
Q3	110.7	110.9	113.2	111.3	124.3	119.3	121.7	119.4	118.4	117.5	113.0	107.0	115.4
Q4	109.7	111.3	115.2	115.2	123.3	120.5	124.5	124.2	116.8	120.3	111.7	111.2	116.6
1985 Q1	111.8	119.3	119.5	119.5	126.8	125.1	129.7	124.6	121.1	119.7	114.6	113.6	120.4
Q2	109.5	118.1	117.6	120.2	132.8	131.9	132.5	133.5	125.6	122.8	115.5	113.1	123.0
Q3	120.4	113.9	123.2	116.9	134.6	133.9	136.0	138.6	128.4	131.0	114.2	115.1	125.2
Q4	127.4	119.8	126.1	126.5	136.2	138.6	144.5	141.5	127.8	123.4	118.7	116.6	128.7
1986 Q1	116.1	114.7	128.4	123.6	140.9	139.6	145.6	150.8	133.1	130.0	117.5	113.2	129.7
Q2	126.8	117.5	132.8	122.3	145.0	145.5	153.8	154.8	140.0	133.5	120.7	117.2	134.0
Q3	126.0	124.3	135.8	130.0	148.5	155.0	164.6	163.0	145.4	139.0	120.8	119.6	139.4
Q4	124.7	130.3	143.5	131.4	161.6	160.6	174.1	167.1	153.4	135.9	127.5	117.2	144.6
1987 Q1	128.2	131.2	148.8	133.8	164.9	168.6	181.8	183.0	149.8	136.7	120.3	121.0	147.8
Q2	127.8	128.2	151.0	141.1	176.1	177.3	192.7	193.3	162.2	153.0	122.8	122.7	154.5
Q3	135.8	126.0	152.4	139.3	186.4	192.7	202.8	210.0	167.5	149.1	127.8	118.8	159.3
Q4	129.7	128.1	157.4	147.9	190.6	190.4	203.3	210.3	169.0	144.5	123.8	118.0	160.2
1988 Q1	124.8	125.8	158.7	150.8	210.0	198.4	213.0	206.1	179.3	156.6	124.1	116.7	164.5
Q2	125.5	131.9	170.1	171.5	233.6	222.2	228.5	220.2	205.8	156.1	123.7	122.5	178.1
Q3	136.1	138.6	196.0	202.6	265.4	247.8	243.9	235.5	230.9	176.9	130.8	116.9	197.1
Q4	147.4	153.7	235.5	198.9	297.8	245.0	252.3	243.4	245.8	207.5	131.7	122.1	209.7
1989 Q1	166.9	159.2	217.0	208.4	262.0	266.8	254.5	249.3	241.2	199.6	139.3	118.1	211.1

TABLE D6: FORMER OWNER-OCCUPIERS - MIX-ADJUSTED INDEX NUMBERS

DATE	REGIONS										UK		
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales		Scotland	Northern Ireland
1983 Q1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Q2	106.3	101.4	102.2	103.1	102.2	102.2	103.7	104.5	106.1	104.6	104.9	104.3	103.0
Q3	107.6	102.8	103.3	104.9	105.4	105.4	106.2	107.6	109.5	107.2	106.4	102.9	105.1
Q4	108.6	104.0	104.5	106.8	109.0	109.0	109.3	110.8	112.4	105.6	106.4	104.7	107.4
1984 Q1	111.9	108.4	107.2	107.7	109.8	109.8	113.6	115.7	118.7	106.7	109.3	105.2	111.0
Q2	115.0	110.3	111.2	113.1	114.5	114.5	118.2	119.5	124.4	116.1	114.1	104.8	114.0
Q3	115.4	110.2	110.7	113.8	118.2	118.2	120.6	123.2	127.2	117.8	117.0	112.0	116.0
Q4	118.7	115.8	113.0	118.8	121.4	121.4	122.8	125.7	131.6	116.1	117.5	111.2	119.1
1985 Q1	121.4	115.3	116.2	119.3	124.8	124.8	126.9	130.8	137.1	117.8	121.5	116.2	122.0
Q2	123.4	119.2	118.8	121.5	128.5	128.5	131.7	135.9	142.7	122.6	122.5	114.0	125.0
Q3	124.8	121.8	119.7	123.0	133.2	133.2	134.6	139.6	147.1	121.6	121.2	117.7	128.0
Q4	125.7	122.1	119.2	125.4	135.0	135.0	136.5	144.4	152.0	123.3	123.1	117.5	130.0
1986 Q1	123.9	120.1	120.8	127.9	136.7	136.7	140.5	146.3	161.2	123.9	120.7	117.1	132.0
Q2	131.1	123.0	123.2	131.6	141.6	141.6	146.5	154.6	169.0	126.9	125.1	121.7	137.0
Q3	125.1	125.8	126.0	135.4	147.2	147.2	153.1	163.7	180.8	128.0	127.2	127.0	141.0
Q4	131.2	125.4	128.1	137.3	151.6	151.6	161.7	172.0	192.1	133.9	127.3	124.4	146.0
1987 Q1	135.2	128.8	129.6	144.6	158.3	158.3	168.5	183.9	203.0	131.8	127.1	118.6	151.0
Q2	133.1	137.1	132.2	148.9	172.9	172.9	180.1	195.8	216.9	139.0	128.2	126.6	159.0
Q3	135.3	137.0	134.3	152.0	184.5	184.5	193.2	206.6	228.4	137.0	130.3	122.2	165.0
Q4	130.5	134.7	131.3	153.8	189.8	189.8	192.9	205.8	227.7	135.4	125.7	116.0	164.0
1988 Q1	131.6	134.6	137.0	159.5	207.7	207.7	205.8	215.9	233.7	140.0	122.9	118.9	172.0
Q2	135.7	147.3	144.1	179.1	236.2	236.2	223.6	229.0	247.4	151.0	127.0	120.7	187.0
Q3	138.4	166.4	158.1	210.5	269.0	269.0	249.1	247.0	261.8	166.6	134.0	117.3	207.0
Q4	153.0	191.9	171.8	233.9	265.2	265.2	259.0	253.5	265.0	197.6	138.8	120.9	220.1
1989 Q1	170.9	197.3	187.2	241.3	262.4	262.4	261.2	260.5	269.6	213.1	145.4	116.7	226.0

APPENDIX E

**NABS TRANSACTIONS FOR OUTER SOUTH EAST AND OUTER METROPOLITAN
AREAS IN 1983 - 1988**

**FINAL REGIONAL WEIGHTINGS FOR UK
(AVERAGE 1983 - 1988)**

AND

**DOE FIVE PER CENT SAMPLE SURVEY OF BUILDING SOCIETY
MORTGAGE LENDING - ANNUAL DATA: 1983 TO 1988**

**NABS TRANSACTIONS FOR OUTER SOUTH EAST
AND OUTER METROPOLITAN AREAS
1983 - 1988**

ALL HOUSES

	1983	1984	1985	1986	1987	1988	Total	Weight
Outer S East	9120	10882	11193	15112	9269	10704	66280	0.439857
Outer Metropolitan	11880	13779	16408	20181	10223	11934	84405	0.560142
							150685	

NEW HOUSES

	1983	1984	1985	1986	1987	1988	Total	Weight
Outer S East	1172	1418	1471	1495	910	859	7325	0.476144
Outer Metropolitan	1269	1444	1913	1637	858	938	8059	0.523855
							15384	

MODERN

	1983	1984	1985	1986	1987	1988	Total	Weight
Outer S East	4540	5176	5707	7401	4898	5305	33027	0.403634
Outer Metropolitan	6714	7683	9277	11821	6167	7135	48797	0.596365
							81824	

OLDER

	1983	1984	1985	1986	1987	1988	Total	Weight
Outer S East	3151	3892	4015	5886	3461	4540	24945	0.475378
Outer Metropolitan	3897	4632	5218	6723	3198	3861	27529	0.524621
							52474	

FIRST-TIME BUYERS

	1983	1984	1985	1986	1987	1988	Total	Weight
Outer S East	3641	4164	3992	6034	2906	4013	24750	0.435264
Outer Metropolitan	4468	5087	6595	8008	3008	4946	32112	0.564735
							56862	

FORMER OWNER-OCCUPIERS

	1983	1984	1985	1986	1987	1988	Total	Weight
Outer S East	5479	6718	7201	9078	6363	6691	41530	0.442641
Outer Metropolitan	7412	8692	9813	12173	7215	6988	52293	0.557358
						93823		

**FINAL REGIONAL WEIGHTINGS FOR UK
(AVERAGE 1983 - 1988)**

ALL HOUSES

Northern	0.05352
Yorks & Humber	0.09980
N West	0.10576
E Midlands	0.07782
W Midlands	0.08891
E Anglia	0.03862
Outer SE	0.09705
Outer Met	0.12359
G London	0.08762
S West	0.09120
Wales	0.04066
Scotland	0.07420
N Ireland	0.02117

PRE-1940

Northern	0.05416
Yorks & Humber	0.10527
N West	0.11546
E Midlands	0.07361
W Midlands	0.07861
E Anglia	0.03421
Outer SE	0.09108
Outer Met	0.10052
G London	0.12378
S West	0.08692
Wales	0.04230
Scotland	0.07362
N Ireland	0.02039

NEW HOUSES

Northern	0.04383
Yorks & Humber	0.08293
N West	0.08455
E Midlands	0.08510
W Midlands	0.08941
E Anglia	0.05609
Outer SE	0.11065
Outer Met	0.12173
G London	0.04798
S West	0.10922
Wales	0.03873
Scotland	0.07593
N Ireland	0.05376

FIRST TIME BUYERS

Northern	0.05451
Yorks & Humber	0.09879
N West	0.10612
E Midlands	0.07723
W Midlands	0.09030
E Anglia	0.03626
Outer SE	0.08489
Outer Met	0.11015
G London	0.10606
S West	0.07982
Wales	0.04256
Scotland	0.08553
N Ireland	0.02771

POST-1940

Northern	0.05555
Yorks & Humber	0.09643
N West	0.09705
E Midlands	0.08221
W Midlands	0.10507
E Anglia	0.04012
Outer SE	0.10614
Outer Met	0.15682
G London	0.04277
S West	0.09233
Wales	0.03866
Scotland	0.07457
N Ireland	0.01221

FORMER OWNER-OCCUPIERS

Northern	0.05251
Yorks & Humber	0.10086
N West	0.10540
E Midlands	0.07843
W Midlands	0.08746
E Anglia	0.04103
Outer SE	0.10930
Outer Met	0.13762
G London	0.06872
S West	0.10281
Wales	0.03872
Scotland	0.06258
N Ireland	0.01448

DOE FIVE PER CENT SAMPLE SURVEY OF BUILDING SOCIETY

MORTGAGE LENDING - ANNUAL DATA: 1983 TO 1988

ALL HOUSES

	1983	1984	1985	1986	1987	1988
Northern	1788	1884	2132	1849	2544	2321
Yorks & Humberside	3186	3822	3990	4150	3987	4206
East Midlands	2728	2960	3079	3501	3117	2815
East Anglia	1204	1528	1607	1897	1542	1254
Greater London	2956	3476	3742	4203	2860	3255
Sout East	7173	8624	9059	10300	8448	7998
South West	3133	3437	3612	4075	3473	3599
West Midlands	3096	3421	3675	3883	3483	3236
North West	3391	3976	4317	4431	4163	4457
Wales	1353	1549	1668	1694	1582	1664
Scotland	2603	3202	3191	3163	2432	2762
Northern Ireland	724	898	936	930	761	704

NEW HOUSES

	1983	1984	1985	1986	1987	1988
Northern	175	192	175	140	216	211
Yorks & Humberside	327	382	316	338	344	391
East Midlands	349	359	381	396	355	313
East Anglia	197	254	241	270	257	200
Greater London	175	224	220	221	199	175
Sout East	871	1105	1118	1107	880	798
South West	407	495	487	499	419	456
West Midlands	393	447	428	379	324	291
North West	322	381	381	333	356	366
Wales	132	181	188	166	145	168
Scotland	324	436	361	311	219	270
Northern Ireland	185	254	274	258	194	195

POST-1944 HOUSES

	1983	1984	1985	1986	1987	1988
Northern	657	647	769	630	942	839
Yorks & Humberside	1087	1185	1341	1381	1427	1363
East Midlands	917	1087	1040	1335	1178	1079
East Anglia	437	498	566	749	519	470
Greater London	421	481	578	716	543	714
Sout East	2840	3357	3501	4364	3693	3471
South West	1123	1065	1191	1429	1284	1361
West Midlands	1167	1241	1399	1690	1574	1410
North West	1042	1211	1315	1468	1359	1439
Wales	466	471	505	551	548	580
Scotland	901	921	985	1019	1009	1184
Northern Ireland	177	188	134	187	176	124

PRE-1945 HOUSES

	1983	1984	1985	1986	1987	1988
Northern	956	1045	1188	1079	1386	1271
Yorks & Humberside	1772	2255	2333	2431	2216	2452
East Midlands	1462	1514	1658	1770	1584	1423
East Anglia	570	776	800	878	766	584
Greater London	2360	2771	2944	3266	2118	2366
Sout East	3462	4162	4440	4829	3875	3729
South West	1603	1877	1934	2147	1770	1782
West Midlands	1536	1733	1848	1814	1585	1535
North West	2027	2384	2621	2630	2448	2652
Wales	755	897	975	977	889	916
Scotland	1378	1845	1845	1833	1204	1308
Northern Ireland	362	456	528	485	391	385

FIRST-TIME BUYERS

	1983	1984	1985	1986	1987	1988
Northern	1031	1000	1127	992	1218	1087
Yorks & Humberside	1683	1943	2075	2091	1929	1976
East Midlands	1438	1502	1635	1761	1527	1281
East Anglia	589	775	775	901	722	532
Greater London	1840	2244	2354	2497	1670	1953
Sout East	3275	3906	4306	4523	3712	3372
South West	1483	1653	1710	1749	1413	1443
West Midlands	1669	1812	1982	2005	1659	1565
North West	1777	2076	2294	2249	2019	2150
Wales	743	826	912	909	798	851
Scotland	1583	1913	1914	1885	1365	1467
Northern Ireland	499	637	621	594	487	443

FORMER OWNER-OCCUPIERS

	1983	1984	1985	1986	1987	1988
Northern	757	883	1003	857	1326	1234
Yorks & Humberside	1502	1878	1914	2059	2058	2229
East Midlands	1289	1458	1442	1740	1589	1534
East Anglia	615	753	831	996	819	722
Greater London	1115	1232	1388	1704	1190	1302
Sout East	3896	4715	4751	5775	4734	4626
South West	1650	1782	1896	2326	2058	2153
West Midlands	1424	1608	1693	1878	1824	1667
North West	1611	1898	2022	2182	2144	2307
Wales	610	722	755	785	784	813
Scotland	1020	1286	1276	1278	1067	1295
Northern Ireland	225	261	315	336	274	261

APPENDIX F

MIX-ADJUSTED HOUSE PRICES

1983 Q1 - 1989 Q1

TABLE F1: ALL HOUSES - MIX-ADJUSTED HOUSE PRICES

DATE	REGIONS											UK	
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland
1983 Q1	21734	23789	22354	24735	28208	32113	37987	34157	29009	22377	27255	23154	2772
1983 Q2	22756	24529	23362	25145	28759	33238	39616	35671	30014	23315	28540	23208	2874
1983 Q3	23371	24575	23500	25470	29789	33811	40685	36855	30940	23986	29097	23744	2932
1983 Q4	23381	24676	23795	25460	30067	34741	42057	37873	31253	23678	29194	23433	2967
1984 Q1	24019	25713	24182	26494	30813	36226	43652	39913	32534	24491	30274	24111	3079
1984 Q2	25064	26537	25654	26994	32601	37823	45494	41913	33197	25664	31333	24392	3196
1984 Q3	25224	26283	25532	27188	33649	38472	46694	42834	33721	26137	32049	24847	3229
1984 Q4	25762	26685	26607	27681	34126	39440	47655	44423	34960	26021	32543	25517	3317
1985 Q1	26311	27509	27178	28661	35177	40872	49656	46338	35832	26305	33357	26093	3412
1985 Q2	27030	28308	27796	29217	36742	42265	51495	48431	36850	27178	34183	25914	3520
1985 Q3	27227	28554	28098	29505	37064	43269	53340	50214	37743	27159	34023	26823	3577
1985 Q4	27822	28611	28551	29876	38073	44196	55100	52120	38291	28088	34163	26811	3653
1986 Q1	27318	28608	29084	29642	38110	45383	55594	54284	39282	27703	33742	26518	3677
1986 Q2	28626	29140	30126	30320	40050	47297	58245	56951	40807	28426	34800	27220	3812
1986 Q3	27572	29615	30639	30873	41254	49363	61865	61310	42631	28634	34980	27812	3930
1986 Q4	28934	29892	31718	31880	43558	51882	65722	65352	43787	29747	35160	27359	4077
1987 Q1	29155	30742	32990	33318	45311	54544	70977	69658	45465	29881	35549	26639	4254
1987 Q2	29602	31414	34414	35205	49863	58460	75272	74824	48011	31110	35732	28486	4476
1987 Q3	29818	31872	34470	36814	52616	61885	79585	78990	50401	31112	35876	28006	4626
1987 Q4	28498	31291	34972	36966	54223	62436	79505	77991	50837	30192	35045	26573	4602
1988 Q1	28485	31893	36023	38609	58957	66517	82767	79417	54224	31512	34118	26716	4753
1988 Q2	29387	33508	40656	43982	67307	72962	87614	84078	61582	33074	35206	27163	5156
1988 Q3	31135	36045	47491	51901	77358	81325	95163	89760	71569	37365	36732	26380	5729
1988 Q4	33630	39392	52566	55054	75514	84108	97296	90608	73446	43119	38122	27160	6032
1989 Q1	37178	43142	55620	57223	76896	85035	99629	91783	72755	47110	39874	27013	6275

TABLE F2: NEW HOUSES - MIX-ADJUSTED HOUSE PRICES

DATE	REGIONS											UK		
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland	
1983 Q1	30331	28287	31099	28290	30248	31986	36083	41152	39399	30912	27853	31706	25403	32334
1983 Q2	30823	27141	31190	29058	30435	33450	37771	42681	41392	32396	31446	31931	24427	33106
1983 Q3	30207	28601	31726	29724	31602	33077	38551	43963	43984	33545	29260	32648	26476	33948
1983 Q4	31763	28682	31865	30078	34079	35794	38789	45891	42825	33618	31723	33347	26757	34821
1984 Q1	34116	29315	33738	30233	32614	36493	41471	46729	46967	35113	31894	33846	26758	35797
1984 Q2	34097	30434	35100	32160	33713	37774	42306	49572	48678	35496	33294	36094	27502	37141
1984 Q3	33566	30940	34491	32022	33672	39749	43056	50089	47060	36600	32720	35843	27179	37324
1984 Q4	33286	30920	34609	32591	34848	39428	43497	51217	48949	36105	33519	35428	28258	37716
1985 Q1	33917	31270	37092	33817	36158	40566	45145	53355	49104	37422	33350	36340	28857	38934
1985 Q2	33212	32524	36716	33267	36362	42492	47606	54540	52604	38821	34209	36609	28730	39768
1985 Q3	36529	33552	35435	34862	35367	43058	48300	55974	54593	39691	36497	36201	29235	40490
1985 Q4	38648	32535	37252	35662	38268	43561	49998	59483	55744	39495	34362	37650	29618	41605
1986 Q1	35209	34168	35678	36328	37385	45058	50358	59917	59429	41141	36216	37249	28745	41929
1986 Q2	38467	34098	36531	37578	36990	46367	52505	63283	60978	43279	37176	38273	29774	43341
1986 Q3	38204	34038	38642	38428	39310	47497	55935	67746	64222	44960	38715	38286	30393	45076
1986 Q4	37815	34395	40524	40610	39755	51688	57938	71635	65855	47405	37854	40417	29784	46749
1987 Q1	38884	35104	40794	42103	40482	52750	60849	74826	72089	46315	38079	38143	30742	47779
1987 Q2	38768	36732	39873	42705	42680	56316	63964	79306	76174	50138	42624	38939	31181	49949
1987 Q3	41192	36122	39192	43126	42140	59607	69545	83443	82721	51772	41542	40516	30176	51519
1987 Q4	39348	36350	39836	44521	44749	60971	68705	83655	82868	52247	40245	39245	29973	51800
1988 Q1	37854	35650	39108	44910	45619	67159	71604	87647	81204	55412	43618	39349	29657	53175
1988 Q2	38051	37706	41011	48108	51870	74704	80163	94033	86748	63626	43468	39215	31107	57581
1988 Q3	41283	44303	43113	55461	61273	84879	89419	100354	92767	71373	49258	41476	29708	63717
1988 Q4	44715	50315	47789	66614	60160	95268	88392	103827	95881	75982	57784	41741	31016	67799
1989 Q1	50622	51193	49496	61400	63041	83812	96286	104730	98235	74547	55607	44167	30008	68246

TABLE F3: OLDER (PRE-1945) HOUSES - MIX-ADJUSTED HOUSE PRICES

DATE	REGIONS											UK		
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland	
1983 Q1	17970	16965	20343	18367	21413	25492	30509	35762	33454	27947	19153	23539	17561	24862
1983 Q2	18573	17714	21024	19671	22168	24832	31287	37686	35027	29198	19862	25235	18324	25922
1983 Q3	19657	18231	21064	19121	22579	26655	31667	38509	36084	29970	20370	25923	18200	26453
1983 Q4	19550	18289	21020	19993	23179	24932	32226	39616	36962	30206	19641	25673	17859	26680
1984 Q1	20056	19256	22361	20466	24086	26645	34401	41842	39273	32351	21380	26812	18330	28137
1984 Q2	21012	19766	22995	21563	24894	28033	36546	43529	41313	33547	22217	27161	18986	29255
1984 Q3	21996	19220	22859	21749	24793	29825	37306	44922	42513	33721	22441	27938	19547	29661
1984 Q4	22064	20973	23440	22712	24996	29756	37905	45869	44022	35338	21955	28558	19868	30536
1985 Q1	22117	20578	23817	22971	26547	31145	39599	47992	46205	36230	22437	29520	20027	31396
1985 Q2	23026	21710	24596	23658	26764	33222	40906	49686	48135	37484	23288	30537	19682	32512
1985 Q3	22908	21806	24834	23712	27258	32837	42210	51630	50055	38315	23159	30557	20840	33091
1985 Q4	23867	22725	24856	24408	27204	33773	42973	53811	52078	39024	24218	30573	21000	33917
1986 Q1	23021	22111	25044	25061	27388	32630	44401	54134	54335	39519	23530	30334	21110	34151
1986 Q2	24733	23121	25296	25917	28057	34963	45925	57182	57102	41395	24699	30926	21249	35534
1986 Q3	23456	23044	25818	26516	28244	36148	47938	60577	61250	43313	24555	31522	21946	36592
1986 Q4	25183	23387	25714	26813	29002	37524	50746	64354	65618	44340	25344	31051	20569	37825
1987 Q1	25798	24808	26924	28357	30307	39889	52258	69557	70010	46446	25451	31984	19266	39696
1987 Q2	25737	25474	26988	29382	32453	44197	56358	73686	74727	49228	27421	32533	23386	41757
1987 Q3	26004	25498	27662	29789	34540	47441	59531	78241	79445	51106	26451	32573	22917	43284
1987 Q4	24550	24743	27161	29619	34002	49049	60511	79461	78293	51918	25704	31851	21888	42964
1988 Q1	24381	24318	28212	29511	33974	50412	63693	80958	80078	53907	26491	30552	21396	43653
1988 Q2	24744	27130	29040	33685	38776	57741	69953	85953	84254	60716	28028	32166	21071	47254
1988 Q3	26383	29011	31150	39160	43973	68209	79301	94345	90736	69235	30626	33209	19972	52062
1988 Q4	28571	32203	33287	45620	48653	61972	81532	93799	91095	71564	35566	34894	21733	54676
1989 Q1	31180	38146	36986	47858	50809	70837	84993	99504	90882	72599	40514	36230	21356	58106

TABLE F6: FORMER OWNER-OCCUPIERS - MIX-ADJUSTED HOUSE PRICES

DATE	REGIONS												UK																																																																																																																																																																																																																																																																																																																																																																								
	Northern		Yorks & Humber-side		North West		East Midlands		West Midlands		East Anglia			Outer South East		Outer Metro-politan		Greater London		South West		Wales		Scotland		Northern Ireland																																																																																																																																																																																																																																																																																																																																																											
1983 Q1	25732	26824	28932	27535	30148	31374	36033	43288	41493	33066	27160	33307	29245	32898	1983 Q2	27361	27208	29564	28387	30641	32079	37351	45224	44038	28416	34940	30501	34069	1983 Q3	27687	27563	29885	28872	31079	33069	38250	46583	45433	35500	29120	35451	30105	34790	1983 Q4	27938	27893	30221	29415	31039	34188	39398	47965	46642	35932	28679	35441	30625	35340	1984 Q1	28784	29068	31018	29653	32537	34433	40922	50069	49269	36880	28982	36408	30764	36502	1984 Q2	29579	29597	32163	31148	32622	35937	42595	51731	51638	37724	31545	38017	30647	37745	1984 Q3	29691	29550	32019	31331	33144	37087	43459	53341	52767	38472	31990	38977	32761	38353	1984 Q4	30544	31068	32699	32717	33653	38076	44259	54433	54593	39751	31526	39141	32526	39310	1985 Q1	31244	30917	33618	32836	34990	39138	45736	56612	56866	40673	31998	40470	33989	40354	1985 Q2	31758	31980	34374	33451	35296	40315	47455	58824	59224	41472	33293	40802	33339	41432	1985 Q3	32123	32668	34634	33871	35836	41774	48482	60433	61050	42985	33040	40375	34422	42232	1985 Q4	32335	32741	34481	34528	36096	42367	49171	62498	63067	43072	33481	40989	34348	42809	1986 Q1	31880	32226	34962	35220	36440	42899	50627	63316	66866	44416	33658	40199	34259	43426	1986 Q2	33728	32980	35642	36227	37185	44412	52793	66922	70136	46178	34466	41653	35579	45057	1986 Q3	32185	33739	36463	37294	38063	46186	55184	70873	75008	48452	34762	42369	37141	46639	1986 Q4	33754	33643	37066	37807	39335	47559	58256	74469	79706	49899	36364	42386	36366	48184	1987 Q1	34792	34561	37500	39817	40374	49661	60707	79606	84251	51326	35784	42321	34696	49914	1987 Q2	34257	36776	38243	41001	43150	54258	64891	84751	89986	54251	37747	42714	37020	52536	1987 Q3	34821	36738	38861	41841	44703	57897	69599	89444	94764	56783	37213	43383	35740	54503	1987 Q4	33574	36131	38002	42346	44971	59546	69490	89077	94477	57408	36784	41856	33910	54239	1988 Q1	33858	36103	39641	43909	47348	65171	74167	93455	96976	62346	38011	40937	34786	56648	1988 Q2	34921	39516	41696	49303	54144	74104	80580	99151	102675	71080	41016	42288	35311	61599	1988 Q3	35612	44629	45743	57949	64710	84397	89761	106911	108646	80903	45239	44642	34299	68410	1988 Q4	39380	51485	49692	64396	68556	83204	93341	109732	109939	83385	53672	46243	35366	72393	1989 Q1	43972	52916	54155	66435	70361	82330	94102	112769	111849	82198	57888	48416	34126	74426
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Fleming, M. C. and Nellis, J. G. (1990) "The Development of Standardised Indices for Measuring House Price Inflation Incorporating Physical and Locational Characteristics", Cranfield School of Management, *mimeo*.

**The Development of Standardised Indices For Measuring
House Price Inflation Incorporating Physical And Locational Characteristics**

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SUMMARY

This paper reports on the application of the hedonic technique to develop standardised indices of house prices in the UK. Standardisation incorporates a wide range of both physical house characteristics and locational attributes which influence house prices. A large data base is employed covering 60,000-90,000 house purchase transactions each year over the period 1983 to 1989. Quarterly standardised indices are derived covering six categories of house type and buyer type for 13 regions and countries of the UK as well for the UK as a whole. Price movements based on the standardised indices are contrasted with those based on simple average prices.

Keywords: HOUSE PRICES; INDEX NUMBERS; HEDONIC TECHNIQUE;
REGRESSION ANALYSIS

1. INTRODUCTION

The measurement of house price movements over time raises a number of severe problems both in terms of data requirements and technical analysis. As with many other goods, the set of houses traded in any time period will possess a diverse range of both quantitative and qualitative characteristics. But, at the same time, house prices are affected by the nature of the immediate residential neighbourhoods in which the houses

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are located as well as by the characteristics of the wider surrounding areas. The derivation of standardised indices to measure price movements over time, therefore, demands that account should be taken of all of these types of influences. This paper builds on previous research by the authors in this field (Fleming and Nellis, 1984, 1985b) and reports on the development of a new set of house price indices which, while allowing for the influence of the physical characteristics of houses themselves, explicitly takes account of locational influences for the first time.

The arrangement of the paper is as follows. In Section 2 we consider briefly the purposes and problems associated with house price measurement, while Section 3 discusses the various methods of measurement which have been employed to date. Section 4 presents the results of a study which we have conducted, employing a unique and specially developed data base, designed to accommodate the various measurement problems associated with house prices. The outcome of this study is a set of standardised house price indices covering six house and buyer groupings for each of 13 regions and countries of the UK as well as for the UK as a whole. These standardised indices are reported in Section 5 and contrasted with indices based on simple average prices.

2. PURPOSES AND PROBLEMS OF HOUSE PRICE MEASUREMENT

2.1 The Purposes of House Price Measurement

The measurement of house prices is of interest to two main groups of users: first, direct participants in the housing market (buyers and sellers, housebuilders, providers of financial and professional services etc.) and secondly, other users such as the government, academic and market researchers etc. Buyers and sellers, of course, will be mainly interested in current price levels at a particular point in time though, naturally, they may also be interested in making comparisons of movements over time as a basis for judging current prices.

Other users, while interested in current price levels as well, will tend to have a greater interest in price movements over time. An index of price movements is of direct use to those, such as valuers, property insurers etc., who wish to estimate current market values on the basis of information about market prices in previous time periods. An index of house prices is also used officially as a constituent in measuring changes in the cost of housing services, incorporated in the Retail Prices Index (RPI) for the UK.

Further, the fact that owner-occupation in Britain is now the major form of housing tenure (65 per cent) and that the ownership of housing constitutes the largest single component of personal sector wealth (approximately 40 per cent) means that changes in the reported values of properties over time, especially in boom or slump periods, provoke widespread interest. They are also an important determinant of people's expectations and economic behaviour, particularly with regard to expenditure decisions, labour mobility and wage demands (Bover *et al*, 1989).

2.2. Problems of House Price Measurement

The main problem of measurement has already been referred to above. This is that the houses traded in any time period will possess a diverse range of physical and locational characteristics and these vary from one time period to the next. Consequently, the use of *simple* average prices as the basis for comparison is inherently misleading (we demonstrate that this is in fact the case in Section 4). It will be appreciated that few houses are identical: they may differ according to a wide variety of physical characteristics such as size, type, age, garden, garage, quality of fixtures and fittings and general condition etc. Even where similar houses exist, each one is necessarily unique in having a fixed location, the regional and localised attributes of which also influence price.

Given that housing demand is satisfied, in the main, by the *existing* stock (rather than by *new* building), it may be thought that the mix of houses traded from one time period to the next may be subject to little change and thus failure to adjust explicitly for changes in the mix may have little significance. In fact, the mix of housing traded *does* change markedly over time. For example, during the 1970s and 1980s the proportions of different types of dwellings on which building societies granted mortgage loans have varied considerably - see Table 1.¹ It will be seen that, in the case of *all* houses, the proportions of flats, maisonettes and terraced houses increased sharply between 1970 and 1988 at the expense of bungalows, detached and semi-detached houses.

INSERT TABLE 1

Variations in mix by type of dwelling illustrate only one source of mix variation in properties traded. Likewise, analyses by age distribution of dwellings also show considerable variation - Table 2 refers. For example there has been a considerable decline in the proportion of houses traded which are new dwellings and a notable growth in the proportion of the oldest group (pre 1919).

INSERT TABLE 2

These illustrations, based on only two physical house characteristics, graphically demonstrate the need for standardisation and the obvious dangers of relying on simple average prices as barometers of price movements. Furthermore, from the point of view of measuring prices at the UK level, changes in the regional distribution of traded

1 Building societies, of course, are not the only source of mortgage finance, but they are the major institutional provider. Their share of the total institutional mortgage finance market (as measured by the value of net mortgage advances) has fluctuated as follows: 1970 - 87 per cent; 1975 - 76 per cent; 1980 - 79 per cent; 1985 - 78 per cent; 1988 - 72 per cent.

properties may be significant because of very marked disparities in regional house prices. Here too there is some (though much less) variation over time - see Table 3.

INSERT TABLE 3

The problem of measurement in the context of mix variability is, of course, not unique to housing. The same problems arise in attempting to measure price movements generally, as in the RPI. The latter takes as a standard of comparison a standard 'basket' of goods which is repriced in successive time periods. To adopt the same principles for housing would require the existence of 'standard' houses which are regularly sold and resold. Unfortunately, the problem is not so readily solved in this context since there is no such thing as a 'standard' house and, as noted above, because locational factors play such a crucial role in house price determination.

In the UK, there are a large number of sources publishing house price information. Currently there are at least 15 such sources. A critical appraisal of the sources is provided in Fleming and Nellis (1981 and 1985a) and a complete collection of the data with technical details is to be found in Fleming and Nellis (1987). Of these, only a few have made any attempt at standardisation (the main sources in this respect are the Department of the Environment, the Halifax Building Society and the then Nationwide Building Society). The methodologies employed are noted below before proceeding to present the results of the present study.

3. METHODOLOGICAL APPROACHES TO THE MEASUREMENT PROBLEM

Two main methodological approaches have been adopted in response to the standardisation problem: a weighted-average approach and a regression-based approach.

3.1 *Weighted-Average Approach*

The weighted-average approach takes average prices for sub-sets of houses defined so as to provide more homogeneous groupings (for example, by type, by size, by age etc.) and then combines these in fixed proportions into a grand or weighted average. This methodology was adopted in 1982 by the Department of the Environment (DOE) for compiling the official index of house prices, and applied retrospectively back to 1968 (DOE, 1982). However, the index adjusts for only three house characteristics: type, size (defined in terms of number of rooms) and age group, sub-classified according to the official standard regions of the UK, in arriving at an overall weighted average index. Consequently, the degree of adjustment is limited and there remains, therefore, an important element of non-comparability.² In addition, this approach, by definition, is unable to measure the degree of interaction between house and locational variables.

3.2 *Regression-Based Approach*

A second, and more sophisticated method of solving the problem of standardisation is to employ regression analysis to estimate the influence that each house characteristic has on price - for example, the contribution to price made by an extra bedroom, the availability of central heating, the existence of a garage or garage space, etc. These measurements may be referred to as 'characteristics-prices'. It is then possible to remove the influence of a varying mix of characteristics (and so to measure price changes for a standardised set of houses) by summing these characteristics-prices in fixed proportions according to the mix of characteristics possessed by a standard representative set of houses. This standard set can, of course, be changed from time to time in the light of any significant changes in the mix. This approach is commonly referred to as the 'hedonic' approach to price measurement - see Griliches (1971), Tripllett (1971), Lancaster (1966, 1971) and Rosen (1974).

2 A similar approach was adopted by some individual building societies in publishing house price data, the major source being the Nationwide Building Society (now the Nationwide Anglia Building Society) until 1989 when the new methodology reported in this paper was adopted.

The regression-based method has been employed by the authors in earlier work to compile national and regional standardised indices for the Halifax Building Society (Fleming and Nellis, 1984 and 1985b). These cover the period from January 1983 and are now compiled by the Society on regular monthly and quarterly bases.

The development of the DOE weighted-index system in 1982 and the subsequent derivation of the Halifax regression-based series in 1983 are regarded as major advances in the measurement of house price trends in the United Kingdom. However, it is also important to stress that both systems focus on the physical characteristics of houses only with location treated merely as a classificatory variable at the broad regional level. They thus fail to allow for the influence of specific locational characteristics on house prices. In recognition of this shortcoming, the major contribution of the research reported here is to extend our earlier work in this area to include the impact of locational factors on house prices. At the same time, the research has permitted us to refine and extend the range of information incorporated about the physical attributes of the houses themselves.

4. PHYSICAL AND LOCATIONAL CHARACTERISTICS MODEL OF HOUSE PRICES

The application of the hedonic approach demands the collection of a large volume of cross-sectional data on a periodic basis recording transactions prices and details of the characteristics of goods under investigation. The gathering of such information is often both expensive and burdensome even on a limited periodic basis. This is one reason that has inhibited the use of the hedonic technique in price measurement generally (Triplett, 1989).

In the case of housing, the application of the hedonic approach to take account of the influence of locational, as well as physical house characteristics demands a data base

covering a large cross-sectional set of house purchase transactions giving information about the price of each house sold and its associated physical and locational attributes. The work reported here is based on a data set especially developed in conjunction with the Nationwide Anglia Building Society to meet the extensive data requirements of the hedonic technique. We describe the data base next before proceeding to present the technical details of the analysis and its application to derive standardised (i.e. hedonic) house price indices.

4.1 The Data Base

The data base covers all the house purchase transactions on which the Nationwide Anglia Building Society approved mortgage loans in each (quarterly) time period back to 1983. It has three particular merits from the point of view of this study. First, as the society is one of the largest societies in the UK, the number of transactions in the data base is exceptionally large covering around 60,000-90,000 properties per year. As noted above, a large data base is essential in order to permit the reliable estimation of the influence of a large number of characteristics on price in each time period using the regression-based hedonic approach. A second merit of the data base is that the locality in which each property is situated is recorded in terms of post codes which define very small areas. This information is then used in conjunction with the ACORN³ classification system to categorise the location of each property at two levels - first at the 'micro' level of the immediate residential neighbourhood and, secondly, at a broader 'macro' level relating to the wider surrounding area. For this latter purpose use of parliamentary constituency boundaries is used for classification purposes, partly for convenience, but also because they provide a larger number of areas than alternatives

3 ACORN stands for 'A Classification of Residential Neighbourhoods'. It was developed by CACI Market Analysis Ltd and applies census of population statistics to classify areas of about 150 households (census enumeration districts) into 38 different neighbourhood types. The ACORN classification takes into account 40 different variables encompassing demographic, housing and employment characteristics. The 38 neighbourhood types are aggregated up to 11 neighbourhood groups, as listed below.

such as counties or other administrative districts, and thus provide a better potential discriminatory variable. A third merit of the data base is that information on physical house characteristics is extensive and, unlike any other source, includes information on house size in terms of floor area - a variable which is a more precise indicator of size than simply number of rooms (which has to be relied upon in other sources). Subsequent analysis shows that size is in fact the most important determinant of house prices.

We summarise the information about the house characteristics and locational variables incorporated in the data base below:

1. Purchase price (recorded at the mortgage approval stage).
2. House characteristics variables - classification according to:

(a) House type:

Detached house

Semi-detached house

Terraced house

Detached bungalow

Semi-detached bungalow

Purpose-built flat or maisonette

Converted flat or maisonette

(b) Tenure:

Freehold or feuhold with vacant possession

Freehold or feuhold without vacant possession

Leasehold

Part freehold/part leasehold

(c) Garage:

Single garage

Double garage

Parking space

Neither garage nor parking space

- (d) Central heating:
 - No central heating
 - Full central heating (gas, electric, oil, or solid fuel)
 - Partial central heating (gas, electric, oil, or solid fuel)
 - (e) House size (floor area)
 - (f) Number of bathrooms
 - (g) Age of dwelling (number of years)
3. Locational Variables - classification according to:
- (a) *Regional location* based on 13 regions* (used only to classify the data base into 13 sets for subsequent generation of regional house price series);
 - (b) *Type of residential neighbourhood* based on 11 'ACORN' groupings:
 - Agricultural areas
 - Modern family housing, higher incomes
 - Older housing of intermediate status
 - Poor quality, older terraced housing
 - Better-off council estates
 - Less well-off council estates
 - Poorest council estates
 - Multi-racial areas
 - High status non-family areas
 - Affluent suburban housing
 - Better-off retirement areas

* These are equivalent to the 12 official Standard Regions with one region (South East) being divided into two: Outer Metropolitan Area and Outer South East.

(c) *Type of surrounding area* (as defined by Parliamentary Constituency boundaries), based on 7 groupings as follows:⁴

- Inner metropolitan area
- Scottish areas
- Poorer, declining industrial areas
- Traditional, stable industrial areas
- Better-off industrial areas
- High status and metropolitan suburbs
- Rural areas, resort and market towns

A list of the variables and labels used for identification purposes in computation is given in Appendix A.

For the purpose of this study, the data base is edited in order to exclude certain transactions which may be regarded as atypical. There are three main categories. First, there are houses which are sold at 'non-market' prices such as council houses sold at discounted prices to their tenants and other sales to sitting tenants in the private sector etc. Secondly, there are houses sold without vacant possession or which are unusual in being mixed freehold and leasehold. Thirdly, there are transactions which may be regarded as outliers either because they are genuinely atypical or because of an error in recording or coding at source. A procedure was therefore established in order to detect this kind of transaction. This procedure involved the analysis of frequency distributions, breakdowns and cross-tabulations of related characteristics to identify outlying cases on individual variables (univariate outliers). On the basis of these investigations the range

4 The classification of Parliamentary Constituencies is similar to that employed by CACI Market Analysis Ltd in the development of ACORN. It applies a large number of socio-demographic characteristics, including age structure, household composition, housing, employment and socio-economic status, to categorise constituencies into 28 types and 7 broader groups as shown. This classification does not apply in Northern Ireland. In addition, it is not possible to assign locational variables to new houses because of the frequent absence of post-code information.

of values within which 99 per cent of cases fell was taken as the range to use for further analyses. At the same time, the data were examined for the presence of outlying cases based on the complete set of characteristics (multivariate outliers). Two tests for multivariate outliers were used, namely Mahalanobis' distance and Cook's distance - for further details see Norušis (1985). It was found that elimination of univariate outliers also removed the most significant multivariate outliers. We refer to this data set as the 'cleaned' data set.

4.2 *The Methodology and Its Application*

4.2.1 *The Hedonic Method*

The term 'hedonic method' encompasses any use in an economic measurement of an 'hedonic function' which is a relationship between prices of varieties or models of heterogeneous goods - or services - and the quantities of characteristics contained in them, i.e.:

$$P = h(c) \quad (1)$$

where P is an n -element vector of prices of the varieties or models etc. and (c) is a $k \times n$ matrix of characteristics. The theory providing the economic interpretation of (1) in terms of price measurement rests on the 'hedonic hypothesis' - this is based on the concept that the value placed on heterogeneous goods by consumers derives from the aggregation of their utility-bearing attributes rather than the provision of a single well-defined service in consumption (Lancaster, 1966, 1971; Griliches, 1971; Triplett, 1971, 1975; Rosen, 1974).

The application of the hedonic method uses multivariate regression analysis to isolate the variations in prices that are caused by differences in the qualitative and quantitative characteristics of goods (in this case housing), from those which reflect other market forces (that is, purely inflationary factors operating over time). Given cross-sectional data on house prices and the attributes of the houses sold in different time periods, we can thus estimate the change in average price, from one time period to

another, on a standardised basis (that is, keeping the cross-sectional mix of attributes or characteristics constant). A particular attraction of the hedonic method is that it not only allows the inclusion of quantifiable characteristics in equation (1) above, but it also permits the inclusion of characteristics which are attached to goods through externalities such as, in the case of housing, the nature and quality of location.

The hedonic approach to price measurement in both production and consumption now has a long pedigree. It was pioneered by Waugh (1928) and Court (1936) and later revived by Griliches (1961) - see Griliches (1986) for discussion - but it has not been adopted widely in official price indexes in practice mainly because the data requirements are quite severe. The limited number of applications have mainly been in the USA and have been developed mainly within the last twenty years or so.⁵

4.2.2 *Technical Details*

We now turn to the application of the hedonic approach to the development of house price indices for the UK, using the data base described earlier. In relation to the present study, a cross-section of house prices, P_{it} , may be observed, where t represents the time period in which each house i is sold. As explained earlier, given the supply and demand conditions in the housing market, such houses may be priced differently due to differences in qualitative characteristics (such as the type of property, the availability of certain amenities, the location of the property etc.), and to differences in quantitative characteristics (such as the age of the property, the size of the property, garages, bathrooms etc.). Thus, for each house i we can write P_{it} as some function of these various characteristics, X_j , together with a group of unmeasured factors (assumed to be

5 The first employment of hedonic methods in any official price statistic occurred in the USA with the development in 1968 of a 'price index of new one-family houses sold' by the Bureau of the Census. It was employed again, some twenty years later in the USA when in 1985 it was introduced into the National Income and Product Accounts for the measurement of computer equipment prices (Cartwright, 1986). Since 1988 it has also been incorporated in the valuation of housing components contained in the US official Consumer Price Index.

randomly distributed) which are specific to each house but for which data are not available, e_{it} ; that is:

$$P_{it} = f(X_{1t}, X_{2t}, \dots, X_{jt}, e_{it}) \quad (2)$$

Given the nature of the data employed in this study, qualitative characteristics can only be represented by 'dummy variables' which take the value of 1 or 0 depending upon the presence or absence of a particular attribute. The technique of multivariate regression using ordinary least squares allows us to estimate the coefficients pertaining to each of the explanatory variables in equation (2). The analyses are carried out to generate six sets of index numbers for each of 13 regions and countries of the UK as defined earlier.

We consider next the usual technical issues that arise in multivariate regression analysis as applied to the development of the physical and locational characteristics model of house prices. We address the main technical issues in turn, concerning (a) choice of functional form, (b) optimal combinations of explanatory variables and (c) multicollinearity and heteroskedasticity.

(a) *Choice of functional form*

A potentially serious source of bias in hedonic-price and other regression-based studies may be associated with functional form mis-specification. In principle, many functional forms are possible but, unfortunately, there is no theoretical guidance as to which form is the most appropriate to a particular model. The solution to this problem, therefore, reduces to an empirical one. Box and Cox (1964) have developed a statistical test based on likelihood ratio tests to identify the functional form providing the 'best fit'. The procedure suggested by Box and Cox is adopted here.

At the outset, it should be noted that various versions of the Box-Cox test procedure may be employed to test not only for the appropriate transformation of the

dependent variable but also for the appropriate transformations of the explanatory variables to be included in the estimating regression equation. However, in relation to the present study a major limitation in applying this test is that many of the explanatory variables are dichotomous (that is, dummy variables taking the value of 1 or 0). This precludes higher transformations of these variables which must of necessity be linearly related to the dependent variable. The Box-Cox test cannot, therefore, be used to assess any of the qualitative characteristics, since these are coded as dummy variables. Thus the search for a functional form using the Box-Cox procedure can only be conducted with respect to the quantitative explanatory variables and the dependent variable, price. On the other hand, it should be appreciated that the use of dummy variables conveniently permits the incorporation of variables to which price may be related non-linearly without the necessity of specifying the nature of the non-linearity.

Our exploratory analysis clearly indicated that the regression results are substantially more sensitive to transformations of the dependent variable than of the explanatory variables. Therefore, the search for the most appropriate functional form focused on transformations of the dependent variable. Transformations of the explanatory variables and their optimal combinations are discussed below.

The procedural steps involved in the Box-Cox test may be summarised briefly as follows:

- (1) Define a family of transformations of the dependent variable, price (P_{it}), such that:

$$P_{it}^{\lambda} = (P_{it} - 1)/\lambda \quad \text{for } \lambda \neq 0$$

$$= \ln(P_{it}) \quad \text{for } \lambda = 0$$

This family of transformations, generated by the parameter λ (over a range, for example of $m \leq \lambda \leq n$), is well defined for all $P_{it} > 0$. In this study, the family of transformations tested corresponds to $-0.5 \leq \lambda \leq 1.1$, in steps of 0.1.

- (2) Estimate each of the regression equations which correspond to each of the transformations of P_{it} - that is, for each $P_{it} = f(X_{jt}, e_{it})$, for $m \leq \lambda \leq n$.
- (3) Calculate for each estimated regression a 'concentrated log-likelihood' function, L , which takes the following form (see Spitzer, 1982, 307-9):

$$L = \frac{-N}{2} \{ \ln(2\pi) + \ln \hat{\sigma}^2 + 1 \} + (\lambda - 1) \sum \ln(P_{it})$$

where N = the number of observations on P_{it}^{λ} in each of the estimated regressions, and

$\hat{\sigma}^2$ = the estimated variance of the error term in each regression,

approximated by RSS/N (where RSS is the regression residual sum of squares).

- (4) Given the set of computed L values, each one corresponding to a particular value of λ , select the 'maximum likelihood' estimator of λ , say $\hat{\lambda}$, which maximises the value of the concentrated log-likelihood function - denoted by $L_{MAX}(\hat{\lambda})$.

- (5) A chi-square (χ^2) test with 1 degree of freedom (d.f.) is then carried out on each of the computed L values; for example, to test the appropriateness of the semi-log model, the χ^2 test statistic is given by:⁶

$$2\{L_{MAX}(\hat{\lambda}) - L(\lambda = 0.0)\}$$

and for the linear model, the test statistic is given by:

$$2\{L_{MAX}(\hat{\lambda}) - L(\lambda = 1.0)\}$$

where $L(\lambda = 0.0)$ and $L(\lambda = 1.0)$ represent the values of the concentrated log-likelihood function, L , corresponding to $\lambda = 0.0$ and 1.0 respectively.

⁶ The test statistic is equivalent to minus twice the logarithm of a likelihood ratio - that is, of the form $-2\log A/B$ which can be rearranged as $2(\log B - \log A)$ as above - which has an asymptotic χ^2 distribution. For proof of this, see Theil (1971), p.396.

- (6) Finally, on the basis of the above test, we are then able either to accept or to reject each possible transformation of P_{it} , and to decide on the optimal value of λ (and hence the most appropriate functional form of the hedonic regression equation).

Table 4 presents the computed values of the concentrated log-likelihood function, L , which correspond to the range of values explored in the context of the present study (with $-0.5 \leq \lambda \leq 1.1$). A graphical distribution of this function is also shown in Figure 1. It will be seen that the value of L is maximised when $\lambda = 0.0$; that is, $L_{MAX}(\hat{\lambda} = 0.0) = -189545$, which corresponds to the transformation of P_{it} into natural logarithms ($\ln P_{it}$).

INSERT TABLE 4

INSERT FIGURE 1

The results of carrying out the χ^2 test are presented in Table 5. It will be noted that in the interests of brevity we present here only the results for the linear ($\lambda = 1.0$) and semi-logarithmic ($\lambda = 0.0$) cases.

INSERT TABLE 5

The conclusion to be drawn from the Box-Cox analysis is that the logarithmic transformation of P_{it} provides the most appropriate functional form for the hedonic regression model.

(b) *Optimal combinations of explanatory variables*

In conjunction with the Box-Cox test, analyses were also carried out to determine the optimal combinations and appropriate transformations of the explanatory variables in the regression equations. In the interests of brevity, details of these investigations are presented in Appendix B. The conclusions of these investigations may be summarised as follows:

- (i) floor area gave consistently better results (in terms of adjusted- R^2 and t-values) than the alternative size variable - number of rooms. In addition, there was very little to choose between the transformations of the size variable (floor area) in terms of statistical fit, and hence, for simplicity, the untransformed variable was finally selected for inclusion;
- (ii) as with floor area, transformations of age made very little difference to the overall explanatory power of the regression models. Hence we selected age in its 'raw' form (that is, number of years) as the candidate for inclusion;
- (iii) while the use of the nine separate central heating categories gave slightly better results than the three broader groupings of 'full', 'non', and 'partial', some of these nine categories were frequently rejected from the equations for the different regions because they failed to meet the significance criteria for inclusion. To avoid this problem, therefore, and to maintain consistency across the regions, it was decided to include the broader, three-fold, classification rather than the nine-fold classification (these have been shown to provide broadly equivalent results);
- (iv) the use of only two tenure categories (freehold or feuhold with vacant possession and leasehold with vacant possession) gave reasonably consistent results; use of the original categories included in the data base added little or nothing to the overall explanatory power of the models;
- (v) our investigations indicated that the inclusion of *both* ACORN and Parliamentary Constituency (PC) codes as locational variables provided an improvement in the overall explanatory power of the regression models compared with those obtained using only one of these. This seems to

suggest that the two locational variables are measuring different locational influences, the former at the 'micro' or neighbourhood level and the latter at a broader, 'macro' level as originally hypothesised. A summary of our findings with regard to these variables is shown in Table 6 below.

INSERT TABLE 6

(c) *Multicollinearity and heteroskedasticity*

Multicollinearity can cause problems with respect to the following aspects of regression analysis:

- (i) estimated regression coefficients may not be uniquely determined,
- (ii) estimates of the coefficients from sample to sample may fluctuate markedly, and
- (iii) less reliability can be placed on the relative importance of variables as indicated by their partial regression coefficients.

Multicollinearity is inevitably present to some degree in most economic analyses and can rarely be eliminated completely. It has to be accepted in a study such as this, that certain characteristics will, by their very nature, be closely associated with each other. The aim therefore, must be to minimise the influence of multicollinearity as much as possible. Both logical and statistical criteria should be used.

There are a number of statistical approaches that may be employed in identifying the statistical relationship between explanatory variables and their relative importance based on adjusted- R^2 and t-values. For this purpose we employed 'forward selection', 'backward elimination' and 'stepwise selection' procedures, embodied in the SPSSX statistics package (for a detailed discussion of the computational procedures described above, see Norušis (1983), 159-65 and Norušis (1985), 42-55). In the present study, all

three methods were employed and were found to give a broadly consistent picture of the relative importance of the variables.

The classic method of dealing with the problem of multicollinearity is to discard redundant variables. It will be appreciated, however, that even though some variables may be shown to offer little explanatory power, it is not sensible to exclude them if they are members of a set which is, in general, very important in the analysis. Exclusion of a member of a set would necessitate removal of the whole set from the equation. In this study, the main candidates for redundancy were the alternative characteristics which measure size - number of rooms and floor area. Examination of the correlation matrix for these variables alone does show high correlations among these characteristics (see Table 7). Thus, a choice had to be made as to the best variable or variables to use as an indicator of size. This resulted in size (floor area) being chosen as the preferred variable.

INSERT TABLE 7

It was expected that the two sets of ACORN and Parliamentary Constituency (PC) codes, incorporated to reflect the influence of locational attributes, would be highly multicollinear because of the similar nature of the characteristics on which the classifications were based. However, the correlation matrix and the variable selection procedures do not reveal any significant problem of multicollinearity with these classification codes. As noted earlier, it appears in general that the PC variables tend to reinforce the influence of the ACORN variables, rather than to detract from them. The effect of the PC variables is to augment the significance of some ACORN variables while diminishing the significance of others but in general there seemed to be adequate justification for retaining both on statistical as well as theoretical grounds.

A full Pearson product-moment correlation matrix of the variables included in the final regression model is presented as Appendix C.

Another potential problem is heteroskedasticity. In using microeconomic data of the kind used in the present study, the assumption of constant variance of the error term, e_{it} , may be violated. This issue was explored by plotting residuals using a sample of the data set. This showed that the constant variance assumption was not seriously violated. In any case, even if heteroskedasticity exists, it would only increase the confidence intervals of the indices; it would not affect their unbiasedness.

4.3 *Application of the Methodology*

The methodology described above is applied in two stages. First, it is employed to generate regional index numbers for four house groups and two buyer-type groups for each of 13 regions. These are:

- ℓ all houses
- ℓ new houses
- ℓ modern (post-1944) houses
- ℓ older (pre-1945) houses
- ℓ houses bought by first-time buyers
- ℓ houses bought by former owner-occupiers

The second stage is the calculation of index numbers for the United Kingdom.

In the first stage, the methodology may be employed to generate index numbers in two basic ways. The usual way of devising an index, employing the hedonic approach, is to take a weighted average of the estimated regression coefficients, each coefficient being regarded as an implicit price of the corresponding characteristic. The other way is to incorporate an additional dummy variable for time into a regression model covering more than one time period, the estimated regression coefficient on such a dummy directly reflecting the change in price from one time period to another.

However, this second approach has certain disadvantages. In particular, from the viewpoint of practicality, it makes greater computational demands in terms of computer processing time and space because it requires the chaining together of the data for many time periods and, secondly, it does not permit the adoption of alternative characteristics weights (that is, other than those which are internal to the particular data set). The approach of weighting the regression coefficients is therefore preferred.

4.3.1 *Generation of Regional Index Numbers*

The steps involved in generating regional index numbers are summarised below.

They apply to the six house and buyer groups for each region.

- (i) Weights, Q_{jt_0} for the j explanatory variables in a chosen reference time period t_0 , are calculated. These correspond to the proportions of the qualitative (categorical) variables and the means of the quantitative variables present in this time period.
- (ii) With price recorded in natural log form, the regression coefficients for the j explanatory variables are estimated in both the chosen time period (that is, b_{jt_0}) and for every subsequent time period (such as, b_{jt_n} for the current time period).
- (iii) An index for the current period (I_{t_n}) is then calculated as the ratio between the sum of the weighted coefficients for the current period and the sum of the weighted coefficients for the chosen reference period (both expressed in exponent form). That is:

$$I_{t_n} = \frac{\exp \sum b_{jt_n} Q_{jt_0}}{\exp \sum b_{jt_0} Q_{jt_0}} \times 100$$

In order to avoid reliance on any single time period for determining the pattern of weights to be adopted in this expression, we adopted instead a set of weights corresponding to the *average* value of Q_t for each variable j over a number of years. Initially, this was taken as the full period for which data were available, i.e. from 1983 to 1988. In future, it is intended that a 'rolling pattern' of weights will be employed by extending this time period. The rationale of this procedure is to maintain an up-to-date pattern of weights and to avoid the need for periodic re-standardisation producing possible discontinuities in the price index series. Regressions have to be run, of course, for each house and buyer category in each of the 13 regions in each quarterly time period. Thus in the period covered by this study, this generates over 2,000 sets of regression results. In the interests of brevity, and for the sake of illustration, we reproduce a set of specimen results for one region and for one time period only, namely 1986 Q1 in Table 8 below. These results are reasonably representative, though, naturally, it will be appreciated that coefficients and significance levels are subject to variation over time and from one regression to another.

INSERT TABLE 8

Statistical reliability of the results in general may be assessed from a number of standpoints. First, the degree of explanatory power attained by each of the regional house price models for each category is very high (as measured by adjusted- R^2 values). Generally, some 70-90 per cent of the variation in house prices is explained by the models. Secondly, the statistical significance levels for individual regression coefficients (on the basis of t-tests) is also very satisfactory: the vast majority are shown to be statistically significant at the 5 per cent, or very much higher, levels of significance.

4.3.2 *UK index numbers*

UK index numbers could be computed in exactly the same way as those for each region described above i.e. running regressions covering the whole data set involving as many as 25,000 cases per quarter. However, this demands that the regional pattern of

lending reflected in the data base should be representative of *all* house purchase transactions. This is not necessarily the case and for this reason, the UK index numbers are derived as weighted averages of the corresponding 13 regional series for each of the six house and buyer groups for each time period, using weights which are representative. For this purpose, a set of regional weights is employed based on the pattern of *all* building society mortgage transactions, as revealed in the official DOE Five Per Cent Sample Survey of building society mortgages over a rolling period of six years (initially 1983 to 1988).

5. RESULTS: REGIONAL AND UK INDICES

This study has resulted in the establishment of sets of indices for the quarterly time periods from 1983 Q1 to 1989 Q4. A complete set of these, showing series of standardised index numbers for each region and for the UK as a whole for the six house and buyer groups, is given in Appendix D.

A summary of all these results, showing the percentage increase in house prices, on a standardised basis, for each series over the period 1983 Q1-1989 Q4 is given in Table 9. This shows that for all houses generally prices increased on average for the UK as a whole by 133.8 per cent, varying across the regions and constituent countries from a low of 20.3 per cent in Northern Ireland to a high of 162.4 per cent in Greater London. With regard to the breakdown by house type, it will be seen that new houses generally increased less than non-new houses at the UK level but this difference was not consistent across the regions. In terms of buyer type, at the UK level houses bought by first-time buyers increased by slightly more than those bought by former owner-occupiers but in some areas this disparity was considerable (such as in East Anglia and Northern Ireland).

INSERT TABLE 9

Finally, it is of interest to compare the standardised indices based on the hedonic method with indices based on simple average prices. For illustration, such a comparison is made for all houses at the UK level in Figure 2. There are a number of notable features. First, over the period as a whole, prices on a standardised basis are shown to have risen somewhat less than simple average prices - 133.8 per cent as against 142.3 per cent - and this was a consistent tendency throughout most of the period with the exception of two quarters (1988 Q4 and 1989 Q1). A second notable feature is that the simple average price series is more volatile than the standardised series. Thirdly, the simple average series shows reversals of trends which are not mirrored in the standardised series. Three periods are particularly notable:

	<u>Simple average price change</u>	<u>Standardised price change</u>
1984 Q2-1984 Q4	-3.6%	+3.7%
1985 Q2-1986 Q1	-1.3%	+4.4%
1988 Q3-1988 Q4	-5.6%	+5.3%

Differences such as these arise of course because of variations in the underlying mix of traded properties from one time period to the next. The magnitude of the disparities is striking and reinforces the need for standardisation and thus more reliable measurement of price movements.

INSERT FIGURE 2

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APPENDIX A

Definitions and Code Names of Variables

We list below those variables that have been included in the final model specifications. In the final regression specifications and results (see specimen in Table 8), it will be noted that one constituent of each dummy variable set is excluded. This is necessary in order to avoid 'over-specification' of the ordinary least squares regression equations. The dummy variable elements chosen for exclusion were: DH, FFVP, DGAR, CHF, B and P6.

<i>Variable Name</i>	<i>Code</i>	<i>Variable Type</i>
HOUSE TYPE:		
Detached house	DH*	A set of dummy variables coded as 1 for the house type to which the property corresponds, otherwise 0.
Semi-detached house	SDH	
Terraced house	TH	
Detached bungalow	DB	
Semi-detached bungalow	SDB	
Purpose-built flat or maisonette	FB	
Converted flat or maisonette	FC	
TENURE:		
Freehold or feuhold with vacant possession	FFVP*	A set of two dummy variables, coded as 1 when tenure type corresponds, otherwise 0.
Leasehold	LH	
GARAGE:		
Double garage	DGAR*	A set of four dummy variables coded as 1 for the corresponding category, 0 for the others.
Single garage	SGAR	
Parking space	SPACE	
Neither garage nor parking space	NOPARK	
AGE OF DWELLING:		
This is calculated from the construction date such that AGE = [(analysis year+1)-date]. The addition of 1 is necessary to avoid a zero age for houses built in the analysis year, which would then exclude such cases from the regression.	AGE	Number of years.
CENTRAL HEATING:		
Full central heating	CHF*	A set of three dummy variables coded as 1 when heating type corresponds and 0 when it does not.
No central heating	NOCH	
Partial central heating	CHP	
SIZE of DWELLING:	SIZE	Floor area in sq. ft.
BATHROOMS:	BATH	Actual number of bathrooms.

APPENDIX A (Continued)

ACORN GROUPS:

Agricultural areas	A
Modern family housing, higher incomes	B*
Older housing of intermediate status	C
Poor quality older terraced housing	D
Better-off council estates	E
Less well-off council estates	F
Poorest council estates	G
Multi-racial areas	H
High status non-family areas	I
Affluent suburban housing	J
Better-off retirement areas	K

A set of eleven dummy variables coded as 1 for the corresponding group and 0 otherwise. Not included in specification for 'New Houses' due to the absence of the corresponding post codes.

PARLIAMENTARY CONSTITUENCY GROUPS:

Inner metropolitan	P1
Scottish areas	P2
Poorer, declining industrial areas	P3
Traditional, stable industrial areas	P4
Better-off industrial areas	P5
High status and metropolitan suburbs	P6*
Rural areas, resort and market towns	P7

A set of seven dummy variables coded as 1 for the corresponding group and 0 otherwise. Not present in specification for 'New Houses' due to the absence of the corresponding post codes.

HOUSE PRICE	LP
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Natural log of house price (P) measured at the mortgage approval stage.

* Excluded variables

APPENDIX B

OPTIMAL COMBINATIONS AND TRANSFORMATIONS OF EXPLANATORY VARIABLES

Summary details of the analyses that were carried out to determine the optimal combinations and appropriate transformations of the explanatory variables in the regression equations are set out below.

- (a) *Size variables.* Investigations were made of: area (square feet), area squared, square root of area, number of rooms or reception rooms plus bedrooms.
- (b) *Age of property.* Investigations were made of: age (in years), age squared or square root of age.
- (c) *Central heating.* Investigations were made using all nine central heating categories provided in the data base or, alternatively, combinations of these to give a set of three categories only, namely full, partial or no central heating.
- (d) *Tenure.* Investigations were made using all of the categories in the data base or an aggregation into two categories: freehold or feuhold with vacant possession, and leasehold with vacant possession.
- (e) *Locational variables.* Investigations were made of the use of *either* ACORN codes or Parliamentary Constituency classification codes in the final regressions, or *both* as indicators of the impact of locational factors on house prices.

APPENDIX D

Results: Regional and UK Index Numbers 1983Q1-1989Q4

Table

D1	All houses
D2	New houses
D3	Older (Pre-1945) houses.
D4	Modern (Post-1944) houses.
D5	First-time buyers.
D6	Former owner-occupiers.

TABLE D1: ALL HOUSES - STANDARDISED INDEX NUMBERS

DATE	REGIONS											UK	
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland
983 Q1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Q2	104.7	103.1	104.5	101.7	102.0	103.5	104.3	104.4	103.5	104.2	104.7	100.2	103.7
Q3	107.5	103.3	105.1	103.0	105.6	105.3	107.1	107.9	106.7	107.2	106.8	102.5	105.8
Q4	107.6	103.7	106.4	102.9	106.6	108.2	110.7	110.9	107.7	105.8	107.1	101.2	107.0
984 Q1	110.5	108.1	108.2	107.1	109.2	112.8	114.9	116.9	112.1	109.4	111.1	104.1	111.0
Q2	115.3	111.5	114.8	109.1	115.6	117.8	119.8	122.7	114.4	114.7	115.0	105.3	115.3
Q3	116.1	110.5	114.2	109.9	119.3	119.8	122.9	125.4	116.2	116.8	117.6	107.3	116.5
Q4	118.5	112.2	119.0	111.9	121.0	122.8	125.4	130.1	120.5	116.3	119.4	110.2	119.6
985 Q1	121.1	115.6	121.6	115.9	124.7	127.3	130.7	135.7	123.5	117.6	122.4	112.7	123.1
Q2	124.4	119.0	124.3	118.1	130.3	131.6	135.6	141.8	127.0	121.5	125.4	111.9	127.0
Q3	125.3	120.0	125.7	119.3	131.4	134.7	140.4	147.0	130.1	121.4	124.8	115.8	129.0
Q4	128.0	120.3	127.7	120.8	135.0	137.6	145.0	152.6	132.0	125.5	125.3	115.8	131.7
986 Q1	125.7	120.3	130.1	119.8	135.1	141.3	146.3	158.9	135.4	123.8	123.8	114.5	132.6
Q2	131.7	122.5	134.8	122.6	142.0	147.3	153.3	166.7	140.7	127.0	127.7	117.6	137.5
Q3	126.9	124.5	137.1	124.8	146.2	153.7	162.9	179.5	147.0	128.0	128.3	120.1	141.8
Q4	133.1	125.7	141.9	128.9	154.4	161.6	173.0	191.3	150.9	132.9	129.0	118.2	147.0
987 Q1	134.1	129.2	147.6	134.7	160.6	169.8	186.8	203.9	156.7	133.5	130.4	115.1	153.4
Q2	136.2	132.0	153.9	142.3	176.8	182.0	198.1	219.1	165.5	139.0	131.1	123.0	161.4
Q3	137.2	134.0	154.2	148.8	186.5	192.7	209.5	231.3	173.7	139.0	131.6	121.0	166.8
Q4	131.1	131.5	156.4	149.4	192.2	194.4	209.3	228.3	175.2	134.9	128.6	114.8	166.0
988 Q1	131.1	134.1	161.1	156.1	209.0	207.1	217.9	232.5	186.9	140.8	125.2	115.4	171.4
Q2	135.2	140.9	181.9	177.8	238.6	227.2	230.6	246.2	212.3	147.8	129.2	117.3	186.0
Q3	143.3	151.5	212.4	209.8	274.2	253.2	250.5	262.8	246.7	167.0	134.8	113.9	206.6
Q4	154.7	165.6	235.2	222.6	267.7	261.9	256.1	265.3	253.2	192.7	139.9	117.3	217.6
989 Q1	171.1	181.3	248.8	231.3	272.6	264.8	262.3	268.7	250.8	210.5	146.3	116.7	226.3
Q2	194.0	202.0	255.4	240.8	275.9	269.2	266.4	274.0	257.9	224.5	160.4	121.5	236.6
Q3	199.7	223.4	248.9	249.1	260.2	259.5	259.3	269.5	255.7	225.0	171.9	119.2	238.7
Q4	217.3	220.2	260.5	244.3	246.5	244.3	246.0	262.4	239.1	224.2	176.6	120.3	233.8

TABLE D2: NEW HOUSES - STANDARDISED INDEX NUMBERS

DATE	REGIONS													UK																																						
	Northern				Yorkshire & Humber-side				North West		East Midlands		West Midlands		East Anglia		Outer South East		Outer Metro-politan		Greater London		South West		Wales		Scotland		Northern Ireland																							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2	Q1		Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2																	
983	100.0	101.6	99.6	104.7	100.0	102.7	101.1	101.4	100.0	105.1	102.5	106.3	100.0	102.7	104.5	112.7	100.0	104.6	103.4	111.9	100.0	104.7	106.8	107.5	100.0	103.7	106.8	111.5	100.0	105.1	111.6	108.7	100.0	104.8	108.5	108.8	100.0	100.0	105.1	113.9	100.0	100.0	103.0	105.2	100.0	96.2	104.2	105.3	100.0	102.4	105.0	107.7
984	112.5	112.4	110.7	109.7	108.5	113.7	109.4	109.3	106.9	113.2	111.3	115.2	107.8	118.1	111.3	115.2	114.1	118.1	124.3	123.3	114.9	117.2	119.3	120.5	113.6	120.5	121.7	124.5	119.2	123.6	119.4	124.2	113.6	114.8	118.4	116.8	114.5	119.5	117.5	120.3	106.7	113.8	113.0	111.7	105.3	108.3	107.0	111.2	110.7	114.9	115.4	116.6
985	111.8	109.5	120.4	127.4	119.3	117.6	118.6	115.0	119.5	123.2	119.8	126.1	119.5	120.2	116.9	126.5	126.8	132.8	134.6	136.2	125.1	131.9	133.9	138.6	129.7	132.5	136.0	144.5	124.6	133.5	138.6	141.5	121.1	125.6	128.4	127.8	119.7	122.8	131.0	123.4	114.6	113.1	114.2	116.6	120.4	123.0	125.2	128.7				
986	116.1	126.8	126.0	124.7	114.7	132.8	124.3	121.6	128.4	135.8	119.8	143.5	123.6	122.3	130.0	131.4	140.9	145.0	148.5	161.6	139.6	145.5	155.0	160.6	145.6	153.8	164.6	174.1	150.8	154.8	163.0	167.1	133.1	140.0	145.4	153.4	130.0	133.5	139.0	135.9	117.5	120.7	120.8	127.5	129.7	134.0	139.4	144.6				
987	128.2	127.8	135.8	129.7	131.2	151.0	126.0	128.5	148.8	152.4	128.1	157.4	133.8	141.1	139.3	147.9	164.9	176.1	186.4	190.6	168.6	177.3	192.7	190.4	181.8	192.7	202.8	203.3	183.0	193.3	210.0	210.3	149.8	162.2	167.5	169.0	136.7	153.0	149.1	144.5	120.3	122.8	127.8	123.8	121.0	122.7	118.8	118.0	147.8	154.5	159.3	160.2
988	124.8	125.5	136.1	147.4	125.8	170.1	138.6	177.9	158.7	196.0	125.8	235.5	150.8	171.5	202.6	198.9	210.0	233.6	265.4	297.8	198.4	222.2	247.8	245.0	213.0	228.5	243.9	252.3	206.1	220.2	235.5	243.4	179.3	205.8	230.9	245.8	156.6	156.1	176.9	207.5	124.1	123.7	130.8	131.7	116.7	122.5	116.9	122.1	164.5	178.1	197.1	209.7
989	166.9	177.4	196.2	168.3	159.2	237.3	185.9	199.0	217.0	209.2	159.2	220.6	208.4	217.3	221.5	198.7	262.0	255.0	243.6	241.3	266.8	252.2	242.6	235.1	254.5	246.2	266.6	251.8	249.3	224.7	227.8	233.9	241.2	235.9	238.7	221.5	199.6	225.7	225.1	236.5	139.3	155.0	155.7	170.1	118.1	120.8	122.8	125.9	211.1	214.7	213.7	211.2

TABLE D4: MODERN (POST-1944) HOUSES - STANDARDISED INDEX NUMBERS

DATE	REGIONS												UK	
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland	Northern Ireland		
1983	Q1 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Q2 105.6	102.5	102.8	100.9	103.0	103.5	103.6	105.1	103.5	105.8	106.2	102.4	103.5	103.5
	Q3 108.4	104.1	104.1	101.6	103.9	105.7	106.5	108.6	107.5	108.9	107.4	103.8	105.5	105.5
	Q4 104.1	103.7	105.1	101.0	106.9	109.1	110.4	113.2	107.7	108.4	109.6	105.0	106.8	106.8
1984	Q1 111.5	107.4	106.8	104.9	109.2	113.3	114.7	116.6	112.1	109.5	111.5	107.4	110.4	110.4
	Q2 113.8	110.9	111.4	105.3	111.1	117.4	119.1	122.7	113.0	114.6	118.2	106.3	113.9	113.9
	Q3 116.0	109.7	110.1	106.8	116.1	119.3	121.9	123.6	116.1	117.3	120.6	110.3	115.4	115.4
	Q4 114.9	112.5	116.0	110.3	120.9	123.0	124.9	127.5	120.0	116.7	124.1	111.6	118.8	118.8
1985	Q1 118.7	113.5	118.4	112.7	121.4	127.1	129.7	133.7	122.8	119.1	126.5	115.1	121.7	121.7
	Q2 122.3	118.6	123.6	115.3	127.0	131.2	135.3	139.1	124.9	122.7	128.1	119.6	125.7	125.7
	Q3 125.5	120.2	125.3	117.0	131.8	133.3	139.8	141.5	129.3	123.7	129.1	120.4	127.9	127.9
	Q4 125.3	119.6	124.1	118.2	132.1	138.2	143.1	147.3	130.5	126.6	128.7	117.4	129.7	129.7
1986	Q1 126.9	119.4	125.6	116.2	134.3	140.1	145.3	152.2	135.7	125.5	125.7	117.7	130.7	130.7
	Q2 131.3	123.5	130.8	120.1	141.2	146.4	151.3	159.8	139.1	125.8	131.0	120.3	135.4	135.4
	Q3 126.7	125.9	133.1	122.6	144.9	153.1	161.1	174.2	145.6	127.8	131.1	122.3	139.5	139.5
	Q4 130.7	128.6	139.6	127.7	151.2	160.6	170.6	185.4	149.7	132.4	133.1	122.1	144.9	144.9
1987	Q1 130.8	129.7	143.5	134.6	157.5	170.6	185.0	196.9	154.3	136.5	133.5	118.6	151.0	151.0
	Q2 131.1	137.5	149.3	139.4	172.6	182.2	196.5	214.3	162.9	136.0	133.6	122.9	158.5	158.5
	Q3 133.6	137.3	148.8	147.1	182.3	192.7	207.1	216.8	171.9	139.2	132.5	121.8	163.6	163.6
	Q4 126.7	135.6	146.8	145.6	188.1	193.4	204.4	217.6	171.4	132.9	129.7	112.3	161.6	161.6
1988	Q1 128.3	134.6	161.0	156.5	205.6	207.7	214.8	220.6	185.0	140.5	128.2	114.8	169.5	169.5
	Q2 134.7	144.7	181.4	178.0	237.5	225.3	226.5	236.1	212.5	148.6	131.0	117.7	184.3	184.3
	Q3 140.8	170.5	213.9	216.7	269.6	249.1	244.8	248.5	248.2	174.2	136.5	117.1	206.8	206.8
	Q4 151.8	198.6	231.8	221.5	268.2	258.1	255.4	254.1	249.9	206.5	142.7	119.8	219.0	219.0
1989	Q1 169.0	200.7	242.9	231.8	268.8	262.9	257.4	258.5	253.2	218.1	150.0	118.1	225.8	225.8
	Q2 193.7	214.9	243.2	236.4	302.1	268.4	261.8	263.7	257.2	228.2	161.6	120.4	235.7	235.7
	Q3 204.7	227.6	242.4	239.3	258.4	252.4	251.4	254.7	253.7	230.0	171.0	118.0	233.8	233.8
	Q4 224.3	241.8	243.3	237.3	260.1	234.4	234.7	247.9	233.9	228.2	177.4	126.1	230.4	230.4

TABLE D5: FIRST-TIME BUYERS - STANDARDISED INDEX NUMBERS

DATE	REGIONS											UK	
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland		Northern Ireland
1983 Q1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Q2	104.4	103.0	105.3	101.2	102.6	102.3	103.1	102.7	102.0	105.2	103.8	97.6	102.9
Q3	108.7	103.0	104.7	102.4	108.2	103.5	106.1	105.4	103.6	108.4	105.8	102.1	105.0
Q4	109.6	103.1	106.6	102.7	105.3	105.8	110.4	109.1	105.7	108.3	108.2	99.3	106.3
1984 Q1	111.3	108.5	109.7	106.5	108.8	111.4	113.3	114.7	112.6	115.2	112.7	102.8	110.8
Q2	117.6	111.4	115.3	109.2	118.8	116.1	119.1	120.3	113.6	115.4	114.1	105.5	114.9
Q3	118.0	109.1	114.4	109.7	122.3	117.8	122.2	123.2	116.5	116.7	116.8	106.3	115.8
Q4	119.5	109.5	117.9	111.8	121.6	122.5	124.8	128.3	120.7	118.7	121.4	109.9	119.3
1985 Q1	125.5	114.0	124.4	115.9	126.9	127.2	130.6	134.3	124.2	119.0	122.7	111.0	123.1
Q2	125.7	117.8	126.8	119.1	136.1	129.9	133.9	140.0	128.5	120.7	126.9	109.9	127.0
Q3	124.4	119.4	127.9	118.2	131.8	133.4	139.6	144.5	127.7	121.1	127.6	114.1	128.2
Q4	127.7	119.8	128.4	120.9	132.8	137.5	143.8	151.1	132.8	128.9	126.4	113.9	131.7
1986 Q1	130.5	118.9	131.7	119.0	135.3	142.6	147.2	156.7	136.9	126.2	127.1	113.7	133.0
Q2	132.5	121.5	138.6	122.4	145.4	148.5	151.8	163.8	142.2	127.5	130.6	115.9	137.9
Q3	133.3	122.7	138.8	124.7	148.5	153.6	159.5	176.8	147.3	131.3	129.6	117.4	141.5
Q4	135.5	122.0	145.4	126.2	156.5	158.7	170.5	186.5	149.2	131.6	131.2	115.3	145.9
1987 Q1	136.5	126.6	148.0	135.6	163.7	167.8	186.6	196.2	156.0	136.5	132.8	112.1	152.5
Q2	144.0	129.8	156.9	139.0	183.6	178.0	192.9	211.5	163.4	140.4	133.2	120.2	159.5
Q3	141.6	132.1	153.7	145.8	189.4	185.9	206.8	226.5	172.2	140.6	132.7	121.3	164.7
Q4	135.5	130.5	159.7	149.5	200.6	195.4	213.2	225.6	175.7	139.6	131.2	114.3	166.7
1988 Q1	135.0	131.5	163.9	156.3	208.2	207.2	220.4	230.3	184.0	146.5	129.0	114.3	171.0
Q2	140.2	138.0	184.3	175.2	239.6	229.0	230.5	242.3	202.5	148.9	132.4	115.7	183.5
Q3	151.4	142.9	209.7	201.4	274.8	254.8	251.5	259.4	236.8	169.4	136.4	114.1	202.2
Q4	158.8	157.6	232.9	213.3	250.3	259.7	256.8	263.3	247.0	185.1	140.7	116.0	211.1
1989 Q1	172.4	170.0	250.7	227.0	304.8	267.4	264.0	265.8	245.4	205.3	144.3	118.6	224.3
Q2	197.4	192.8	263.8	257.5	269.0	264.3	275.0	273.9	254.4	217.9	163.6	118.9	235.7
Q3	195.5	208.1	265.4	252.1	273.5	265.3	268.7	266.8	245.7	228.6	173.1	120.8	238.4
Q4	191.9	218.0	247.8	247.4	308.4	241.6	255.7	261.4	243.3	217.2	177.8	110.7	233.4

TABLE D6: FORMER OWNER-OCCUPIERS - STANDARDISED INDEX NUMBERS

DATE	REGIONS													UK									
	Northern Yorkshire & Humber- side	North West	East Midlands	West Midlands	East Anglia	Outer South East	Outer Metro- politan	Greater London	South West	Wales	Scotland	Northern Ireland											
1983	Q1 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						
	Q2 106.3	101.4	103.1	101.6	102.2	103.7	104.5	106.1	103.8	104.6	104.9	104.3	103.6	107.6	102.8	103.3	104.9	105.8					
	Q3 107.6	102.8	104.9	103.1	105.4	106.2	107.6	109.5	107.4	107.2	106.4	102.9	105.8	108.6	104.0	104.5	106.4	107.4	107.4				
	Q4 108.6	104.0	106.8	103.0	109.0	109.3	110.8	112.4	108.7	105.6	106.4	104.7	107.4	111.9	108.4	107.7	109.3	110.8	108.7	108.7			
1984	Q1 111.9	108.4	107.2	107.9	109.8	113.6	115.7	118.7	111.5	106.7	109.3	105.2	111.0	115.0	110.3	111.2	114.1	114.7	114.7	114.7			
	Q2 115.0	110.3	111.2	108.2	114.5	118.2	119.5	124.4	114.1	116.1	114.1	104.8	114.7	115.4	110.2	110.7	113.8	118.2	116.3	117.8	117.0	112.0	116.6
	Q3 115.4	110.2	110.7	109.9	118.2	120.6	123.2	127.2	116.3	117.8	117.0	112.0	116.6	118.7	115.8	113.0	118.8	121.4	120.2	116.1	117.5	111.2	119.5
	Q4 118.7	115.8	113.0	111.6	121.4	122.8	125.7	131.6	120.2	116.1	117.5	111.2	119.5	121.4	116.2	116.1	124.8	137.1	123.0	117.8	121.5	116.2	122.7
1985	Q1 121.4	115.3	116.2	116.1	124.8	126.9	130.8	137.1	123.0	117.8	121.5	116.2	122.7	123.4	119.2	118.8	121.5	142.7	125.4	122.6	122.5	114.0	125.9
	Q2 123.4	119.2	118.8	117.1	128.5	131.7	135.9	142.7	125.4	122.6	122.5	114.0	125.9	124.8	121.8	119.7	123.0	147.1	130.0	121.6	121.2	117.7	128.4
	Q3 124.8	121.8	119.7	118.9	133.2	134.6	139.6	147.1	130.0	121.6	121.2	117.7	128.4	125.7	122.1	119.2	125.4	152.0	130.3	123.3	123.1	117.5	130.1
	Q4 125.7	122.1	119.2	119.7	135.0	136.5	144.4	152.0	130.3	123.3	123.1	117.5	130.1	125.7	125.4	119.2	125.4	161.7	150.9	133.9	127.3	117.5	130.1
1986	Q1 123.9	120.1	120.8	120.9	136.7	140.5	146.3	161.2	134.3	123.9	120.7	117.1	132.0	123.9	123.0	120.8	127.9	161.2	134.3	123.9	120.7	117.1	132.0
	Q2 131.1	123.0	123.2	123.3	141.6	146.5	154.6	169.0	139.7	126.9	125.1	121.7	137.0	133.1	123.0	123.2	131.6	141.6	139.7	126.9	125.1	121.7	137.0
	Q3 125.1	125.8	126.0	126.3	147.2	153.1	163.7	180.8	146.5	128.0	127.2	127.0	141.8	125.8	125.4	128.1	137.3	147.2	146.5	128.0	127.2	127.0	141.8
	Q4 131.2	125.4	128.1	130.5	151.6	161.7	172.0	192.1	150.9	133.9	127.3	124.4	146.5	125.4	125.4	128.1	137.3	151.6	150.9	133.9	127.3	124.4	146.5
1987	Q1 135.2	128.8	129.6	133.9	158.3	168.5	183.9	203.0	155.2	131.8	127.1	118.6	151.7	135.2	128.8	129.6	144.6	158.3	155.2	131.8	127.1	118.6	151.7
	Q2 133.1	137.1	132.2	143.1	172.9	180.1	195.8	216.9	164.1	139.0	128.2	126.6	159.7	133.1	137.1	132.2	148.9	172.9	164.1	139.0	128.2	126.6	159.7
	Q3 135.3	137.0	134.3	148.3	184.5	193.2	206.6	228.4	171.7	137.0	130.3	122.2	165.7	135.3	137.0	134.3	152.0	184.5	171.7	137.0	130.3	122.2	165.7
	Q4 130.5	134.7	131.3	149.2	189.8	192.9	205.8	227.7	173.6	135.4	125.7	116.0	164.9	130.5	134.7	131.3	153.8	189.8	173.6	135.4	125.7	116.0	164.9
1988	Q1 131.6	134.6	137.0	157.1	207.7	205.8	215.9	233.7	188.6	140.0	122.9	118.9	172.2	131.6	134.6	137.0	159.5	207.7	188.6	140.0	122.9	118.9	172.2
	Q2 135.7	147.3	144.1	179.6	236.2	223.6	229.0	247.4	215.0	151.0	127.0	120.7	187.2	135.7	147.3	144.1	179.1	236.2	215.0	151.0	127.0	120.7	187.2
	Q3 138.4	166.4	158.1	214.6	269.0	249.1	247.0	261.8	244.7	166.6	134.0	117.3	207.9	138.4	166.4	158.1	210.5	269.0	244.7	166.6	134.0	117.3	207.9
	Q4 153.0	191.9	171.8	227.4	265.2	259.0	253.5	265.0	252.2	197.6	138.8	120.9	220.1	153.0	191.9	171.8	233.9	265.2	252.2	197.6	138.8	120.9	220.1
1989	Q1 170.9	197.3	187.2	233.4	262.4	261.2	260.5	269.6	248.6	213.1	145.4	116.7	226.2	170.9	197.3	187.2	241.3	262.4	248.6	213.1	145.4	116.7	226.2
	Q2 192.0	217.1	204.9	232.1	272.5	265.7	261.4	270.5	256.5	222.1	154.1	123.3	234.1	192.0	217.1	204.9	242.2	272.5	256.5	222.1	154.1	123.3	234.1
	Q3 201.0	223.5	223.5	241.6	252.0	253.4	250.8	266.4	252.9	219.9	163.8	120.5	233.4	201.0	223.5	223.5	232.9	252.0	252.9	219.9	163.8	120.5	233.4
	Q4 212.2	225.6	217.7	235.6	239.2	242.9	240.8	258.3	236.0	223.0	169.5	127.9	229.6	212.2	225.6	217.7	249.3	239.2	236.0	223.0	169.5	127.9	229.6

TABLE 1

Distribution of dwellings by type mortgaged by building societies

						<i>Per cent</i>
<i>Year</i>	<i>Bungalow</i>	<i>Detached house</i>	<i>Semi detached house</i>	<i>Terraced house</i>	<i>Flat or maisonette</i>	<i>Total</i>
<i>New dwellings</i>						
1970	24	24	35	13	4	100
1975	15	35	30	14	6	100
1980	14	41	24	15	5	100
1985	13	31	24	20	12	100
1988	13	41	18	14	14	100
<i>Non-new dwellings</i>						
1970	14	19	40	24	4	100
1975	12	21	36	24	7	100
1980	9	16	33	33	10	100
1985	7	14	31	35	13	100
1988	6	12	30	36	15	100
<i>All dwellings</i>						
1970	17	20	39	21	4	100
1975	12	24	35	22	7	100
1980	9	20	32	30	9	100
1985	8	15	30	34	13	100
1988	7	15	29	34	15	100

Totals may not equal 100 due to rounding.

Source: DOE Five Per Cent Sample Survey of building society mortgages: DOE (annually); Building Societies Association (1988), Building Societies Association (quarterly).

TABLE 2*Distribution of dwellings by age mortgaged by building societies*

<i>Year</i>	<i>Built before 1919</i>	<i>Built from 1919 to 1939</i>	<i>Built after 1939 (non-new)</i>	<i>New dwellings</i>	<i>Per cent Total</i>
1970	17	22	34	27	100
1975	19	19	43	19	100
1980	28	18	39	15	100
1985	28	17	43	11	100
1988	27	16	47	10	100

Totals may not equal 100 due to rounding.

Source: As for Table 1.

TABLE 3

Regional Distribution of dwellings mortgaged by building societies

<i>Region</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>	<i>1985</i>	<i>Per cent</i> <i>1988</i>
Northern	5	6	5	5	6
Yorks & Humberside	10	9	10	10	11
East Midlands	9	8	8	8	7
East Anglia	3	4	4	4	3
Greater London	8	7	9	9	9
South East	25	25	22	22	21
South West	9	9	8	9	9
West Midlands	10	10	10	9	8
North West	13	11	11	11	12
England	90	88	87	86	87
Wales	4	4	4	4	4
Scotland	4	6	8	8	7
Northern Ireland	2	1	2	2	2
United Kingdom	100.0	100.0	100.0	100.0	100.0

Source: As for Table 1

TABLE 4

Box-Cox test for functional form of dependent variable (P_{it})

Transformation parameter	Concentrated log-likelihood function
λ	$L(\lambda)$
-0.5	-191325
-0.4	-190931
-0.3	-190399
-0.2	-189974
-0.1	-189685
-0.0 ----- <i>semi-log model</i> -----	-189545 = $L_{\max}(\hat{\lambda}) = L(\lambda = 0)$
0.1	-189563
0.2	-189748
0.3	-190104
0.4	-190635
0.5	-191341
0.6	-192221
0.7	-193270
0.8	-194487
0.9	-195867
1.0 ----- <i>linear model</i> -----	-197406 = $L(\lambda = 1.0)$
1.1	-199103

TABLE 5

χ^2 test for functional form

(i) *Linear Model*

$$P_{it} = f(X_{jt}, e_{it})$$

Null hypothesis $H_0 : \lambda = 1.0$

Alternative hypothesis $H_A : \lambda \neq 1.0$

Test statistic: $\chi^2 = 2\{-189545 - (-197406)\} = 15722$

$$\chi^2_{0.01} = 6.63 \text{ (1 d.f.)}$$

Thus, $\chi^2 > \chi^2_{0.01}$

Hence, H_0 is not accepted and we conclude that the linear model is not optimal.

(ii) *Semi-logarithmic Model*

$$\ln(P_{it}) = f(X_{jt}, e_{it})$$

Null hypothesis $H_0 : \lambda = 0.0$

Alternative hypothesis $H_A : \lambda \neq 0.0$

Test statistic: $\chi^2 = 2\{-189545 - (-189545)\} = 0$

$$\chi^2_{0.01} = 6.63 \text{ (1 d.f.)}$$

Thus, $\chi^2 < \chi^2_{0.01}$

Hence, we cannot reject H_0 and we conclude that the semi-logarithmic functional form is optimal.

TABLE 6

*Regression adjusted-R² values and the inclusion or exclusion of locational variables**

	<i>ACORN only</i>	<i>PC only</i>	<i>Neither</i>	<i>ACORN and PC</i>
North	.758	.741	.733	.772
Yorks & Humberside	.754	.754	.723	.777
North West	.791	.788	.763	.809
East Midlands	.728	.744	.721	.759
West Midlands	.754	.744	.725	.770
East Anglia	.656	.692	.645	.712
Outer South East	.724	.725	.721	.739
Outer Metropolitan	.739	.777	.729	.789
Greater London	.682	.697	.648	.714
South West	.730	.717	.714	.740
Wales	.668	.665	.649	.693
Scotland	.756	.762	.704	.788

* Results for Q2 1986. Northern Ireland is not included since codes for this area are not available.

TABLE 7*Correlation matrix of size variables*

	<i>SIZE</i> <i>(floor area)</i>	<i>TOTRMS</i> <i>(total number of rooms)</i>	<i>RECEP</i> <i>(number of reception rooms)</i>	<i>BED</i> <i>(number of bedrooms)</i>
<i>TOTRMS</i>	.7826			
<i>RECEP</i>	.5814	.7895		
<i>BED</i>	.7346	.9067	.4571	
<i>BATH</i>	.3773	.2982	.2294	.2745

TABLE 8

*Specimen regression results for 1986 Q1: all houses
Outer SE Region*

<i>Variable+</i>	<i>Mean</i>	<i>Coefficient</i>	<i>Significance</i>
<i>SDH</i>	0.260	-0.22396	0.0000*
<i>TH</i>	0.348	-0.30888	0.0000*
<i>DB</i>	0.049	-0.03144	0.0662
<i>SDB</i>	0.019	-0.16148	0.0000*
<i>FB</i>	0.093	-0.27970	0.0000*
<i>FC</i>	0.038	-0.38036	0.0000*
<i>LH</i>	0.139	-0.09273	0.0001*
<i>SGAR</i>	0.496	-0.16340	0.0000*
<i>SPACE</i>	0.110	-0.23626	0.0000*
<i>NOPARK</i>	0.340	-0.24695	0.0000*
<i>AGE</i>	37.928	0.00034	0.0003*
<i>NOCH</i>	0.234	-0.10182	0.0000*
<i>CHP</i>	0.105	-0.06112	0.0000*
<i>SIZE</i>	901.336	0.00037	0.0000*
<i>BATH</i>	1.049	0.10231	0.0000*
<i>A</i>	0.009	0.08550	0.0163*
<i>C</i>	0.193	-0.05677	0.0000*
<i>D</i>	0.026	-0.14195	0.0000*
<i>E</i>	0.085	-0.01998	0.1097
<i>F</i>	0.018	-0.06375	0.0118
<i>G</i>	0.002	0.06628	0.3607
<i>H</i>	0.004	-0.30238	0.0000*
<i>I</i>	0.037	0.00853	0.6592
<i>J</i>	0.132	0.05700	0.0000*
<i>K</i>	0.071	0.00051	0.9728
<i>P1</i>	0.001	0.31732	0.0005*
<i>P2</i>	0.000	0.00000	
<i>P3</i>	0.001	0.18780	0.0362*
<i>P4</i>	0.011	-0.18104	0.0000*
<i>P5</i>	0.368	-0.03498	0.0000*
<i>P7</i>	0.216	-0.08603	0.0000*
<i>Constant</i>	1.000	10.62045	0.0000*
	Sample Size		2942
	Adjusted-R ²		0.7546
	F-Statistic		302.5130

* Significant at the 5%, or higher level, of significance.

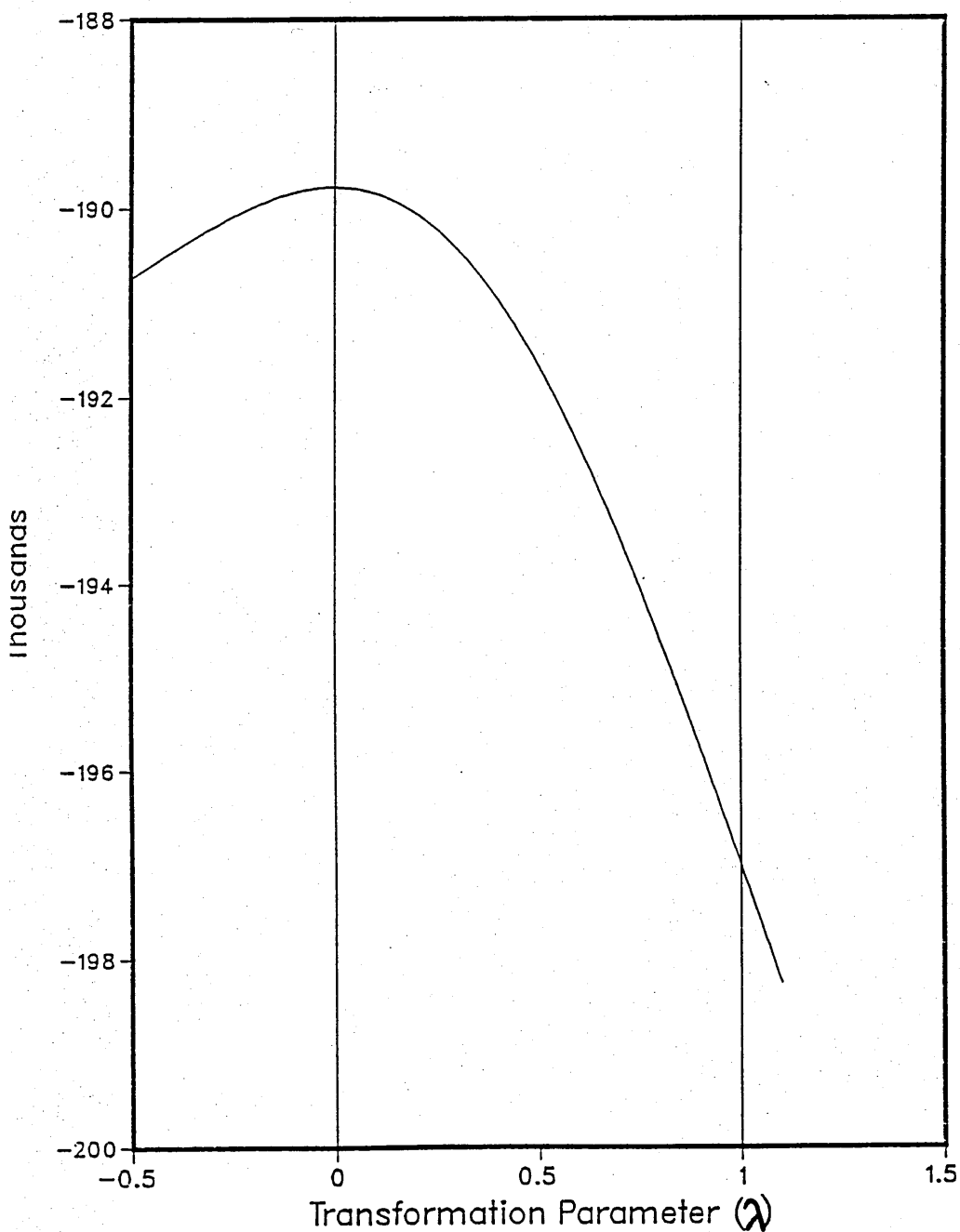
+ Variable labels are defined in Appendix A.

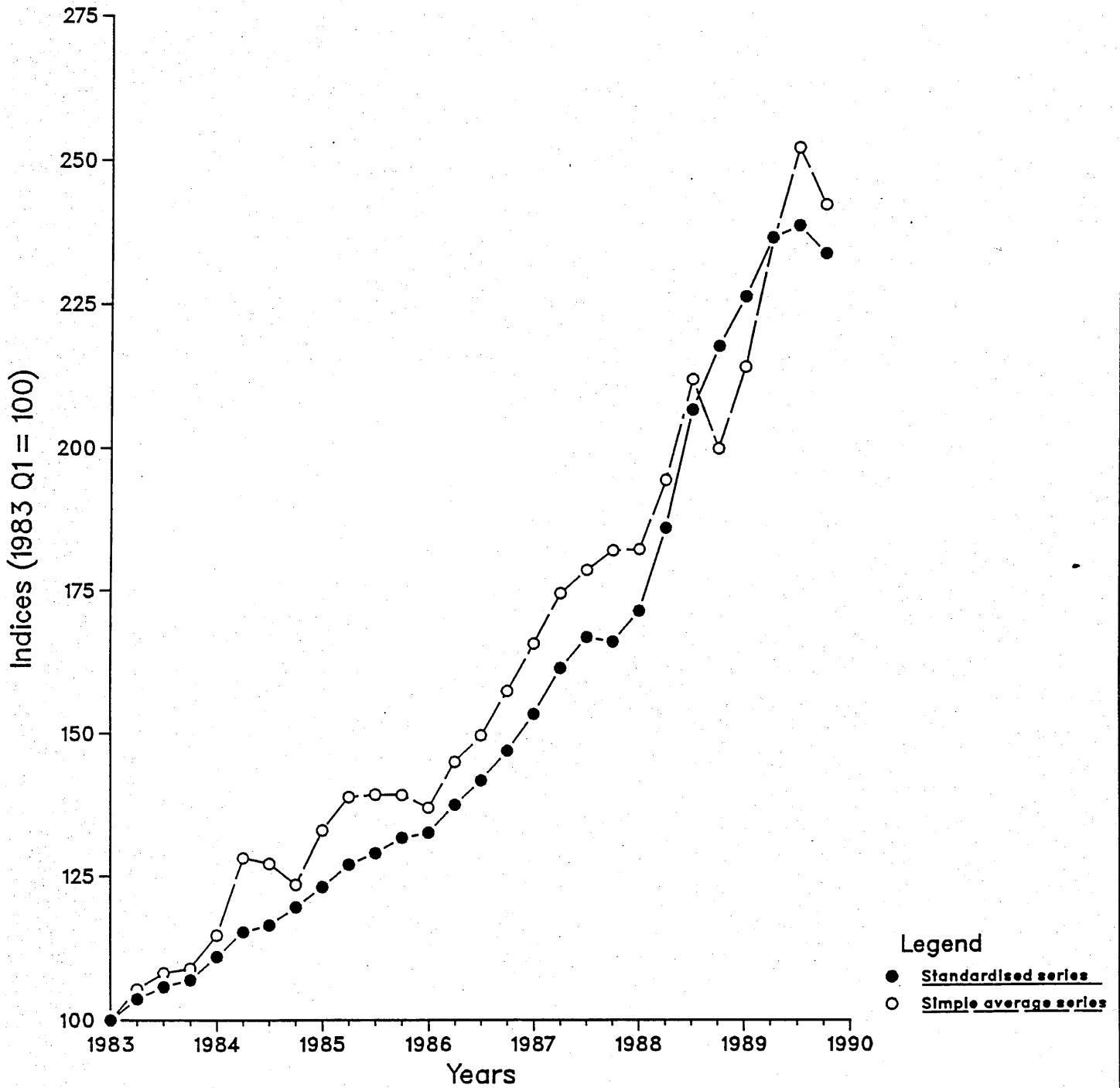
TABLE 9

*Percentage Increase in Standardised House Prices:
1983 Q1-1989 Q4*

<i>Regions</i>	<i>All Houses</i>	<i>House Type</i>			<i>Buyer Type</i>	
		<i>New</i>	<i>Older (Pre-1945)</i>	<i>Modern (Post-1944)</i>	<i>First-time Buyers</i>	<i>Former Owner-Occupiers</i>
Northern	117.3	168.3	121.0	124.3	91.9	112.2
Yorks & Humberside	136.8	99.0	152.3	141.8	140.8	125.6
North West	120.2	92.7	125.4	124.4	118.0	117.7
East Midlands	160.5	120.6	174.9	143.3	147.8	149.3
West Midlands	144.3	98.7	172.4	137.3	147.4	135.6
East Anglia	146.5	141.3	142.5	160.1	208.4	139.2
Outer South East	144.3	135.1	165.3	134.4	141.6	142.9
Outer Metropolitan	146.0	151.8	161.0	134.7	155.7	140.8
Greater London	162.4	133.9	168.7	147.9	161.4	158.3
South West	139.1	121.5	159.8	133.9	143.3	136.0
Wales	124.2	136.5	122.6	128.2	117.2	123.0
Scotland	76.6	70.1	87.1	77.4	77.8	69.5
Northern Ireland	20.3	25.9	16.5	26.1	10.7	27.9
UK	133.8	111.2	146.3	130.4	133.4	129.6

FIGURE 1
Box-Cox Test for Functional Form





g. 2. Indices of Standardised and Simple Average Prices – All Houses, UK
1983 Q1 – 1989 Q4

Nellis, J. G. and Longbottom, J. A. (1981) "An Empirical Analysis of the Determination of House Prices in the United Kingdom", *Urban Studies*, Vol. 18, pp. 9-21.

An Empirical Analysis of the Determination of House Prices in the United Kingdom

Joseph G. Nellis and J. Andrew Longbottom [First received January 1980; final form August 1980]

Summary. Between the first quarters of 1970 and 1980 the average price of new houses in the United Kingdom increased five-fold. Over the same period building societies grew to become major financial institutions, attracting almost 50 per cent of the personal sector's holdings of liquid assets, and responsible for more than 85 per cent of house purchase finance. This paper sets out to examine the extent to which building societies have been responsible for the rapid acceleration of house prices and indicates the other main determinants of this phenomenon. The analysis is extended to a discussion of recent econometric research into house price determination and arrives at a more general specification, employing an error-correction estimation methodology.

Over the past decade, house prices in the United Kingdom (UK) have exhibited dramatic increases, at times far in excess of the prevailing general rate of inflation. In direct contrast, the 20 years prior to 1970 can only be described as years of comparative stability for the housing sector. When house prices rose in the 1950s and 1960s, they did so only gradually and at a generally acceptable pace. In the light of recent events, some commentators (for example, Johnson, 1979) argue that the building societies, due to their lending patterns and interest-rate structure, are principally to blame for the major variations in house prices during the past ten years. The societies during this period have grown up to become major financial institutions, providing at present 86 per cent of the finance for private house purchase, while their share of the total personal sector holdings of liquid assets has risen from 28 per cent in 1966 to 48 per cent at the end of 1978. Consequently, the building society movement has changed into a significant economic force due to the scale and consequences of fluctuations in the level of its operations.

This very success has in itself brought to the forefront an array of questions and problems. The aims of this paper are two-fold:

- (i) to examine the issue of whether the societies are mainly responsible for the dramatic fluctuations in the average price of new houses over the past ten years. Mayes (1979) provides a probing analysis into this debate; here we shall be content to summarise his findings.
- (ii) to arrive at a satisfactory set of determinants for the price of new privately owned dwellings in the UK. Rather than attempting the unenviable task of specifying the entire model of the building society and housing sectors, we shall concern ourselves only with this single structural equation of the model. The derivation of a *suitable* price equation, one that is both theoretically and economically appealing, capable of portraying satisfactory predictive power, is both desirable and essential for the subsequent research and effort required to model the remainder of the housing sector and the building society movement.

The paper is intended as a stepping-stone, albeit a very large one, towards a fuller understanding of the workings of the housing market in the UK. Other possible avenues of development for house price research are outlined and some positive changes in government policy are suggested.

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The authors gratefully acknowledge the comments of Mark Boléat, David Mayes, Paul Turnbull, Sean Holly, Geoff Dennis and the anonymous referees.

The Trend in House Prices

In analysing the determinants of house prices, attention is focused on *new* houses, since it is implicitly assumed that the average price of these is a good indicator of average house prices in general. This contention relies on the fact that movements in new and existing house prices follow almost identical paths. The economic rationale for this is simple: if the prices of new houses happen to move out of line with those of the existing stock, then since there is a very large number of very close substitutes among existing houses, deviations in relative terms will tend to be minimised. Thus competition between new and existing houses effectively ensures price equalisation.¹

During the 15-year period from 1956 to 1970, the average price of new houses followed a fairly stable path, rising by an annual average of just over 8 per cent. However, since then this relative stability has been dramatically disrupted; between the first quarter of 1970 and the second quarter of 1980, house prices have risen by an annual average of 43 per cent (from an average of £4,890 to £25,710). More notably still, between mid-1971 and early 1974 the United Kingdom experienced the first and biggest *property boom* of the 1970s. In just three years average house prices more than doubled, jumping from £5,390 in the second quarter of 1971 to almost £11,000 by the early months of 1974. A second property boom began in 1977, reaching its peak in late 1979. This phenomenon, to a large extent, faded out during the first half of 1980; during the first six months of the present decade average house prices rose by only 8 per cent, slightly lower than the general rate of inflation in the economy at that time. Undoubtedly, the economic recession, especially in the house-building sector, and the high interest rates were significant contributory factors to this speedy deceleration of house prices.

Figure 1 provides a visual summary of the trends of average new house prices (PNH), personal incomes (YD) and consumer goods prices (PC) from 1970 (quarter 1) to 1980 (quarter 1). In 1971 house prices began to rise very rapidly and, continuing to do so until 1973, they reached a peak rate of increase at the end of that year. From 1974 to late 1976 the

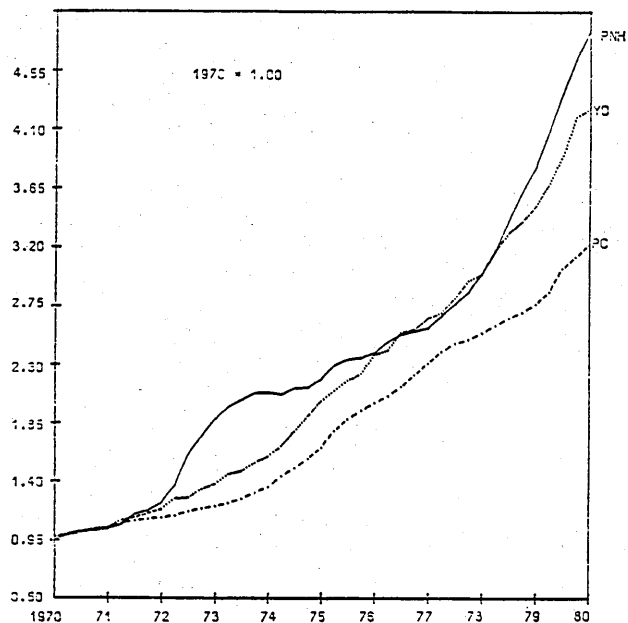


Fig. 1. House prices*, incomes and consumer prices. Source: *Financial Statistics* (-1980).

* Note that in house price studies there is the difficulty of fixing a time at which house prices are finally settled. There are two important stages:

- (a) the MORTGAGE APPROVAL STAGE; and
- (b) the MORTGAGE COMPLETION STAGE.

The former is when the buyer accepts the offer of advance from the building society and when the selling price is finally agreed. House prices at this stage reflect agreed selling prices in that month. The latter stage is when the house actually changes hands. This transfer, on average, takes 2-3 months after the mortgage has been approved. Thus, prices at the completion stage will reflect agreed selling prices 2-3 months previously.

In this paper, we focus on prices at the Completion Stage.

pace of house price inflation fell, as indicated by the gentle slope of the PNH path. In 1977 house prices again increased rapidly and this second property boom continued until early 1980. The fluctuations of incomes and consumer goods prices are clearly much less marked than those of house prices. Except for some minor exceptions between 1976 and 1978, house price increases have stayed ahead of rises in incomes and the general level of prices throughout the past decade.

So much for the history of events - more importantly, we turn now to an examination of the *causes* of such events, and it is here that disputes

¹ There are, of course, some exceptions to this such as under conditions of changing tastes or excess supply. In the latter case, some house-builders may actually prefer to restrain from selling in the hope of a future price rise. Mayes (1979, pp. 47-49) provides a fuller explanation of this point.

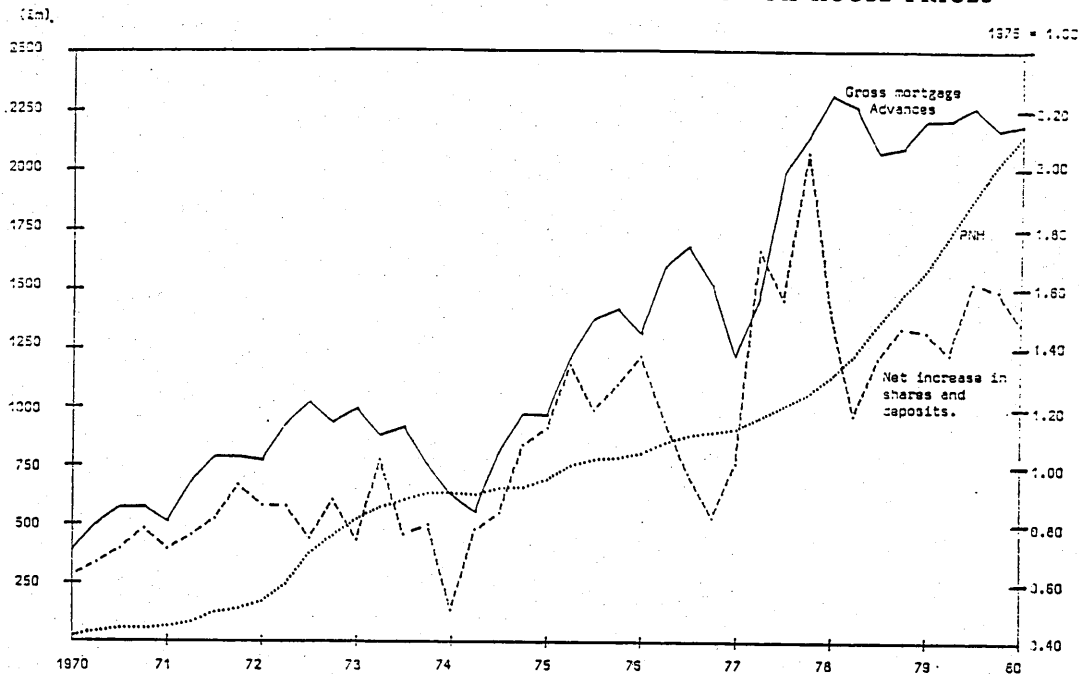


Fig. 2. Building society behaviour and house prices 1970(I)–1980(I).
Source: *Financial Statistics* (–1980).

and disagreements exist between factions (chiefly the building societies and the banks). Some commentators (Johnson, 1979) argue that the building societies are principally to blame for the severe disruptions in the housing market, claiming that such occurrences, by and large, coincided with periods when the societies were providing funds at record levels. During the property boom of 1971–73, building societies' mortgage lending doubled, exceeding £1,000 million for the first time in the third quarter of 1972. Lending then fell back substantially, dropping by the second quarter of 1974 to levels not experienced since 1970. But, just as suddenly, within the next nine months mortgage advances rose dramatically to reach £1,208 million in 1975 (quarter 2) representing three and a half times the figure for the first quarter of 1970. However, by the end of 1979, building societies' net lending (at constant house prices) had fallen back to its 1974 level. This severe famine of mortgage finance was the direct result of the low inflow of funds to the societies at that time. With Minimum Lending Rate at 17 per cent, the building society movement was at a competitive disadvantage and consequently personal sector funds were diverted to higher interest earning outlets.

Mayes (1979), however, in his analysis of the

societies' lending patterns, notes that while a peak for lending in both current and constant *consumer* prices was attained between 1972 (quarter 2) and 1973 (quarter 1) this peak in constant *house* prices lies earlier, in particular between 1971 (quarter 3) and 1972 (quarter 3). Consequently, in terms of the *number* of houses which could be purchased, lending by the societies was in fact *lower* in 1973 than in 1970. Figure 2 presents the trends for average new house prices (PNH), gross mortgage advances (GMA) and the net increase in shares and deposits of societies (SD) during the 1970s. Certainly, the paths followed by PNH and GMA are similar, but correlation should never be taken to imply causation. To blame the building societies for the house price inflation is to miss the mark. Figure 2 supports the claim made by Mayes, in that

'the comparison of the paths of the inflow of funds and mortgage lending . . . shows that building societies were following approximately the pattern of behaviour expected in that, in general, lending follows the path of the inflow of funds with a lag and with less fluctuation'. (Mayes, 1979, p. 65).

The prime function of the societies is to channel funds into housing in line with national aspirations to encourage home ownership. But the amount that

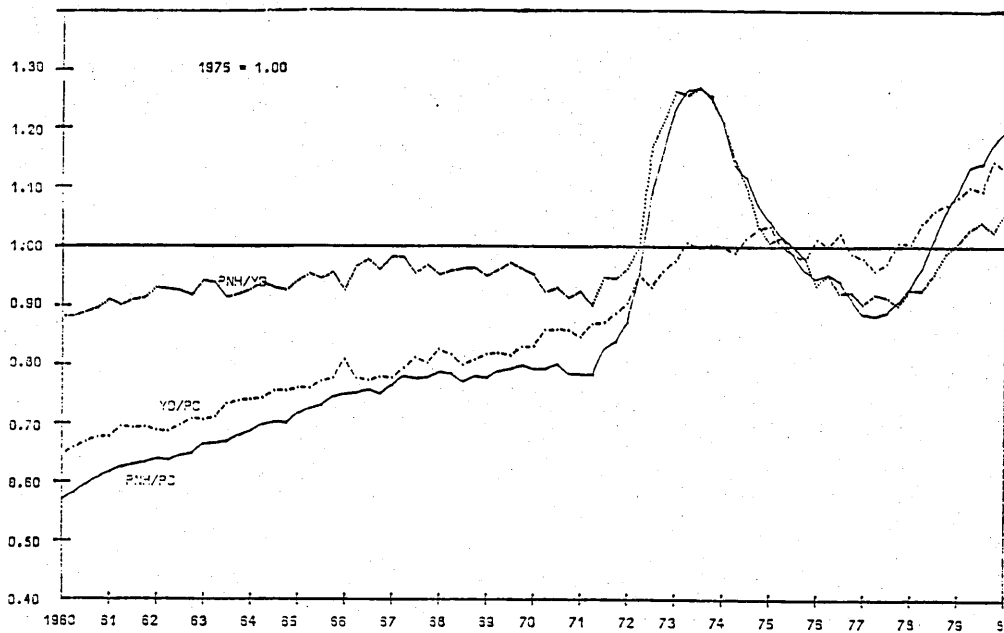


Fig. 3. The movements of real variables, 1960–1980.
Source: *Financial Statistics* (–1980).

they are able to lend is directly influenced by the amount of funds deposited with them and this in turn is mainly affected by prevailing interest rate differentials.

Throughout the 1970s, interest rates in the UK have fluctuated almost continuously as a result of several changes in economic policy.² Consequently, as investors have sought the best return on investments, financial institutions have likewise sought to attract funds via increased competitiveness. The building societies are no exception. At times it has been necessary for the societies to make severe cutbacks in lending, while in addition rates have been increased, rationing of mortgages and mortgage queues have been commonplace. But to *blame* the building society movement for the major fluctuation in house prices is to ignore other, perhaps even more important, contributory factors. Changes in the structure and operation of financial institutions resulting from the major changes in economic policy have brought about fundamental changes in the reactions of individuals and institutions to events in the economy.

Two other important factors need to be analysed.

How have incomes moved in recent years and how has the house-building industry itself reacted to the changing economic circumstances?

Since the price index of houses is not of constant quality (i.e. the index is based on a *basket* of houses), it is reasonable to question whether or not the rise in house prices may merely be a reflection of rising real incomes, and hence an increased ability and desire on the part of individuals to buy better quality housing. Boléat (1976) stresses this possibility and focuses attention on the ratio of house prices to earnings. He points out that by 1975 this ratio was returning to the level it held during the 1960s, noting that prior to 1971, house prices were in fact low relative to earnings. Hence, it is argued, some of the impetus behind the rapid rise in house prices can be attributed to this factor – house prices were simply *catching up* with earnings.³ Figure 3 shows the movements of real personal disposable income (YD/PC), the ratio of house prices to consumer goods prices (PNH/PC) and the ratio of house prices to personal disposable income (PNH/YD). Over the period 1960 to 1970, real income was rising on a steady trend with cyclical fluctuations around

² Examples are the introduction of *Competition and Credit Control* in September 1971, the floating of sterling in June 1972, and the move to a market determined Minimum Lending Rate in October 1972.

³ There is the problem of deciding whether we should be looking at earnings or personal disposable income, but this issue will not concern us here.

this trend. Then from 1971 to 1975, larger and more erratic fluctuations in real income emerged, while during this same period house prices more than doubled. The large upward shifts in the ratios of PNH to PC and YD highlight the rapid inflation in house prices between 1972 and 1975. This is an extremely important point, and we stress it again – the rapid rise in house prices could have been partly caused by the increased ability of people in this decade to pay for bigger and better houses, thereby frustrating the demand for all housing, which was not being satisfied by an adequate increase in supply.

An examination of the supply side of the housing market shows that since 1968 the house-building industry in the United Kingdom has been in a state of decline with only small recoveries taking place periodically. Figure 4 highlights this decline by tracing the total number of new house completions (THC) and housing starts (THS) in both the private and public sectors. The seasonal element in both variables is evident from the diagram but a steady downward trend is equally apparent, especially since 1974. This falling supply of new houses has been accompanied over the years by an increasing demand for home-ownership. Consequently, price increases have been inevitable. Given some downward rigidity of prices in slack periods, a tendency for

marked inflation has naturally come into being. Because of lags within the building industry whereby starts feed through to completions after approximately six to eight quarters, the property boom of the early 1970s was largely punctured before an adequate supply response could emerge. In addition, the supply of housing has been severely restricted by acute shortages of raw materials and, sometimes, land. With the present Conservative government policy of selling off council houses, the deficiency in supply should be reduced to an extent. However, a longer-term planning horizon will have to be adopted if the deterioration of the housing sector is to be halted and reversed.

Thus, to conclude this section, we again emphasise that to lay the blame for the inflation of house prices on the doorstep of the building society movement is to ignore several other very important factors. The societies have been *one* element in the matrix, but their actions were not unusual in the context of previous experience. To avoid such upsurges in the 1980s certain changes in government policy are essential. Firstly, a radically different approach to the building societies and their role as financial intermediaries is needed; secondly, the government must endeavour to free the housing market and break the frequent bottle-necks that arise, mainly by

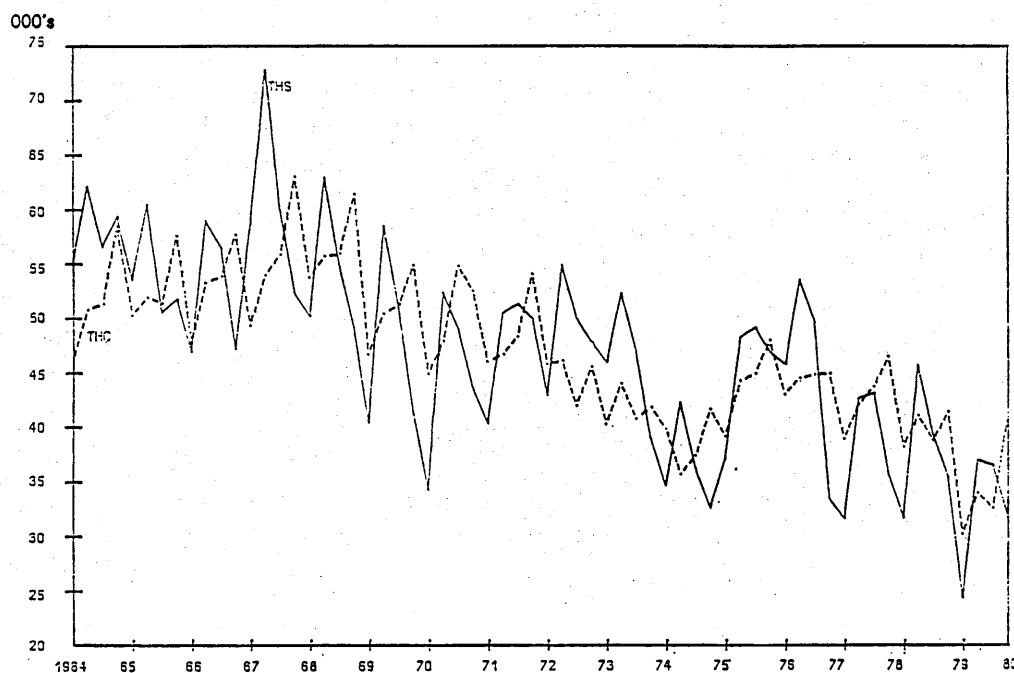


Fig. 4. Total housing starts and completions, 1964-1980.
Source: Housing and Construction Statistics (-1980).

of the estimated equations was then used to predict new house prices for the out-of-sample forecast quarters from 1978(1) to 1979(4), assuming correct knowledge of all exogenous and lagged endogenous variables. The subsequent predictions for house prices (PNH) and their associated absolute percentage errors are shown in Table 2.

Results

Duffy Specification

Duffy (1970) uses a price relating equation augmented by building society mortgage advances by suggesting that new house prices depend upon the recent trend level of net new advances in real terms (using PNH as the deflator), and also on the general level of prices in the economy as measured by the implicit gross domestic product deflator (PGDP).

The former variable $\left(\frac{NMA}{PNH}\right)$ is expressed as a four-quarter unweighted moving average.

Clearly, this explanation puts heavy direct emphasis

on the role of building society advances on house prices. The general linear specification is of the form:

$$PNH_t = \alpha_1 + \alpha_2 \left(0.25 \sum_{i=0}^3 \left(\frac{NMA}{PNH} \right)_{t-i} \right) + \alpha_3 (PGDP)_t + e_{1t} \quad (1)$$

The estimated equation over the sample period is shown as equation (i) in Table 1. The results indicate that the null hypothesis that the residuals are random is rejected, with the Lagrange Multiplier (LM) test statistic indicating that the equation is severely autocorrelated. Moreover, the hypothesis of constant parameters was also rejected when the equation was asked to predict up to 1979(4). These results seem to suggest that the equation is misspecified, and therefore unable to model the true data generation process for the price of new houses. Clearly the equation is not satisfactory on the basis of standard statistical criteria. As expected, the specification also has poor predictive power with an average forecast error over two years of 11.63 per cent and a root mean square error of 0.1706.

Table 2

Forecasts for the average price of new houses (PNH), 1978(1)–1979(4)*

Year/ Quarter	Actual value of PNH 1975 = 1	(a) Duffy		Specifications by (b) Mayes		(c) LBS	
		Forecast value	% Error	Forecast value	% Error	Forecast value	% Error
1978(1)	1.3050	1.4088	7.95	1.3201	1.16	1.3016	0.26
(2)	1.3800	1.4518	5.20	1.3741	0.43	1.3695	0.76
(3)	1.4820	1.4911	0.61	1.4311	3.43	1.4360	3.10
(4)	1.5760	1.5008	4.77	1.5252	3.22	1.5348	2.61
1979(1)	1.6610	1.5351	7.58	1.6264	2.08	1.6195	2.50
(2)	1.7820	1.6007	10.17	1.7047	4.34	1.7102	4.03
(3)	1.9060	1.6569	13.07	1.8138	4.84	1.8184	4.59
(4)	2.0180	1.7014	15.69	1.9095	5.38	1.9304	4.34
Average % error 1978(1)–1979(4)			11.63		4.16		2.77
PS: Chi-square test for parameter stability		33.99	critical χ^2 (8 degrees of freedom) = 15.51			161.82	
F: Chow test for model consistency†		(2.07)		300.05		(2.085)	
RMSE: Root mean square error		2.85		10.48		12.46	
		0.1706		0.0641		0.0571	

* Forecasts assuming correct knowledge of all exogenous and previous quarter endogenous variables.

† Figures in brackets denote the critical values of the F -statistic (at the (0.05 level) for the respective degrees of freedom. Note that all three models fail this test, as well as the chi-square test for parameter stability.

Mayes Specification

Like the former case, Mayes (1979) estimates a direct new house price function. The general linear specification is:

$$\begin{aligned} \text{PNH}_t = & \beta_1 + \beta_2 \left(\frac{\text{YP}}{\text{PC}} \right)_t + \beta_3(\text{IM})_t \\ & + \beta_4(\text{GMA})_t + \beta_5(\text{HCO})_t + \beta_6(\text{HCP})_t \\ & + \beta_7(\text{PC})_t + \beta_8(\text{PNH})_{t-1} + e_{2t} \end{aligned} \quad (2)$$

where real income $\left(\frac{\text{YP}}{\text{PC}} \right)$ is expressed as a four-quarter unweighted moving average, IM is the mortgage rate of interest. GMA represents gross mortgage advances by the building societies, HCO and HCP are completions of houses in the public and private sectors respectively; finally, PC is the implicit deflator for consumption. Incorporated in this specification is a naive price expectations mechanism, such that

$$\text{PNH}_t^{\text{expected}} = (1 + \lambda)\text{PNH}_{t-1} \quad (3)$$

Mayes acknowledges that this treatment of expectations is not attractive and argues that a more satisfactory justification for the inclusion of PNH_{t-1} is to take account of the failure of prices to adjust to their desired levels within each quarter. On the basis of previously published work by Whitehead (1974), Hadjimatheou (1976), and Neuberger and Nichol (1976) as well as on his own investigations, Mayes indicates that there is little to choose between a linear and log-linear equation; hence he rejects the latter on the grounds that it would make the estimation of his simultaneous model of the housing and building society sectors more complex.

Equation (ii) of Table 1 presents the results for the period 1959(1) to 1977(4) using this specification. The estimated coefficients indicate that house prices are to some extent sensitive to changes in the main determining variables. The high value (0.930) on the coefficient for lagged new house prices reflects the fact that long-run effects will be much greater than short-run effects – a conclusion to be expected using an equation of this form. It also indicates that expectations are not fully taken into account. However, the size of the coefficient on PNH_{t-1} appears to suggest that a first-difference structure for the dependent variable might be more appropriate.

ate. Mayes does mention that he has experimented with this idea but rejects it on the basis that the derived predictions are less reliable. We shall return to this point later when reporting our own specification.

While the test statistics accept the null hypothesis of the general randomness of the equation residuals (LM calculated = 9.71), Durbin's 'h' statistic indicates the presence of positive autocorrelation. Once again the parameters of the equation were found to be unstable and specific coefficients show considerable variation when the equation was estimated to 1979(4). In particular HCP (the number of house completions in the private sector), although it had the wrong sign, showed considerable parameter fluctuation and was found to be significant over the full period (to 1979, quarter 4). This variability probably reflects the high degree of collinearity between HCP and HCO (public sector house completions) and this later led us to consider *total* house completions ($\text{THC} = \text{HCO} + \text{HCP}$) rather than the separate components.

The average percentage error of the predictions for the Mayes equation over the next eight quarters is 4.16, with a root mean square error of 0.0641. On this criterion it is certainly superior to that of Duffy's, but there are several drawbacks: while the main factors of demand and supply are incorporated, the structure of these variables is open to criticism. We have already mentioned that a first difference equation for PNH may be preferred, total house supply might be more appropriate, and rather than using the level of mortgage advances each quarter, a four-quarterly moving average could perhaps improve predictive power; i.e. since we are interested in a long-term relationship, it might be appropriate to smooth out short-term fluctuations.

London Business School (LBS) Specification

The LBS Centre for Economic Forecasting estimates a first difference equation (ΔPNH_t), with the main determining variables being real income, the mortgage rate and a moving average of HSP (starts of new houses in the private sector).

$$\begin{aligned} \Delta\text{PNH}_t = & \gamma_1 + \gamma_2 \left(\frac{\text{YD}}{\text{PC}} \right)_t + \gamma_3(\text{IM})_t \\ & + \gamma_4 \left(0.25 \sum_{i=8}^{11} (\text{HSP})_{t-i} \right) + e_{3t} \end{aligned} \quad (4)$$

Housing starts are used since it is assumed that these feed through to completions (with a subsequent effect on prices) with a lag of eight quarters. Clearly, there is a direct link between the two variables and we accept this approach as satisfactory.

In equation (iii) of Table 1 all the right-hand side explanatory variables are significant at the 5 per cent level and are correctly signed. Once again, although the residuals pass the test for randomness, the equation suffers from first order autocorrelation ($DW = 1.325$). Furthermore, the hypothesis of parameter stability is rejected.⁴

Turning to Table 2, the predictions for the out-of-sample forecast period 1978(1) to 1979(4) are encouraging. The average percentage error is only 2.77, with a root mean square error of 0.0571. On this basis, we argue that the LBS specification is preferred to those of Duffy and Mayes.

The task remaining is to improve on this performance, maintaining economic rationale, in order to arrive at a more satisfactory explanation of the average price of new houses.

An Alternative Approach

(i) Theoretical Issues

In the housing market, the principal determinants of price are those variables which influence the demand for and supply of houses, as in any similar market. Thus, in the long run, price will adjust to ensure market clearing. The approach which we follow here is to derive an estimating equation as a reduced form relationship from the specified arguments of demand and supply functions for housing, reflecting the influence of the three main economic agents that operate in this market, namely potential buyers, sellers and financial intermediaries.

Obviously, the need to consider financial intermediaries as a separate party arises from the inability of the majority of house buyers to finance their purchases immediately out of their personal assets. Hence, the cost of obtaining additional finance is a factor which enters the potential house buyers' decision calculus, and is thus a variable to be included in the demand function. However, due to social and political considerations, plus the ability to offset some part of mortgage interest payments against tax, throughout the 1960s and 1970s the

rate of interest on mortgage finance has often been set below its equilibrium level. As a consequence the mortgage market has often been characterised by excess demand and financial intermediaries have been forced to ration available funds for house purchase among the potential house buyers. This is a quantity constraint, largely outside the house purchasers' decision calculus, but nevertheless, it is a factor which must be considered when specifying the housing demand function.

The demand for houses, conceived in real terms, is determined by household income, demographic factors, prices, the cost and availability of mortgage finance, and the preferences of consumers. Hence we may specify (in log form) the demand function as:

$$\begin{aligned} \ln H_t^d = & a_1 + a_2 \ln \text{PNH}_t + a_3 \ln \text{YD}_t \\ & + a_4 \ln \text{POP}_t + a_5 \ln \text{IM}_t + a_6 \ln \text{M}_t \\ & + a_7 \ln \text{PC}_t \end{aligned} \quad (5)$$

H_t^d = the demand for housing; POP denotes population size, and M is the stock of building societies' mortgage assets. All other variables are as defined previously. One might also wish to specify terms in $(\Delta \text{PNH}_t^{\text{expected}}) - (\Delta \text{PNH}_t^{\text{actual}})$ to capture the speculative element in house purchase.

The stock of housing units in any period is identically equal to the existing stock of houses carried over from the previous period and units completed during that period, plus conversions and renovations minus demolitions. Since the latter three features can be regarded as being largely dependent on past stock, we postulate that the supply of houses (H^s) depends on price and the existing stock of houses. House completions do not determine the desired stock of housing. In equilibrium the existing stock is just sufficient to satisfy the demand for housing, and there is no incentive for builders to complete further new units. It is, however, a possible indicator of the pressure of demand within the construction industry, and is therefore a proxy for the supply constraints on the rate of adjustment of the housing stock to its desired level.

So, we may write:

$$\ln H_t^s = b_1 + b_2 \ln \text{PNH}_t + b_3 \ln H_{t-1} \quad (6)$$

⁴ Note that R^2 for this specification cannot be compared with those of the other two since the dependent variable takes a different form.

where H is the existing stock of houses. In equilibrium

$$H^s = H^d, \text{ in which case we get}$$

$$\ln \text{PNH}_t^* = c_1 + c_2 \ln \text{YD}_t + c_3 \ln \text{POP}_t$$

$$+ c_4 \ln \text{IM}_t + c_5 \ln M_t + c_6 \ln \text{PC}_t + c_7 \ln H_{t-1} \quad (7)$$

where PNH^* is the equilibrium value of PNH which ensures market clearing.

(ii) *Estimation Methodology and Empirical Results*

Equation (7) above is our estimating equation. However, it is an equilibrium relationship which will not hold at every moment in time, reflecting the cost of instantaneous adjustment towards equilibrium and modifications to the basic relationship caused by relatively short-term influences. The relationship depicted in equation (7) is therefore intended to be a steady state hypothesis towards which the short-term behaviour of agents will eventually converge. In estimating an equation of this form we attempted to take these dynamic factors into account. We assumed that the house prices adjust toward their equilibrium value (PNH^*) on the basis of an *error correction* hypothesis such as:

$$\Delta \ln \text{PNH}_t = -\lambda \ln (\text{PNH}/\text{PNH}^*)_{t-1} \quad (8)$$

and applied the estimation methodology developed by Davidson *et al.* (1978), enabling us to develop a framework in which to model the short-term dynamic behaviour of agents and test the validity of our equilibrium relationship.

Consider the following equation, which for simplicity contains only four determinants of house prices, namely M , YD , IM and PC :

$$\ln \text{PNH}_t = d_1 + d_2 \ln M_t + d_3 \ln \text{YD}_t$$

$$+ d_4 \ln \text{IM}_t + d_5 \ln \text{PC}_t \quad (9)$$

If this were the maintained hypothesis, we might postulate the following error correction hypothesis:

$$\Delta \ln \text{PNH}_t = \delta_1 + \delta_2 \Delta \ln M_t + \delta_3 \Delta \ln \text{IM}_t$$

$$+ \delta_4 \ln \left(\frac{\text{PNH}}{\text{PC}} \right)_{t-1} + \delta_5 \ln \text{PC}_{t-1} + \delta_6 \ln M_{t-1}$$

$$+ \delta_7 \ln \text{YD}_{t-1} + \delta_8 \ln \text{IM}_{t-1} \quad (10)$$

where δ_2, δ_3 represent derivative error corrections and δ_3 proportional error corrections. The homogeneity of PNH and PC can be directly tested by the

inclusion of an additional term in PC_{t-1} ; if this is found to be insignificant (i.e. $\delta_5 = 0$) then we can accept the homogeneity of house prices and the general level of prices (proxied by PC).

The steady state solution of equation (10), assuming

$$\Delta \ln \text{PNH}_t = \Delta \ln M_t = \Delta \ln \text{IM}_t = 0, \text{ and}$$

$$\delta_5 = 0$$

is given by

$$\ln \text{PNH} = \frac{\delta_1}{\delta_4} + \frac{\delta_4}{\delta_4} \ln \text{PC} + \frac{\delta_6}{\delta_4} \ln M$$

$$+ \frac{\delta_7}{\delta_4} \ln \text{YD} + \frac{\delta_8}{\delta_4} \ln \text{IM} \quad (11)$$

Since we have no prior knowledge concerning the nature or path of the short-term dynamic behaviour, we allowed the data to identify the dynamics by applying the model-fitting procedure developed by Mizon (1977). The maintained hypothesis which we wish to test is a general unrestricted dynamic model upon which a sequence of testable restrictions is imposed in order to simplify it. Thus, equation (7) may be rewritten as:

$$\theta_1(L) \ln \text{PNH}_t = \theta_2(L) \ln \text{YD}_t$$

$$+ \theta_3(L) \ln \text{POP}_t + \theta_4(L) \ln \text{IM}_t + \theta_5(L) \ln M_t$$

$$+ \theta_6(L) \ln \text{PC}_t + \theta_7(L) \ln H_t + \xi_t \quad (12)$$

where $\theta_1, \dots, \theta_7$ are polynomials in the lag operator L , and ξ_t is a white noise residual. A specification search is then undertaken, where each stage is nested within the maintained hypothesis.

Initial restrictions were imposed on the restricted form of the equation by including additional variables in place of those found to be insignificant in the original unrestricted form. A number of pitfalls are recognised in this approach. In particular, the danger of miss-specification is prevalent. The subsequent restrictions which are imposed on the data are conditional on the restrictions imposed on the error-feedback terms in the unrestricted form. If these preliminary restrictions are invalid, the additional restrictions are conditional on these incorrect restrictions. Hence variables which are significant (insignificant) may not be so when considered in a totally unrestricted form. This does not appear to be a problem here, however, since the equation passes all the tests for non-random residuals, parameter stability and model consistency quite

comfortably. The derived estimated (forecasting) equation is:

$$\begin{aligned} \Delta \ln \text{PNH}_t = & -3.413 + 0.332 \Delta \ln (\text{PNH})_{t-1} & (2.86) \quad (2.95) \\ & + 0.031 \Delta^2 \ln (M)_t & (1.75) \\ & - 0.048 \left[0.25 \sum_{i=0}^3 \ln (\text{HCO} \right. & (1.51) \\ & \left. + \text{HCP})_{t-i} \right] - 0.191 \left(\frac{\text{PNH}}{\text{PC}} \right)_{t-2} & (4.31) \\ & + 0.355 \left[0.25 \sum_{i=0}^3 \left(\ln \frac{\text{YD}}{\text{PC}} \right)_{t-i} \right] & (2.66) \\ & - 0.123 \ln (\text{IM})_{t-2} & (3.26) \\ & + 0.147 \ln \left(\frac{M}{\text{PC}} \right)_{t-2} & (3.46) \\ & - 0.065 \ln (\text{KIH})_{t-2}^* + 0.010 Q_{1t} & (1.74) \quad (1.81) \\ & + 0.008 Q_{2t} + 0.004 Q_{3t} & (1.29) \quad (0.70) \quad (13) \end{aligned}$$

* KIH is the stock of real residential investment in both the private and public sectors, used here as a proxy for H (the existing stock of houses).

$$\begin{aligned} \bar{R}^2 &= 0.567 \\ \text{SE} &= 0.162 \\ \text{DH} &= -0.791 \\ \text{LM}(5) &= 4.60 (11.07) \\ \text{Q}(14) &= 21.10 (23.68) \end{aligned}$$

The estimated equation renders the following steady-state solution (see equation 11):

$$\begin{aligned} \ln \text{PNH}_t = & \text{constant} + 1.855 \ln \left(\frac{\text{YD}}{\text{PC}} \right) \\ & - 0.640 \ln (\text{IM}) + 0.768 \ln \left(\frac{M}{\text{PC}} \right) \\ & + 1.0 \ln (\text{PC}) - 0.339 \ln (\text{KIH}) \quad (14) \end{aligned}$$

A number of important points emerge from these results:

(i) Not unexpectedly, the price of houses is relatively more responsive to *demand factors*. On

a single equation basis, a 10 per cent rise in real permanent income (proxied by a four-quarterly moving-average on personal income) leads to a rise in house prices of 18 per cent; a corresponding increase in the stock of real mortgages could be expected to raise house prices by 7.6 per cent and in the case of the mortgage rate of interest to cause prices to fall by 6.4 per cent. There is strong support for the homogeneity of house prices with respect to the price of other goods (PC), with a coefficient of unity on the latter being accepted as a valid constraint. The supply side response is relatively small: a 10 per cent increase in the stock of real investment in housing will lead to a 3.4 per cent fall in house prices.

- (ii) In the short-run, the change in the price of houses lagged one period and the second difference in the nominal mortgage stock were found to be important. A moving average of completions in both private and public sectors was found to be preferable to other possible specifications as a proxy for the pressure of demand against capacity. This reflects the need to consider the productive capacity of the whole construction industry in evaluating the speed of adjustment of the housing stock to its desired level.
- (iii) The function has been specified here with the price of new houses as the dependent variable. Strictly speaking, this is not consistent with the theoretical underpinnings of the model but this practice was retained to allow comparisons to be made with the previous specifications. As mentioned earlier in the paper, PNH should provide a reasonable guide to prices generally in the housing market.
- (iv) Attempts to identify the influence of demographic factors met with little response. There is difficulty in specifying the appropriate variable to be incorporated in the housing demand function (see Mayes, 1979), and thus it was decided to omit such a factor from the final specification.
- (v) The dependent variable shows weak seasonal variation. Estimation without seasonal dummy variables does not lead to any substantial changes in the long-run properties of the estimated equation, although the standard

error of the equation shows a significant increase.

Table 3 shows the forecast values for the average price of new houses using our estimated equation for $\Delta \ln \text{PNH}$, (equation 13). The specification passes both the test for parameter stability and model consistency, with a root mean square error of only 0.0209. The average percentage forecast error for the out-of-sample forecast period 1978(1) – 1979(4) is only 1.57. This compares very favourably with the other three specifications we have examined in this paper. On these bases, our own specification is an improvement over the other three.

Table 3

Forecasts for PNH over the out-of-sample period 1978(1)–1979(4)

Year/Quarter	Actual value of PNH 1975 = 1	Forecast value	% Error
1978 (1)	1.3050	1.3110	0.46
(2)	1.3800	1.4017	1.57
(3)	1.4820	1.5099	1.88
(4)	1.5760	1.6340	3.68
1979 (1)	1.6610	1.7268	3.96
(2)	1.7820	1.7962	0.80
(3)	1.9060	1.9065	0.00
(4)	2.0180	2.0231	0.25

Average % error 1978(1)–1979(4) 1.57

PS: Chi-square test for parameter stability: 13.38 (15.51) with 8 degrees of freedom.

F: Chow test for model consistency: 0.73 (2.085) with (8, 64) d.o.f.

R.M.S.E.: 0.0209.

Conclusions

In this paper we have endeavoured to improve upon several previous specifications of house prices. By employing the estimation techniques developed by Davidson, Hendry and Mizon, an alternative specification has been arrived at which passes the tests for parameter stability, randomness of residuals and model consistency.

The results clearly indicate that the most important factor in the determination of house prices is real income. The mortgage rate of interest and the stock of building societies' mortgage assets are important secondary influences. These econometric results lend support to the conclusions of the first section in which we argue that the building societies are not principally to blame for the rapid acceleration of house prices in the 1970s.

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Appendix

Definitions of Variables

GMA	Gross advances on mortgages by building societies.	£m
HCO	House completions in the public sector.	000's
HCP	House completions in the private sector.	000's

HSP	Private dwelling starts.	000's	Qi	Seasonal zero-one dummies (i.e. $i = 1$ in first quarter Q1, zero elsewhere).	
IM	Interest rate on building society mortgages.	$\% \times 10$			
KIH	Stock of real residential investment in both the private and public sectors.	£m	THC	Total house completions (in both private and public sectors).	000's
M	Building societies' stock of mortgage assets (end period).	£m	YD	Personal disposable income	£m
			Δ	First difference; Δ^2 Difference of first difference.	
NMA	Net advances on mortgages by building societies.	£m			
PC	Implicit deflator for consumption.	1975 = 1		<i>Sources of Data</i>	
PGDP	Implicit deflator for gross domestic product.	1975 = 1		Economic Trends, Central Statistical Office. HMSO - 1980 (quarterly).	
PNH	Index of unit value of new dwellings mortgaged by building societies.	1975 = 1		Financial Statistics, Central Statistical Office. HMSO - 1980 (monthly).	
				Housing and Construction Statistics. HMSO - 1980 (quarterly) (formerly Housing Statistics).	
				Monthly Digest of Statistics. HMSO - 1980 (monthly).	

Nellis, J. G. and Thom, R. (1983) "The Demand for Mortgage Finance in the United Kingdom", *Applied Economics*, Vol. 15, pp. 521-529.

The demand for mortgage finance in the United Kingdom

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This paper examines the rationing behaviour of building societies in the United Kingdom. Mortgage rationing is defined as the use of non-interest rate terms to allocate available funds and the empirical results indicate that the adjustment of such terms is significant in determining the demand for mortgage finance. In contrast with previous studies, the demand side of the mortgage market is disaggregated between first-time house buyers and existing owner-occupiers.

I. INTRODUCTION

This paper investigates the rationing behaviour of building societies in the United Kingdom (UK) mortgage market over the period 1969(1)-1980(4)¹. A widely recognized problem in modelling the market for residential mortgages is that building societies, the main institutional lenders, frequently resort to 'non-price' terms as a means of rationing available funds. If rationing does take place then observations may not fall simultaneously on the demand and supply curves for funds, thereby generating an identification problem. Several authors have attempted to deal with this problem, either by the use of dummy variables (O Herlihy and Spencer, 1972), or by assuming that the observed mortgage flow is a weighted average of demand and supply (Pratt, 1980). Such approaches assume that the mortgage rate fully describes the market price of credit for house purchase.

The approach taken in this paper treats the 'price-vector' as multi-dimensional, including non-interest variables (such as the loan-income ratio) as well as the interest (mortgage) rate. Building societies are assumed to adjust these non-interest terms as a means of allocating funds. That is, building societies may attempt to ration via non-interest terms, such as loan-income ratio, loan-value ratio, characteristics of borrower (first-time or existing owner-occupiers), length of savings record etc., rather than by pure interest rate adjustment. Mortgage demand is likewise modelled explicitly as a function of these non-interest terms as well as the mortgage rate itself.

Further, in contrast with previous studies, the demand side of the mortgage market is disaggregated between first-time buyers (FTBs) and existing owner-occupiers (EOOs) on the

¹ The period was chosen with regard to the available data.

grounds that building societies may apply different lending criteria in favour of the former during periods of mortgage famine. In addition, given that disaggregated data are readily available, it seems sensible to test the hypothesis that demand responses for mortgage funds vary between these two types of borrowers.

Section II discusses the nature of rationing and distinguishes between two types, *market clearing* and *non-market clearing* rationing. Section III develops and tests a model which enables us to identify demand during periods when observations may fall on the supply curve only. It also tests the hypothesis that the UK mortgage market is characterized by rationing of the market-clearing type. An important feature of our approach is that the mortgage rate is assumed to be exogenous with respect to current mortgage market conditions. We treat the mortgage rate as a mark-up on the share rate with the latter being determined by building societies' expectations of changes in competing interest rates. We attempt to justify this approach in section II. Finally, section IV presents the main conclusions and implications of this study. An Appendix is included which gives the definitions of the variables and sources of the data used.

II RATIONING IN THE MORTGAGE MARKET

Mortgage rationing is defined here as the use of non-price terms to allocate available funds for house purchase. Desired demand is assumed to depend upon the mortgage rate, and a vector of non-interest terms such as the downpayment ratio, the loan-income ratio and the term to maturity. In a competitive mortgage market, the interest rate always adjusts to equate desired demand and supply. However, in a rationed market the mortgage rate does not always adjust to its market-clearing or equilibrium level and, consequently, available funds have to be allocated by other means.

The mortgage market literature distinguishes between 'equilibrium' and 'disequilibrium' rationing. Kent (1980) defines equilibrium rationing as a situation in which the adjustment of non-interest terms is sufficient to equate demand and supply when the mortgage rate is below its equilibrium level, and disequilibrium rationing as a situation in which changes in these terms are not sufficient to clear the market. To avoid confusion with Jaffee's (1971) analysis which views equilibrium rationing as a consequence of the long-run optimizing behaviour on the part of lenders, we use the terms *market clearing* and *non-market clearing* rationing rather than equilibrium and disequilibrium rationing.²

To illustrate each type of rationing, assume that the mortgage market can be described by the following model:

$$MD = D(MR, V, ZD); \quad D_1 < 0 \quad (1)$$

$$MS = S(MR, ZS); \quad S_1 > 0 \quad (2)$$

where MD is the desired nominal flow demand for mortgages, MR is the nominal mortgage interest rate, V is a vector of non-interest terms, MS is the desired nominal flow supply of

² Ostas and Zahn (1975) also use the terms equilibrium and disequilibrium rationing but define the latter as a situation in which the market is cleared by the adjustment of non-interest terms when the actual mortgage rate differs from its equilibrium level. In their terms, equilibrium rationing is rationing by price (by changes in the mortgage rate).

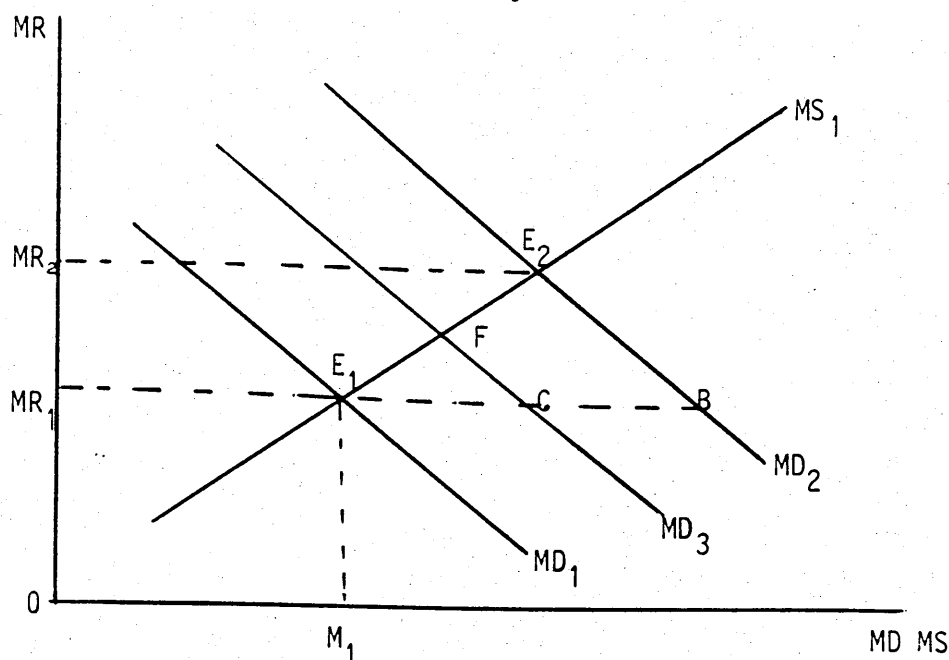


Fig. 1. Mortgage rationing.

mortgages, and ZD and ZS are vectors of independent variables determining MD and MS . Fig. 1 illustrates MD and MS as functions of MR with the other variables in Equations 1 and 2 assumed constant.

Consider an initial equilibrium, E_1 , where $MR = MR_1$ and the observed mortgage flow $M_1 = MD = MS$. Assume that this equilibrium is disturbed by a change in ZD which shifts the demand curve, MD_1 , to MD_2 . If the market is competitive in the sense that the interest rate always adjusts to equate demand and supply, then MR would rise to MR_2 , giving a new equilibrium at E_2 .

It will be argued below that the UK mortgage market is not competitive in the sense described above and that MR does not necessarily respond to excess demand or excess supply. Hence, given MR at MR_1 in Fig. 1, the shift in MD produces an excess demand of E_1B per period. Market clearing rationing exists when V is adjusted sufficiently to shift MD back to MD_1 , regaining the initial equilibrium at E_1 ; i.e. the adjustment of V 'rationes' E_1B out of the market. On the other hand, non-market clearing rationing exists when the adjustment of V is not sufficient to shift MD back to MD_1 . For example, if the demand curve shifts back to MD_3 , then the change in V rationes CB out of the market, leaving an excess demand of E_1C . When this type of rationing prevails lenders must resort to other non-price means (queues, length of saving record, etc.) to allocate supply.

Several authors have attempted to model the disequilibrium nature of the mortgage market by assuming that the mortgage rate adjusts slowly to its competitive equilibrium level. Ostad and

Zahn (1975) assume that institutional lenders choose MR to minimize adjustment costs with the adjustment process given by

$$MR_t/MR_{t-1} = (MR_t^*/MR_{t-1})^b \quad (3)$$

where MR^* is the competitive equilibrium level of MR and t is a time subscript. In periods when MR_t differs from MR_t^* they assume that the terms in V adjust to clear the market. Hence they do not consider non-market clearing rationing.³

An important implication of this type of approach is that MR always adjusts smoothly whenever MD differs from MS . That is, excess demand/supply always leads to some change in the mortgage rate. For example, in terms of Fig. 1, Ostas and Zahn (1975) assume that when MD shifts to MD_2 , V adjusts to reverse this movement and MR is raised to give an equilibrium at a point such as F . Even if the market is characterized by market-clearing rationing MR always changes when the current rate deviates from its competitive equilibrium level. The model developed below (section III) is estimated using quarterly UK data over the period 1969(1)–1980(4). Over several sub-periods, however, the mortgage rate is observed to be constant [e.g. 1969(2)–1971(3), 1973(4)–1976(1), 1980(1)–1980(4)]. If the smooth interest rate adjustment approach is valid then we must assume that the market was continually cleared over these periods, implying that the demand and supply curves were stationary or that they underwent equal proportionate shifts in the same direction.⁴

To avoid these highly restrictive assumptions we assume that there is no direct relationship between excess demand/supply and changes in the mortgage rate. Following Hewitt and Thom (1979), we treat building societies, the main institutional lenders, as passive interest rate adjusters, setting the rate offered on shares and deposits according to their expectations of interest rates offered by competing institutions with the mortgage rate as a mark-up on the share and deposit rate. We recognize that this is a highly restrictive assumption in that it does not permit excess demand/supply to directly influence building societies' interest rates. Nor does it take account of possible surpluses which may influence the spread between the mortgage and share rates. However, imposing the assumption that the mortgage rate is exogenous allows us to concentrate on direct estimation of the demand functions specified below. It must be stressed that this assumption is merely a working hypothesis which may not be tenable in an extended model of building society behaviour.

III. TESTING FOR RATIONING IN THE UK MORTGAGE MARKET

In this section we develop a disaggregated model of the UK mortgage market which tests for the presence of disequilibrium rationing. The demand side of the market is disaggregated into two types of house purchasers, namely, FTBs and EOs. The approach outlined in section II requires that the non-interest terms, V , must be specified. Obvious candidates to be included in V are the

³In the Ostas-Zahn model, 'disequilibrium' rationing occurs when credit is contracted at a mortgage rate which differs from its competitive level.

⁴In interest rate adjustment models, $\Delta MR_t = 0$ only when $MR_t = MR_t^*$. If the market is cleared at a rate which differs from MR^* then the clearing mechanism is a combination of ΔMR_t and ΔV_t .

loan-income ratio, loan-value ratio and the period to maturity. Including all of these terms in a demand function to be estimated by ordinary least squares would undoubtedly lead to serious multicollinearity problems. If we assume that all such non-interest credit terms change in the same direction (Vernon, 1965; Ostar and Zahn, 1975), the loan-income ratio may be used as a proxy for V . Our main reason for this choice is the belief that building societies are primarily concerned with the borrower's ability to finance periodic mortgage repayments. Use of the fixed-maturity, variable interest rate mortgage tends to cause gross repayments to rise disproportionately to income during periods when the mortgage rate is being increased. Given that mortgage rationing may be intensified during periods when the mortgage rate is high, in absolute if not relative terms, building societies may favour borrowers with relatively low loan-income ratios in an attempt to minimize the problem of front-end loading.⁵

To model the market, we assume therefore that the non-interest terms, V , may be proxied by the imposed loan-income ratio. That is:

$$V^i = L^i/Y^i; \quad i = \text{FTB, EOO} \quad (4)$$

where L^i is the average loan granted to each type of purchaser and Y^i is the corresponding average nominal income. The adjustment of V^i is given by

$$V_t^i/V_{t-1}^i = \left(MD_t^i/MS_t^i \right)^k; \quad k < 0. \quad (5)$$

If the market is always characterized by market clearing rationing, then V^i adjusts to give

$$MD_t^i = MS_t^i = L_t^i, \quad \text{for all } t. \quad (6)$$

If there is non-market clearing rationing, then the change in V^i is not sufficient to clear the market and

$$L_t^i = \text{MINIMUM} [MD_t^i, MS_t^i]. \quad (7)$$

Consider the case illustrated by Fig. 1 when MD_1 shifts to MD_2 giving excess demand of E_1B . V_t^i will fall relative to V_{t-1}^i and $L_t^i = MS_t^i$. From Equation 5, taking logs of both sides, we have:

$$\ln MS_t^i = \ln L_t^i = \ln MD_t^i - (1/k) \Delta \ln V_t^i (-) \quad (8)$$

where $\Delta \ln V_t^i (-) = \Delta \ln V_t^i$ when $\Delta \ln V_t^i$ is negative and zero otherwise. (\ln = natural logarithm, Δ = first difference operator.)

For illustrative purposes, let the demand for mortgage finance from FTBs be a function of an income variable (Y^{FTB}), the loan-income ratio applied to FTBs (V^{FTB}) and the mortgage rate (MR). Then substituting for demand in Equation 8, gives:

$$\ln L_t^{\text{FTB}} = a_0 + a_1 \ln Y_t^{\text{FTB}} + a_2 \ln V_t^{\text{FTB}} + a_3 \ln MR_t - (1/k) \Delta \ln V_t^{\text{FTB}} (-). \quad (9)$$

An equation such as Equation 9 may then be estimated by standard regression techniques. If $\Delta \ln V_t^{\text{FTB}} (-)$ proves significant, then demand from FTBs is greater than supply (L_t^{FTB}) when

⁵We are grateful to an anonymous referee for pointing out that over the last year or so, when mortgage demand has been relatively slack in the UK, borrower's income has not been the binding constraint, but rather that mortgagors have set their own limits on the level of borrowing in the interests of prudence.

V_t^{FTB} is falling, and rationing is of the non-market clearing type. Alternatively, if $\Delta \ln V_t^{FTB} (-)$ proves insignificant, then the non-market clearing rationing hypothesis cannot be accepted. If the market is characterized by market clearing rationing then $V_t^{FTB} = V_t^{*FTB}$, where V_t^{*FTB} is that level of V_t^{FTB} which will equate demand and supply, at a given mortgage rate; i.e.

$$\ln V_t^{*FTB} = -a_0/a_2 - a_1/a_2 \ln Y_t^{FTB} - a_3/a_2 \ln MR_t + 1/a_2 \ln L_t^{FTB}. \quad (10)$$

Substituting for V_t^{FTB} in Equation 9, and assuming that all observations fall on the supply curve, yields:

$$(1/k) \Delta \ln V_t^{FTB} (-) = 0; \quad (11)$$

hence, $(1/k) \Delta \ln V_t^{FTB} (-)$ is a measure of excess demand.

To estimate Equation 9 in relation to FTBs and EOs separately, mortgage demand for each type of borrower is assumed to be based on utility-maximizing behaviour subject primarily to the real income of borrowers, as well as the cost of mortgage finance adjusted for tax relief, the loan-income ratio, an appropriate house price index, and the rate of change of house prices. This last variable is included to test the hypothesis that demand contains a speculative element. Hence:

$$L^{FTB} = F(RY^{FTB}, MRT, V^{FTB}, PH, IPH) \quad (12)$$

$$L^{EOO} = E(RY^{EOO}, MRT, V^{EOO}, PH, IPH) \quad (13)$$

where L^{FTB} is the average advance to FTBs, RY^{FTB} is the average real income of FTBs, MRT is the mortgage rate adjusted for tax relief, V^{FTB} is the loan-income ratio imposed on FTBs. L^{EOO} , RY^{EOO} and V^{EOO} are the corresponding terms for EOs, while PH is a house price index, and IPH is the percentage change in PH from one time period to the next.

In estimating the relationships summarized by Equations 12 and 13, we do not impose the restriction that nominal mortgage demand is unit elastic with respect to house prices. Thus the dependent variable, L^i , is expressed in nominal terms, with PH appearing on the right-hand side of the equations.

Ordinary least squares (OLS) estimates for Equations 12 and 13 are presented in Table 1.⁶ Two equations are reported for each type of buyer. The first in each case treats the nominal mortgage rate (adjusted for tax relief) and the inflation rate of house prices as separate variables, while the second in each case combines these two variables in the form of a 'real' mortgage rate. In each case, the latter specification is preferred.

The results indicate that the hypothesis that market clearing rationing exists cannot be rejected in both cases, especially in the case of FTBs. All the demand variables have the expected signs, and with the exception of $\Delta \ln PH$, the coefficients on all variables are significant at the 5% level. The mortgage rate in both nominal and real forms (MRT , $MRRT$) is significant in all cases, although the elasticities are relatively low. As the coefficient on $\ln PH$ is consistently less than 1.0, the assumption of non-homogeneity of mortgage demand is confirmed. The results also indicate that while the rationing variables V^{FTB} and V^{EOO} significantly influence L^{FTB} and L^{EOO} ,

⁶The results shown in Table 1 indicate the existence of autocorrelation in both cases. All equations were also estimated using the Cochrane-Orcutt adjustment for autocorrelation. Unfortunately, the Durbin-Watson (DW) statistics indicate that the problem remains.

Table 1A. First-time buyers. Dependent variable = $\ln L^{FTB}$

		Independent variables								
	C	$\ln RY^{FTB}$	$\ln V^{FTB}$	$\ln PH$	$\ln MRT$	$\Delta \ln PH$	$\ln MRRT$	$\Delta \ln V^{FTB}(-)$	\bar{R}^2	DW
(i)	5.85 (5.00)	0.31 (2.21)	0.26 (2.09)	0.81 (13.56)	-0.12 (3.02)	-0.07 (1.05)	—	0.001 (0.007)	0.99	1.44
(ii)	5.90 (5.00)	0.31 (2.20)	0.26 (2.10)	0.80 (13.63)	—	—	-0.11 (3.16)	0.004 (0.02)	0.98	1.16

Table 1B. Existing owner-occupiers. Dependent variable = $\ln L^{EOO}$

		Independent variables								
	C	$\ln RY^{EOO}$	$\ln V^{EOO}$	$\ln PH$	$\ln MRT$	$\Delta \ln PH$	$\ln MRRT$	$\Delta \ln V^{EOO}(-)$	\bar{R}^2	DW
(i)	3.56 (3.06)	0.58 (4.29)	0.33 (2.29)	0.70 (9.95)	-0.14 (2.68)	0.09 (1.11)	—	0.28 (1.45)	0.98	0.84
(ii)	3.66 (3.21)	0.58 (4.28)	0.33 (2.34)	0.68 (10.04)	—	—	-0.12 (2.91)	0.27 (1.42)	0.98	0.83

Notes: Sample period: 1969 (1)–1980 (4). Seasonal dummies included in all cases. PH is the index of average price of all existing houses at the mortgage completion stage (1975 = 1), expressed as a four-quarter moving average $\ln MRRT = \ln MR (1 - TX) - \Delta \ln PH$, where TX is the standard rate of income tax. Numbers in parentheses below coefficients are t -ratios. \bar{R}^2 is the coefficient of determination adjusted for the number of variables in the equation. DW is the Durbin–Watson statistic for first-order autocorrelation. See Appendix for definitions and sources of variables.

respectively, the corresponding elasticities are relatively low. Nevertheless, it is important to note that the elasticity with respect to the loan–income ratio (V) is consistently greater than the elasticity with respect to the mortgage rate (expressed in either nominal or real terms). Hence, mortgage demand, in general, is found to be more responsive to changes in non-interest rate terms than it is to changes in the mortgage rate.

IV. SUMMARY AND CONCLUSIONS

In this paper we have attempted to model mortgage demand on the assumption that demand functions can be identified with respect to non-interest credit terms. The paper distinguishes two possible types of credit rationing behaviour: market-clearing and non-market clearing rationing. Our empirical results presented in section III do not support the view that the UK mortgage market is characterized by non-market clearing rationing; that is, that the adjustment of non-interest terms is insufficient to equate mortgage demand with existing supply. This result is in agreement with Kent's study of the US mortgage market (Kent, 1980).

Estimates of the disaggregated demand functions suggest that mortgage demand is relatively inelastic with respect to the mortgage interest rate, defined in either nominal or real terms. This

finding suggests the following possible explanation for the well-documented reluctance of building societies to increase the mortgage rate when interest rates are rising generally in the economy. Our estimates suggest that the interest-elasticity of demand for mortgages is less than 0.15 in absolute terms for both first-time buyers and existing owner-occupiers. If these estimates are correct, then the implication arises that relatively large interest rate adjustments may be required to clear the market when mortgage supply declines relative to demand. Given the type of mortgage instrument used in the UK, increasing the mortgage rate tends to cause disproportionate increases in gross repayments. This problem (familiarily termed 'front-end loading') is particularly severe for new mortgages and for those borrowers in the early years of a mortgage. Faced with this dilemma (in terms of public concern), building societies may have a preference to allocate available funds on a non-price basis, rather than intensifying financing problems, for existing mortgage holders.

ACKNOWLEDGEMENTS

The authors are grateful to Adrian Coles of the Building Societies' Association, Mark Pratt, Leslie Rosenthal and an anonymous referee for their valuable comments on an earlier draft of this paper.

APPENDIX

Definitions of variables

Code	Definition	Units
<i>L</i>	Average mortgage advance: quarterly L _{FTB} = first-time buyers L _{EEO} = existing owner-occupiers	£
<i>MR</i>	Gross mortgage rate, recommended by the BSA, applied to annuity advances to owner-occupiers; quarterly average	% × 10
<i>PH</i>	Index of average price of all existing houses, recorded at the mortgage approval stage; quarterly	1975 = 1
<i>TX</i>	Standard rate of income tax	Proportion
<i>V</i>	Average advance ÷ average income; quarterly. V _{FTB} = first-time buyers V _{EEO} = existing owner-occupiers.	Ratio
<i>Y</i>	Average income; quarterly Y _{FTB} = first-time buyers Y _{EEO} = existing owner-occupiers	£

Note: the data for average income in both cases should be viewed with caution because there is considerable variation in the income recorded by different societies.

Sources of data: The Building Societies Association (BSA) and Department of the Environment: 5% sample survey of building society mortgage completions. Department of Environment, *Housing and Construction Statistics*, Table 1.7. Central Statistical Office, *Economic Trends*.

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Nellis, J. G. and Thom, R. (1986) "The Nature of Credit Rationing in the United Kingdom Mortgage Market", *Journal of Urban Economics*, Vol. 20, pp. 35-54.

The Nature of Credit Rationing in the United Kingdom Mortgage Market

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Received September 4, 1984; revised November 26, 1984

This paper addresses the problem of how to estimate market demand functions for finance in the presence of rationing within the context of the U.K. house mortgage market. Two distinct approaches are outlined. The first, and more traditional, focuses on American studies in which non-price terms are assumed to adjust so as, in combination with price, to produce market clearing. In contrast, the approach used in the present study conjectures that non-interest-rate terms are varied so as to discriminate among borrowers, satisfying some but leaving the market uncleared. Empirical tests, using U.K. data, offer some support for this alternative approach. The paper offers some thoughts on credit rationing, and outlines possible avenues for further research into this important and current topic.

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1. INTRODUCTION

In recent years credit rationing has attracted considerable academic interest. The level, structure, and fluctuations of both national and international interest rates over the past decade have resulted in the growth of importance of rationing in all financial markets. This paper focuses on rationing in the home mortgage market, with particular attention on the U.K. situation. We put forward some thoughts on the rationale of mortgage rationing, in relation to both interest rates and non-interest-rate terms. It should be appreciated, however, that the complexity of the subject matter permits us to offer only limited insights and thus we do not suggest that the results are an end in themselves. Rather, the paper should serve as a useful platform for further academic research into this important and current topic.

¹I express my gratitude to the Committee for Social Science Research in Ireland for financial support.

Much recent research has centered on the estimation of market demand functions for credit. A problem sometimes encountered in this respect is that observed price-quantity relationships may not correspond to combinations given by the desired, or *ex ante*, demand curve—giving rise to the familiar “identification” problem. This identification problem is particularly severe in the market for home mortgages. Several British and American studies suggest that lending institutions (building societies in Britain and savings and loan associations in America) are slow to adjust their mortgage interest rates to levels that clear the market, especially when the general level of capital market rates is rising.² Given that the observed mortgage flow must be equal to the *minimum* (demand, supply), failure by such institutions to adjust interest rates to equilibrium levels implies that we may experience periods during which market observations fall on the supply curve only. It is precisely this disequilibrium feature of the mortgage rate of interest which may prevent the simultaneous estimation of both functions from the same data set.

Attempts to deal with this problem fall into several distinct groups. Authors such as Fair and Jaffee [6], Maddala and Nelson [11], and Bowden [3] have developed econometric methods specifically designed to estimate markets in disequilibrium. Anderson and Hendry [1] use a dynamic control theory model which attempts to explain rationing behavior of United Kingdom building societies. Claretie [4], Ostas and Zahn [14], and Kent [10], on the other hand, have attempted to deal with this identification problem by treating the demand for mortgage finance as a function of non-interest-rate terms such as the loan-to-value ratio and the period to maturity. During periods of excess demand for funds such terms are assumed to adjust so as to induce equality between aggregate demand and supply, thereby enabling both functions to be estimated from the same data set. For convenience we call this approach the equilibrium rationing hypothesis (ERH)—by definition, this approach assumes that the market is continually cleared at each level of the mortgage interest rate.

The present paper is principally concerned with the applicability of the ERH to British data. While the results presented here should be viewed with caution, we argue nevertheless that this hypothesis does not provide a totally satisfactory rationale for estimating market demand functions when the adjustment of interest rates is sluggish (as in the U.K. case). Whereas the ERH predicts that non-interest-rate credit terms should be eased (tightened) as the mortgage rate is raised (lowered), the results of the present study suggest that a rising (falling) mortgage rate may often be associated with tighter (easier) non-interest-rate terms. Based on these results, we argue that variations in non-interest-rate terms are a means by

²See, for example, Jaffee and Rosen [8], Kearn *et al.* [9], Meltzer [12], and Pratt [15].

which lending institutions may discriminate among borrowers, satisfying some but leaving the market as a whole not cleared. For example, lowering loan-to-value ratios may be a means of allocating available supply to borrowers whose demand satisfies more stringent non-interest-rate conditions. Successful mortgage applicants will be on their desired demand curves but the number of mortgages offered may be reduced and aggregate excess demand will remain a feature of the market. That is, variations in non-interest-rate terms determine which borrowers are accommodated, but do not shift the market demand curve.

In Section 3 we develop this alternative approach and present estimates of demand and supply relationships for the U.K. mortgage market. This approach highlights avenues for further research into this important area of finance. It should be noted, however, that in this paper we do not estimate market demand functions and we do not force the data to satisfy market equilibrium conditions.

In Section 4 we summarize the results of the study and draw some conclusions. Policy implications are not considered in detail at this stage of our research into the rationing of finance—such aspects are the focal point of other ongoing studies. An appendix is included, giving detailed descriptions of the data employed and their sources.

2. THE EQUILIBRIUM RATIONING HYPOTHESIS

2.1 *The Rationale behind the ERH*

The possible disequilibrium character of the mortgage rate presents a fundamental problem in modeling the mortgage market. Jaffee and Rosen [8] and Ostas and Zahn [14] assume that lending institutions adjust the mortgage rate so as to minimize cost; these researchers employ an adjustment mechanism, described by the following process, to explain such adjustments:

$$MR_t = kMR_t^* + (1 - k)MR_{t-1} \quad \text{with } 0 < k < 1. \quad (1)$$

MR defines the current mortgage interest rate, MR^* represents the market-clearing level of MR, k is the adjustment coefficient, and t represents time. If (1) adequately describes the process by which the mortgage rate is changed then, in any given time period, MR may differ from MR^* and consequently observations on current mortgage flow may not be simultaneously on the market demand and supply curves.

Models such as those developed by Kent [10] and by Ostas and Zahn [14] attempt to solve this problem by treating market demand as a function of non-interest-rate terms which are assumed to adjust to eliminate excess demand at any given value of MR. The point of the implicit model of the

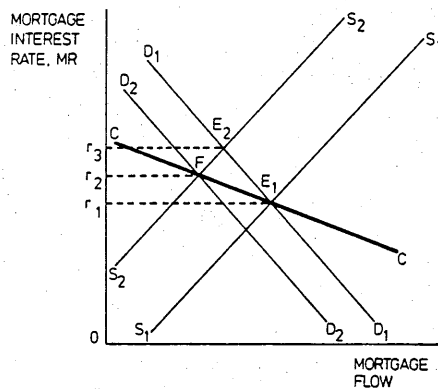


FIG. 1. Flow model of ERH.

mortgage market underlying the ERH is that there is a surface of possible combinations of mortgage rate, loan terms, etc., all of which may be adjusted in order to bring demand and supply into balance. Figure 1 illustrates the ERH, showing nominal flow demand and supply as functions of the mortgage rate. Consider an initial equilibrium at E_1 , with $MR = r_1$, which is disturbed by a shock originating from the supply side, shifting the supply curve from S_1 to S_2 . Sluggish interest-rate adjustment implies that the mortgage rate may be initially raised to a level such as $MR = r_2$ which is below the new market-clearing level, r_3 . The ERH, as put forward by the above researchers, suggests that lending institutions will tighten non-interest-rate terms and force the demand curve for funds to shift from D_1 to D_2 , resulting in a short-run equilibrium at F . As the mortgage rate is subsequently adjusted toward r_3 , non-interest-rate terms are gradually relaxed so as to induce a rightward shift in the demand curve until the new long-run equilibrium is achieved at E_2 . If the assumptions underlying the ERH are valid then it is possible to estimate, simultaneously, demand and supply functions, even though the mortgage rate may differ from its long-run equilibrium level.

As presented by Ostas and Zahn [14], the main evidence in favor of the ERH is based on a statistically significant negative relationship between aggregate mortgage demand and the down payment ratio which, given that all non-interest-rate terms change in the same direction, can be considered an appropriate indicator of such changes. Ostas and Zahn also report a significant negative relationship between demand and the mortgage interest rate and a positive relationship with real income. Hence if their estimated demand function is expressed in inverse form with the down payment ratio as the dependent variable, then this variable would be negatively related to

MR and positively related to income. Such a result is, of course, consistent with the ERH. In terms of Fig. 1, for example, a rise in income which shifts the demand curve to the right requires a compensating rise in the down payment ratio if MR is held below its new market-clearing level.

2.2 *The ERH in the U.K. Context*

As a useful exercise the ERH was investigated with respect to U.K. data. The most important problem, however, is to specify accurately a market demand equation for mortgage finance which picks up several crucial factors such as the demand for housing, the growth of real purchasing power, the cost of credit, the speed of adjustment, etc. Not surprisingly, we were forced to compromise with regard to the final specification—a trade-off between complexity and informativeness is inevitable in studies of this kind with many different interactions affecting the overall analysis. After a great deal of econometric experimentation, we chose a short-run flow model of mortgage finance. A major disadvantage of this model is that the long-run implications are ignored, but nevertheless the model offers important insights into credit rationing. Market demand was specified as a function of real disposable income, YD , the tax-adjusted mortgage rate, $MR(1 - v)$ where v represents the marginal tax rate, lagged housing starts, HST , the relative tax advantage of owner occupation, Z , and non-price terms.

To keep the model tractable, we assume that the vector of non-price terms can be proxied by a single variable, namely the loan-to-value ratio LV , defined as L/PH where L is the average mortgage approval and PH represents the price of housing. By definition, LV also equals 1 minus the average down payment ratio. This is the approach used by Clauretje [4] and by Ostas and Zahn [14], while Kent [10] uses the term to maturity. The common assumption in these models is that all non-price terms change in the same direction and that each term can be approximated by a single value rather than a distribution of values among borrowers.

An important feature of the U.K. tax system is that imputed income from owner occupation is not treated as part of gross household income for tax purposes. Following Atkinson and King [2] we approximate imputed income by $R \cdot PH$, where R is a representative return on non-housing assets; that is, $R \cdot PH$ equals the sum which PH would yield in non-housing assets. Given that the returns to non-housing assets are generally taxed, the relative real tax advantage of holding wealth in housing capital can be approximated by $Z = v \cdot R \cdot PH/P$, where P is a generalized price index. As an increase in Z induces households to reallocate wealth toward housing equity we expect mortgage demand to be negatively related to Z .

The inverse form of the demand function is given by

$$LV = D(YD, MR(1 - v), HST, Z, AD/PH) \quad (2)$$

where AD represents nominal aggregate mortgage demand. Disposable income, housing starts and Z collectively capture the demand for housing; YD and Z represent the determinants of housing demand while HST is a measure of that demand. Several measures of permanent income (such as a four-quarter moving average of YD) were used in place of YD but the econometric results suggested that these added little to the overall explanatory power. Alternative interest rates were also employed since these would be expected to influence mortgage demand; again we found no empirical justification for including them as separate variables, and the Z variable can be interpreted as including them.

Apart from the use of the Z term, (2) differs from Ostad and Zahn's [14] specification in that we specify flow demand in real rather than in nominal terms.³ Since the ERH assumes market clearing at each interest rate, we replace AD by the observed mortgage flow A . To accommodate possible simultaneity problems, instrumental variables were used in place of MR, Z, and A/Ph .⁴ Instruments were obtained by first regressing MR, PH, and A on the other variables, the lagged mortgage rate, the stock of building society share and deposit liabilities lagged four quarters, and the exogenous variables in the supply function as specified in Section 3 below. Predicted values were then used to compute the tax adjusted mortgage rate, Z and real mortgage supply.

The results, using quarterly U.K. data for the period 1965 (Q1)–1981 (Q1) and assuming a log-linear specification, are presented in Table 1. The initial estimated equation for L/PH , shown by (3) in Table 1, indicated the possibility of serial correlation; consequently the model was reestimated using the Cochrane–Orcutt procedure, shown by (4). Seasonal dummies were included in both cases, but are not reported in the interests of brevity.

The results shown in Table 1 appear to contrast those predicted by the ERH. For example, returning to Fig. 1, consider the implications of an initial equilibrium at E_1 being disturbed by a rise in real income which shifts the demand curve to the right, *ceteris paribus*. The ERH suggests that "since the mortgage rate is sluggish in adjusting to its market equilibrating rate the down payment ratio will increase [loan-to-value ratio fall] to clear the market of excess demand in the short run" [14, p. 193]. The present results for the inverse demand function suggest that the loan-to-value ratio is a positive function of real income. Alternatively, consider the adjustment process from the short-run equilibrium at F towards the long-run equilibrium at E_2 . The ERH predicts that as MR is raised toward r_3 , non-inter-

³Specifications using nominal mortgage flow yielded similar results in terms of the signs of individual coefficients but the overall regression statistics were inferior to those using the real mortgage flow.

⁴As tax relief is granted on mortgage interest the mortgage rate was adjusted to $MR(1 - v)$.

TABLE 1
The Demand for Mortgage Finance—U.K. Data

Dependent variable	Constant term	Explanatory variables					
		$\ln(YD)_t$	$\ln(MR)_t$	$\ln(HST)_{t-1}$	$\ln(Z)_t$	$\ln(A/PH)_t$	
$\ln(L/PH)_t$	-1.867 (3.17)	+0.208 (3.26)	-0.296 (7.95)	-0.037 (1.94)	-0.057 (1.70)	+0.629 (3.24)	$\bar{R}^2 = 0.89$ SEE = 0.025 DW = 1.12 (3)
$\ln(L/PH)_t$	-1.877 (2.26)	+0.223 (2.43)	-0.281 (6.27)	-0.043 (1.87)	-0.066 (1.82)	+0.513 (1.97)	$\bar{R}^2 = 0.76$ SEE = 0.022 DW = 2.01 RHO = 0.463 (4)

Note. A full description of the data is given in the Appendix; t statistics are in parentheses.

est-rate terms must be relaxed to shift market demand to the right along S_2 . Once again the results for the present study suggest the opposite—a *ceteris paribus* rise in MR is found to be associated with a tightening of non-interest-rate terms.

Section 3 presents an alternative mechanism for modeling the mortgage market which is consistent with the above results. The basis of this approach is that during periods of excess demand, institutions discriminate in favor of borrowers whose preferences indicate that they are willing to accept some stringent non-price terms such as relatively low loan-to-value ratios. This implies that successful loan applicants are on their desired demand curves but that the market may remain uncleared. In order to provide demand estimates we concentrate on explaining average loan size and include the number of loans as a shift variable in the demand function. As will be explained below, this approach is consistent with our initial results as it permits individual borrowers to reduce mortgage demand as the mortgage rate rises toward its equilibrium level. That is, individuals are moving along their demand curves so that average loan size (or, at a given average house price, the observed loan-to-value ratio) is negatively correlated with the mortgage interest rate as supported by the estimates of (2).

Before presenting the alternative approach it is important to stress two key differences with the ERH. First, we do not assume that the market demand curve shifts in response to variations in non-price terms. Indeed, a contention of the present paper is that this assumption is invalid. As developed by Ostas and Zahn [14], the rationale underpinning the ERH is that tightening non-interest-rate terms raises the marginal cost of equity in housing capital. They argue that increasing the down payment ratio leads to higher marginal costs of equity and induces borrowers to defer purchase or to purchase smaller homes, thus generating a decline in mortgage demand.

The problem with this approach is that it confuses the concepts of total cost and marginal cost of housing equity.

The total cost of housing equity is the income foregone by holding wealth in housing as opposed to non-housing assets. The marginal cost is the change in total cost from reallocating an additional unit of wealth. Marginal cost may therefore be interpreted as the average yield on non-housing assets, or the opportunity cost of the marginal unit of housing equity. Rising capital market yields may therefore induce individuals to reduce housing equity and to increase mortgage demand. That is, rising marginal cost may reduce the demand for housing services, but does not imply that the planned portion of any given purchase financed by a mortgage will be reduced. On the contrary, we expect desired loan-to-value ratios to be an increasing function of marginal cost.

Further, as individual borrowers can reasonably be assumed to be price takers in asset markets, the marginal cost of housing equity is not only exogenous with respect to individual mortgage decisions, but also equals average cost. It follows that when individuals are offered loan-to-value ratios less than desired, then the total cost of housing capital, but not the marginal cost, increases.

Given that decisions on the desired amount of housing equity depend upon marginal cost, it follows that individuals do not willingly change their *ex ante* demand when offered a loan size less than they desire. If individual borrowers are quantity constrained in this sense then some may accept a non-optimum solution by increasing equity to a level in excess of their planned level. But this does not imply that individual demand curves are shifting and, as the market demand curve is the horizontal summation of individual curves, then varying non-interest-rate terms does not necessarily lead to a fall in aggregate demand at any given mortgage rate. Conversely, consider a market equilibrium at F in Fig. 1. The ERH implies that if non-interest-rate terms were relaxed then the demand curve would shift to the right; that is, individuals would be willing to accept greater mortgage liability even though the mortgage rate, the opportunity cost of housing equity and real incomes remained constant.⁵

The second point of contrast between the two approaches is that we attempt to explain the equilibrium behaviour of the non-price terms whereas the ERH assumes that the long-run value for this variable is constant. For example, in Fig. 1 as the mortgage rate is gradually raised toward r_3 ,

⁵Using the ERH as a rationale for estimating market demand functions may therefore give excessive elasticity estimates. For example, the ERH assumes that observations lie on relationships such as D in Fig. 1. If, on the other hand, the demand curve does not shift then we are actually estimating a relationship such as CC in which case the estimated elasticity with respect to MR will exceed the "true" value as implied by D_1 (see Dhrymes and Taubman [5]).

non-interest-rate terms are steadily relaxed to induce accommodating shifts in the demand curve. However, once the equilibrium at E_2 is attained, then non-interest-rate terms must have reverted to the initial values of E_1 as both points lie on the same demand curve. The ERH, therefore, implies that equilibrium values of non-price terms are independent of the mortgage interest rate and, given mortgage supply, of the exogenous variables in the demand function.⁶

3. THE U.K. MORTGAGE MARKET

In the context of the United Kingdom, O'Herlihy and Spencer [13] and Hadjimatheou [7] have attempted to deal with the identification problem by the use of dummy variables to account for periods of credit rationing. The problem with this approach is that it not only assumes that the mortgage rate fully describes the price of credit, but it also treats rationing as exogenous to the market. Anderson and Hendry [1], on the other hand, endogenize rationing behavior by assuming that institutional lenders choose an interest rate/mortgage supply combination which maximizes a myopic cost function with conflicting aims. While these models either directly or indirectly provide estimates of market demand, the present paper concentrates on the determinants of average loan size by assuming that successful mortgage applicants are on their desired demand curve. We do not, however, employ the ERH and do not force the data to satisfy aggregate market conditions.

To illustrate our approach we distinguish two types of rationing—borrower specific and loan specific. Borrower-specific rationing is defined as a process by which lending institutions discriminate in favor of certain types of borrowers such as first-time house buyers and applicants who have accumulated a certain volume of deposits with the institution concerned. Loan-specific rationing means that institutions adjust the terms on which any given loan is offered. During periods of credit restraint, we assume that institutions use the former type of rationing to determine priority. Variations in non-interest-rate terms are viewed as the method for determining which borrowers are accommodated but not as a means of inducing shifts in the aggregate flow demand curve. Note that borrower-specific rationing may, *ex post*, appear to be loan specific if institutions discriminate in favor of applicants with relatively low loan-to-value ratios and/or maturity.

3.1 The Demand Side

Given the above approach we cannot simultaneously estimate market demand and supply functions. We can, however, provide demand estimates

⁶We are grateful to an anonymous referee for making this point explicit.

by concentrating on average mortgage size. To illustrate, consider a situation in which an initial market equilibrium is disturbed by a leftward shift in aggregate supply. If the mortgage rate always adjusted to clear the market then the average loan-to-value ratio would fall as individual borrowers responded to an increase in MR by reducing the proportion of the house price financed by borrowing—individuals would be moving along their demand curves. In terms of Fig. 1 adjustment from E_1 to E_2 implies a decline in mortgage flow and a fall in the observed average loan-to-value ratio given that real mortgage demand is an inverse function of financing cost. If, on the other hand, mortgage rate adjustment is sluggish and MR initially rises to $MR = r_2$ then lending institutions must find some other means of allocating available supply which now falls short of market demand. If the rationing criterion employed is borrower specific then institutions may discriminate in favor of applicants with relatively low loan-to-value ratios. We would then expect the observed average loan-to-value ratio to fall because there is some upward movement in MR and because mortgage supply has declined relative to demand. In other words, at any given MR a decline in mortgage availability leads to a change in observed loan-to-value ratios. Excess demand remains a feature of the market but successful applicants are on their desired demand curves.

To test this approach we assume that the average desired loan-to-value ratio (or real mortgage demand) depends upon real per capita income, Y , the tax-adjusted mortgage rate and the relative tax advantage of owner-occupied housing as defined in Section 2. The desired average loan-to-value ratio is therefore given by

$$(L/PH)^* = F\{Y, MR(1 - v), Z\}. \quad (5)$$

As aggregate flow demand may not equal supply at the current mortgage rate, observed, or *ex post* mortgage size will also depend upon mortgage availability; that is,

$$L/PH = G\{A/PH, (L/PH)^*\} \quad (6)$$

where A is the flow of new mortgage approvals which, by definition, must equal the product of average mortgage size, L , and the number of mortgages granted, N ; that is

$$A = L \cdot N \quad (7)$$

Using a log-linear specification gives the following relationship to explain

the average loan-to-value ratio:

$$\ln(L/PH)_t = a_0 + a_1 \ln(Y)_t + a_2 \ln(MR)_t + a_3 \ln(Z)_t + a_4 \ln(N)_t. \quad (8)$$

If rationing favors applicants with low loan-to-value ratios we expect a_4 to be positive.

It should be noted that Z may be interpreted as a "catch-all" variable for several terms which have not been included individually, such as the relative implicit rental price of housing (along the lines of Atkinson and King [2]) as well as the influence of other market interest rates, other than the mortgage rate, which may affect the demand for mortgage finance by borrowers.

3.2 The Supply Side

On the supply side we assume that mortgage availability can be measured by new commitments made by building societies. Over the sample period building societies supplied more than 80% of all mortgage commitments in the U.K. These societies are mutual institutions whose primary function is to attract fund, mainly from households, and to purchase mortgages on owner-occupied dwellings. They typically hold about 80% of their assets in home mortgages with the bulk of the remainder being held in "liquid assets" which consist of cash and short-term public sector securities.

We model new commitments as depending on the availability of funds and liquidity considerations. The availability of funds is assumed to depend on the net change in share and deposit liabilities plus repayments of principal on existing mortgages. Hence

$$A = f(\text{DSK}, \text{REP}, \text{LR}^*/\text{LR}) \quad (9)$$

where DSK = the change in the stock of building society shares and deposits, REP = repayments of principal, LR^* = desired liquidity, and LR = the liquidity ratio at the end of the previous period. Our *a priori* expectations are that A is positively related to DSK and REP, but negatively related to LR^*/LR . Modeling desired liquidity is a problem which has plagued researchers since research on building society behavior originated in the early 1970s. There are many alternatives to choose from with, as yet, no overall conclusion. In line with many studies which we have examined a partial adjustment framework was used for the liquidity ratio in favor of, for example, the supply of mortgage funds. To model LR^* we assume that building societies in the U.K. have two motives for holding liquid assets.

i. *A precautionary motive* which arises from the uncertainty regarding future deposit inflows. Mortgage commitments made in the current quarter

may not be taken up until future quarters with the consequence that societies must gear current lending to expected inflows. We assume that lending behavior will be curtailed if societies are relatively uncertain about future inflows and that uncertainty is positively related to the variance of DSK.

ii. *An income motive.* Building societies finance interest payments on their liabilities plus management expenses and additions to reserves from interest earned on mortgages and liquid assets. Given that the mortgage rate may not be instantaneously responsive to trends in financial markets, a relative increase in short-term interest rates may lead to an increase in desired liquidity.

Hence

$$LR_t^* = L \{ V_t, (MR/CR)_t \} \quad (10)$$

where

$$V_t = 0.25 \sum_1^4 (DSK_{t-i} - MDSK_t)^2 \quad (11)$$

and

$$MDSK_t = 0.25 \sum_1^4 DSK_{t-i}. \quad (12)$$

CR is a measure of the return on non-mortgage assets. In the analysis which follows we attempted to employ a portfolio allocation model in which MR and CR entered directly rather than using the desired liquidity concept. Based on standard statistical criteria, however, the above model proved superior. As noted in the previous section, we recognize that a model of this nature is unable to capture totally the long-run characteristics of the market but for the present we focus on the short-run phenomena.

Substituting (10)–(12) into (9), using a log-linear specification and remembering that $A = N \cdot L$, gives the following relationship to explain the number of loans granted per period:

$$\begin{aligned} \ln N_t = & b_0 + \ln L_t + b_1 \ln DSK_t + b_2 \ln REP_t + b_3 \ln V_t \\ & + b_4 \ln (MR/CR)_t + b_5 \ln LR_{t-1}. \end{aligned} \quad (13)$$

3.3 Estimation of the Model

Equations (8) and (13) explain the average loan-to-value ratio and the number of mortgages granted at given levels of the mortgage rate MR. The

TABLE 2
The Demand Side—Eq. (8)

Dependent variable	Independent variables						\bar{R}^2	DW
	Constant	$\ln PH_t$	$\ln Y_t$	$\ln MR_t$	$\ln Z_t$	$\ln N_t$		
$\ln L_t$	1.175 (0.94)	1.107 (46.90)	0.234 (4.50)	-0.202 (4.89)	-0.084 (3.52)	0.083 (2.70)	0.99	2.02
$\ln(L/PH)_t$	0.234 (1.47)	—	0.271 (6.46)	-0.171 (8.66)	-0.73 (3.68)	0.086 (4.66)	0.95	1.60

Note. See Table 3 for definitions of variables.

equations were estimated over the period 1969 to 1981 using quarterly data and employing instrumental variables in place of the explanatory variables in (8) and in place of MR , DSK , V , and N in (13). Instruments were obtained as in estimating (2). The income variable in (8) is the average income of successful mortgage applicants valued at 1975 prices. Given the assumption of borrower-specific rationing, Y is treated as endogenous.

The results are presented in Tables 2 and 3. Seasonal dummies were included in all regressions and a dummy = 1 for 1973 (Q1) to 1973 (Q3) was included in (13) to account for a government loan paid to societies in an attempt to prevent a rise in the mortgage rate. Equation (8) was also estimated without the restriction that average loan demand is unit elastic with respect to PH and (13) was estimated with and without the restriction that the coefficient on $\ln L = -1$. Based on standard statistical criteria the results are satisfactory and all coefficients have their expected signs.

The following example illustrates one method of interpreting the model and results. Assume that an initial market equilibrium is disturbed by an

TABLE 3
The Supply Side—Eq. (13)

Dependent variable	Independent variables							\bar{R}^2	DW
	Constant	$\ln L_t$	$\ln DSK_t$	$\ln REP_t$	$\ln V_t$	$\ln(MR/CR)_t$	$\ln LR_{t-1}$		
$\ln N_t$	6.776 (14.98)	-1	0.134 (2.70)	0.912 (12.25)	-0.026 (2.20)	0.240 (2.92)	0.408 (2.02)	0.88	1.77
$\ln N_t$	6.335 (4.28)	-0.912 (3.25)	0.129 (2.39)	0.850 (4.02)	-0.028 (1.97)	0.265 (2.29)	0.438 (2.07)	0.88	1.76

Note. t statistics are in parentheses. L , average loan approval; PH , average price of houses financed by building society mortgages; N , number of mortgage approvals; DSK , four-quarter moving average of $SK_t - SK_{t-1}$, SK , stock of share and deposit liabilities; REP , repayments of principal; LR , liquidity ratio; CR , yield on 3-month deposits with local authorities; Y , average real income of borrowers valued at 1975 price; and R , yield on 20-year government bonds.

increase in income which shifts individual demand curves to the right. As the market demand curve is the horizontal summation of individual demand curves there will be aggregate excess demand at the current mortgage rate. We assume that successful applicants are on their desired demand curves but that the number of loans adjusts to give equality between availability and $N \cdot L$. This implies that building societies discriminate among borrowers on loan characteristics. As the estimated equation for (8) indicates that the average loan-to-value ratio is positively related to loan numbers we conclude that rationing tends to discriminate in favor of borrowers with relatively low loan-to-value ratios. Table 2 therefore confirms that the average loan-to-value ratio is a positive function of loan numbers and declines during periods of credit restraint.

In contrast with the ERH, our results suggest that the loan-to-value ratio is a negative function of MR. In the approach used by Ostad and Zahn [14], for example, increasing MR requires that institutions ease non-interest credit terms. They assume continuous market clearing so that increasing MR generates excess supply at any given loan-to-value ratio, with the consequence that L/PH must be increased simultaneously to shift the market demand curve to the right. Our approach on the other hand suggests that increasing MR permits a decline in the loan-to-value ratio because individuals will, on average, seek smaller loans (accept greater equity) as the mortgage rate rises.

The results also indicate that MR is a significant determinant of loan size but that the elasticity is relatively small. If this result is interpreted as implying the mortgage demand is relatively inelastic with respect to MR, then we can suggest the following "rationale" for rationing behavior. A low-demand elasticity implies that a relatively large mortgage rate increase may be required to eliminate any given level of excess demand. In the U.K. mortgages are normally granted for a fixed term, usually 20–25 years, but with a variable interest rate. Given that the rate applied to outstanding mortgages is variable, increasing MR not only raises the cost of new commitments but also creates financing problems for existing mortgage holders. Building societies may therefore prefer to accept the problems of extending the mortgage queue in order to avoid the generally unpopular and politically sensitive alternative of imposing "hardship" on a relatively large number of households who are currently using mortgage finance.

4. SUMMARY AND CONCLUSIONS

In this paper we have addressed the problem of how to estimate market demand functions for mortgage finance in the presence of rationing. The empirical analysis is directed at the U.K. house mortgage market, though the methodology is, of course, applicable to a large number of other financial sectors and countries. Section 2 deals with the traditional equi-

librium rationing hypothesis whereby non-price terms are assumed to adjust so as, in conjunction with price (the mortgage rate) to produce market clearing. A short-run flow model of this hypotheses is examined using U.K. data and, while it is acknowledged that the tests do not offer definite conclusions, some evidence is found which suggests that the ERH may not be totally acceptable. We offer several important criticisms of the underlying assumptions.

Section 3 provides an alternative approach which assumes that rationing is a means by which institutions discriminate among borrowers. Again, owing to the availability of adequate data, attention is directed towards the U.K. mortgage market. Individual borrowers are assumed to be on their desired demand curves but market demand is not modeled as a function of non-interest-rate terms and variations in these terms do not shift individual demand curves and, consequently, the aggregate demand curve. The regression results, which offer support for this alternative approach, do not therefore force the data to satisfy market-clearing conditions.

The analysis carried out in this study indicates the need for further research into the rationing of credit in general. While much of the analysis has been conjectural and the results tentative, it is hoped that the discussion will serve as a useful platform for further academic work in this area.

APPENDIX

CR	Local Authority 3-month deposit rate; source ET, %
DSK	Change in stock of building society share and deposit liabilities, four-quarter moving average; source BSA, £m
L	Average mortgage approval; source BSA £000
LR	Building Society liquidity ratio; source BSA, %
MR	Building Society mortgage interest rate, source BSA, %
N	Number of mortgage commitments; source BSA, 000's
P	Price deflator for disposable income; source ET, 1975 = 100
PH	Average price of houses financed by building society mortgages; source BSA, £000
R	Yield on 20-year government bonds; source ET, %
REP	Repayments of principal; source BSA, £m
Y	Average real income of mortgage borrowers at 1975 prices; source BSA, £000

Sources. BSA, Bulletin of the Building Societies Association (BSA, London); ET, Economic Trends (Central Statistical Office, London).

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