SWP 11/87 FINANCIAL CHARACTERISTICS OF SMALL COMPANIES IN THE UK

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ABSTRACT

This paper reports the provisional results of research into the financial characteristics of small companies. It analyses data produced by the Department of Trade and Industry on the profitability and the financial structure of small companies and draws some tentative conclusions. When extended into the general area of small firm efficiency some of these conclusions are particularly worrying and have implications for Government policy. Finally, the paper highlights some unanswered questions and areas for future research.

1. BACKGROUND

Studies of company financial performance in the UK were only made possible by the 1948 Companies Act which required public companies to file their balance sheets in a fairly standardised format. Some of the first studies on this date, covering the period from 1948-60, have since become known as the "Cambridge Studies".[1] However since most private companies were exempt from the provisions of the 1948 Act, little work was possible on small companies until the 1967 Companies Act removed this exemption. An exception to this was the Oxford survey which was subsequently reported on by Bates.[2]

However the first comprehensive study of small firms in the UK was undertaken by the Bolton Committee[3] which reported in 1971 and was accompanied by 18 research reports. Report 16,[4] based on replies from a sample of 2115 forms to a postal questionnaire on accounting data, in particular provided the following figures for profitability:

	Return on Net Assets	Return on Total Assets
Small firms	17.8%	11.2%
Quoted firms	13.5%	9.5%

Subsequently the Wilson Committee[5] provided further analysis of the accounts of a large sample of small and large companies between the period 1972-1975. Their results for return on net assets were as follows:

	1973	1974	1975
Small companies	18.4%	16.4%	14.9%
Medium companies	22.7%	19.5%	16.9%
Medium and small companies	21.0%	18.2%	16.1%
Large companies	18.3%	16.3%	14.9%

Business Monitor results are based on a sample of nearly 3000 limited liability companies filing accounts with Companies House. This sample is stratified and varies from a 1 in 360 sample for small companies to a 1 in 1 sample of the top 500 companies. This agregate data has been used to produce an analysis based on accounting ratios and all ratios will thus be "value weighted".

3. PROFITABILITY ANALYSIS

An analysis of profitability data is presented in Table 1 and this is shown diagramatically in figures 1-3. This presents a very different picture to that disclosed by the Bolton and Wilson Reports.

Return on total assets is the best measure of a firm's efficient use of assets because it is independent of financing methods. Using this criteria small companies can be seen to be significantly less profitable than large companies and, until 1982 (provisional data only) that situation was worsening. Indeed the situation appears to have deteriorated even more dramatically in the manufacturing sector.

Return on net assets (defined to exclude bank overdraft) is probably the key measure of performance since it measures productivity of capital in national terms, not just the return to the owner of the capital. After all, creditor finance is free and, although firms making extensive use of it may be perceived as risky, they are likely to appear better performers using their measure than firms that do not. As can be seen, large companies have significantly out performed small firms since 1979 despite, as we shall see later, the extensive use of creditor finance by the latter. Small companies' profitability has again deteriorated most in the manufacturing sector. However, medium companies

In a study of Israeli companies Tamari[9] declared profits were increased by 50% after adding back excessive salaries, household expenses, the cost of foreign travel, car allowances, entertainment charges etc., which tax officers ascribed to the personal accounts of major shareholders. Similarly Stekler[10] in a study of US companies showed that profits were increased by 50% after correcting for excess managerial charges defined by him as the difference between that paid to managers of loss making companies and that paid to profit earning companies, on the assumption that the loss making companies were unable to pay salaries in excess of the market rate. Thus a downward bias in the reported profitability of small firms in the UK seems highly likely, however, no research into its extent has been undertaken. Clearly this is an interesting area for further research.

4. BALANCE SHEET ANALYSIS

The analysis of balance sheet structures is presented in Tables 2 and 3 and shown diagramatically in figures 4-6. The pattern of financing is remarkably similar to that found in Tamari's study for the Wilson Report.[11]

- Small companies continue to be less liquid than large companies with current ratios around 1.0 over the period compared to 1.4 for large companies.

- The smallest companies are also more highly geared and that gearing would appear to be drifting up. However there are significant differences with medium companies.

- For both small and medium companies the proportion of debt represented by long term loans is significantly lower than for large companies and that proportion is drifting down.

- A far higher proportion of small companies' assets are represented by debtors and a far lower proportion by fixed assets than large companies.

data reported may be the result of changes in many other economic factors affecting profitability.

It has also been empirically established that small firms exhibit greater variability in their growth rates of profitability than large firms.[15] Whittington,[16] looking at the variability of profit and firm size for UK public companies stated:

> "there is a clear tendency for smaller companies to have a greater variability of profitability over time than the larger companies"

Tamari[17] gave us some information on the extent of this variability in the UK:

No. of employees	1-5	6-24	25-99	100-199
Profit as % of net assets				
Lower quartile	3.2	2.4	1.8	3.5
Medium	20.0	12.0	9.1	12.3
Upper quartile	58.8	32.3	25.5	22.6
Variability	55.6	29.9	23.7	19.1

Many studies of small and large firm performance tend to focus on means and ignore variability and the effect of other economic factors. When firms are classified according to one or more characteristic (such as size), any observed differences in performance can be tested for statistical significance using a T test or F test. This has not been undertaken for this data set. However a pilot study by this author of 31 small and 32 large companies in the mechanical engineering sector over the period 1978-82, which disclosed similar profitability trends to those discussed here found that the means of the two samples were not significantly different when tested at the 5% level, until 1982 (their worst year).

7. SUMMARY

This paper reports the analysis of aggregate financial data now regularly published in Business Monitor MA3. The results on financial structure are generally in line with previous studies. However the results on performance are not, disclosing that small companies' profitability is generally lower than large companies and is declining faster than that of large companies. The paper goes on to look at factors which affect this profitability and propose areas of further research.

Table 2 Common Size Balance Sheets for Small Companies 1977–82

	1977				1978				1979				1980				1981*		1982**	
All Companies %	L	M/S	M	S	L	M/S	M	S	L	M/S	M	S	L	M/S	M	S	L	M/S	L	M/S
Fixed assets:																				
Net tangible assets	36	28	29	28	38	29	29	27	37	29	29	29	40	31	31	30	42	31	42	31
Other	2	2	2	2	2	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1
Current assets:																				
Stock	26	29	30	23	25	28	30	22	26	29	31	22	25	27	29	21	23	26	22	26
Debtors	22	32	31	35	22	33	31	36	23	32	32	35	22	30	30	33	23	30	22	30
Investments	8	2	2	2	7	2	2	2	7	2	2	2	6	3	2	2	5	2	6	1
Cash	6	7	6	10	6	7	6	11	5	7	5	11	5	8	7	13	6	10	7	11
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Current Liabilities:																				
Bank overdraft	13	15	16	12	13	13	14	11	13	14	14	13	14	16	16	14	14	16	14	17
Creditors	25	39	34	57	24	40	34	59	25	41	36	60	25	39	34	59	26	42	26	42
Div's & Interest	1	–	–	1	1	–	–	–	1	–	–	–	1	–	–	–	1	–	1	–
Tax	2	3	3	2	3	3	3	2	3	2	2	2	3	2	2	2	3	2	3	2
Capital:																				
S'holders Interest	41	32	35	23	43	34	38	22	44	34	38	20	44	36	40	20	43	35	43	35
Minorities	2	–	–	–	2	–	–	–	3	–	–	–	3	–	–	–	3	–	4	–
Deferred Tax	6	8	9	3	4	7	8	4	3	6	7	3	2	5	5	3	2	3	3	3
Debentures, loans etc.	10	3	3	3	10	3	3	2	8	3	3	2	8	2	3	2	8	2	6	1
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* Small/Medium classification discontinued from MA3 No.16
** Provisional figures

Source: Business Monitor MA3 No.13–16

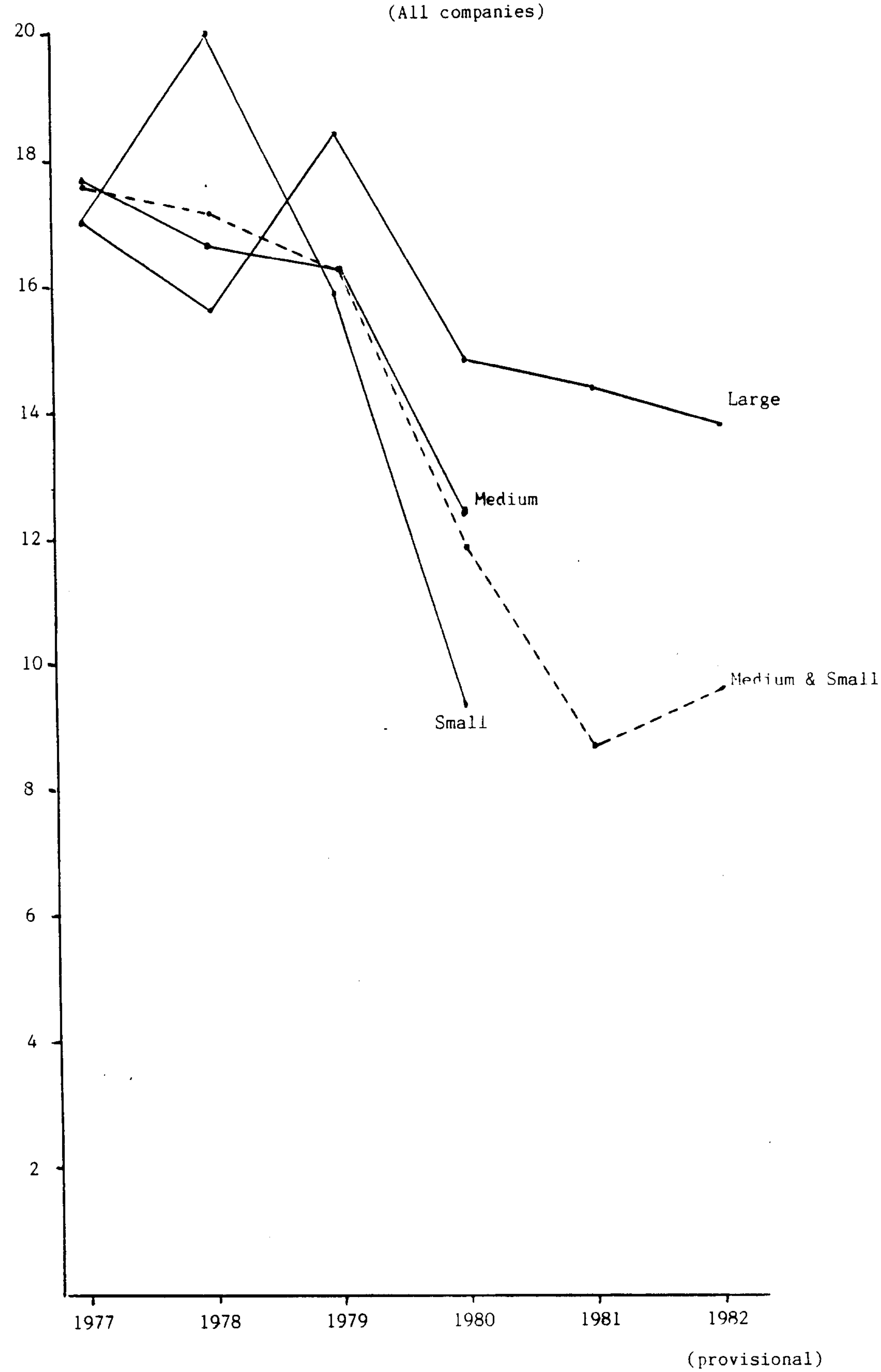
Table 4 The Financing of Small Companies 1962-1982

	Various samples of small companies						Large companies	
	1962-63	1964-68	1968-70	1970-71	1971-75	1977-82	1962-75	1977-82
	%	%	%	%	%	%	%	%
Assets:								
Fixed assets	33	36	37	34	27	30	45	38
Current assets	67	64	63	66	73	70	55	62
	100	100	100	100	100	100	100	100
Financed by:								
Owners interests	58	59	43	53	36	40	55	47
Current liabilities	29	30	33	31	57	42	26	28
Bank borrowing	11	7	16	12		15	7	13
Long term loans	2	4	7	3	7	3	10	9
Minorities	0	0	1	1	0	-	2	3
	100	100	100	100	100	100	100	100

Sources: See reference 12

RETURN ON NET ASSETS

(All companies)



BALANCE SHEET STRUCTURES

(All companies)

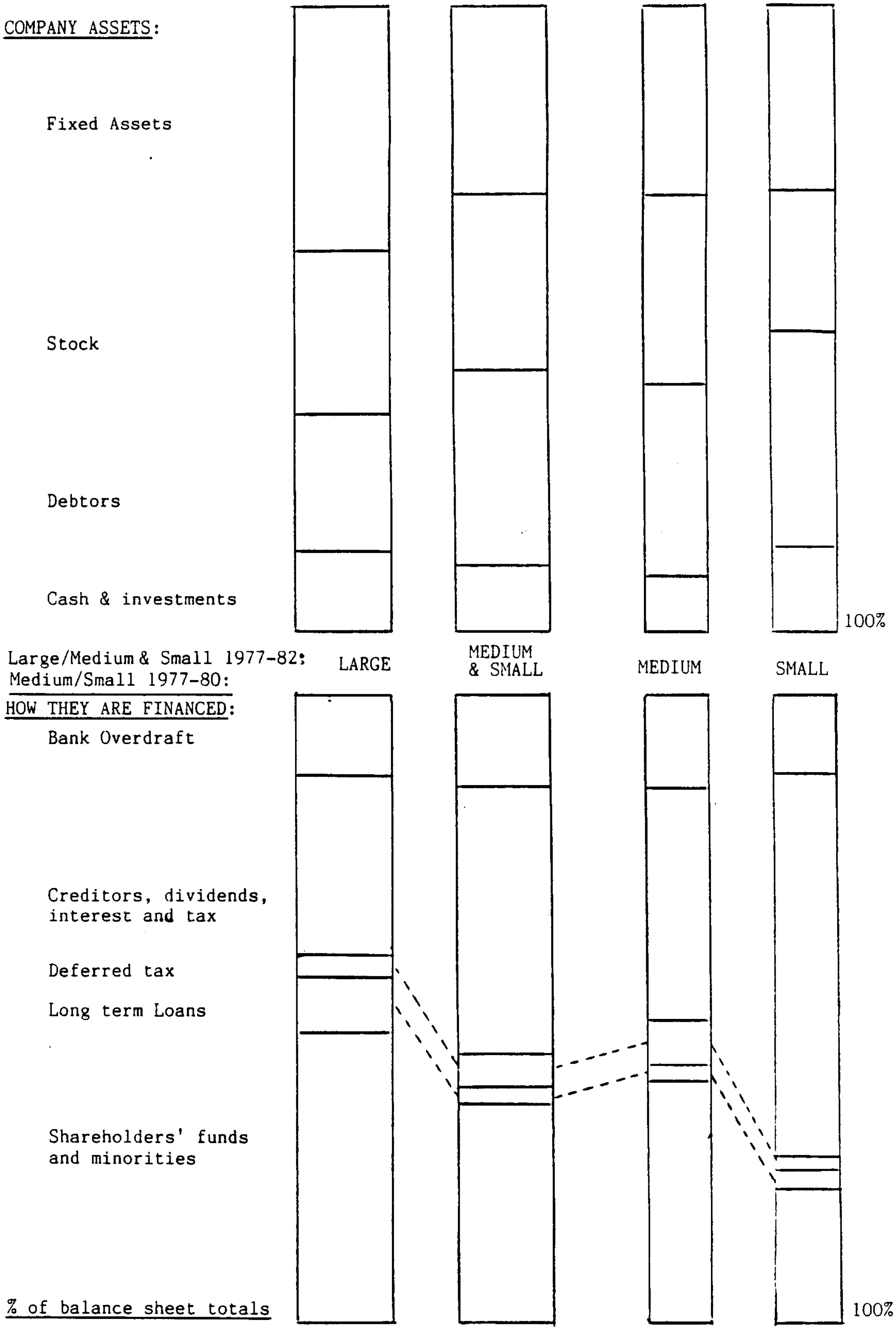
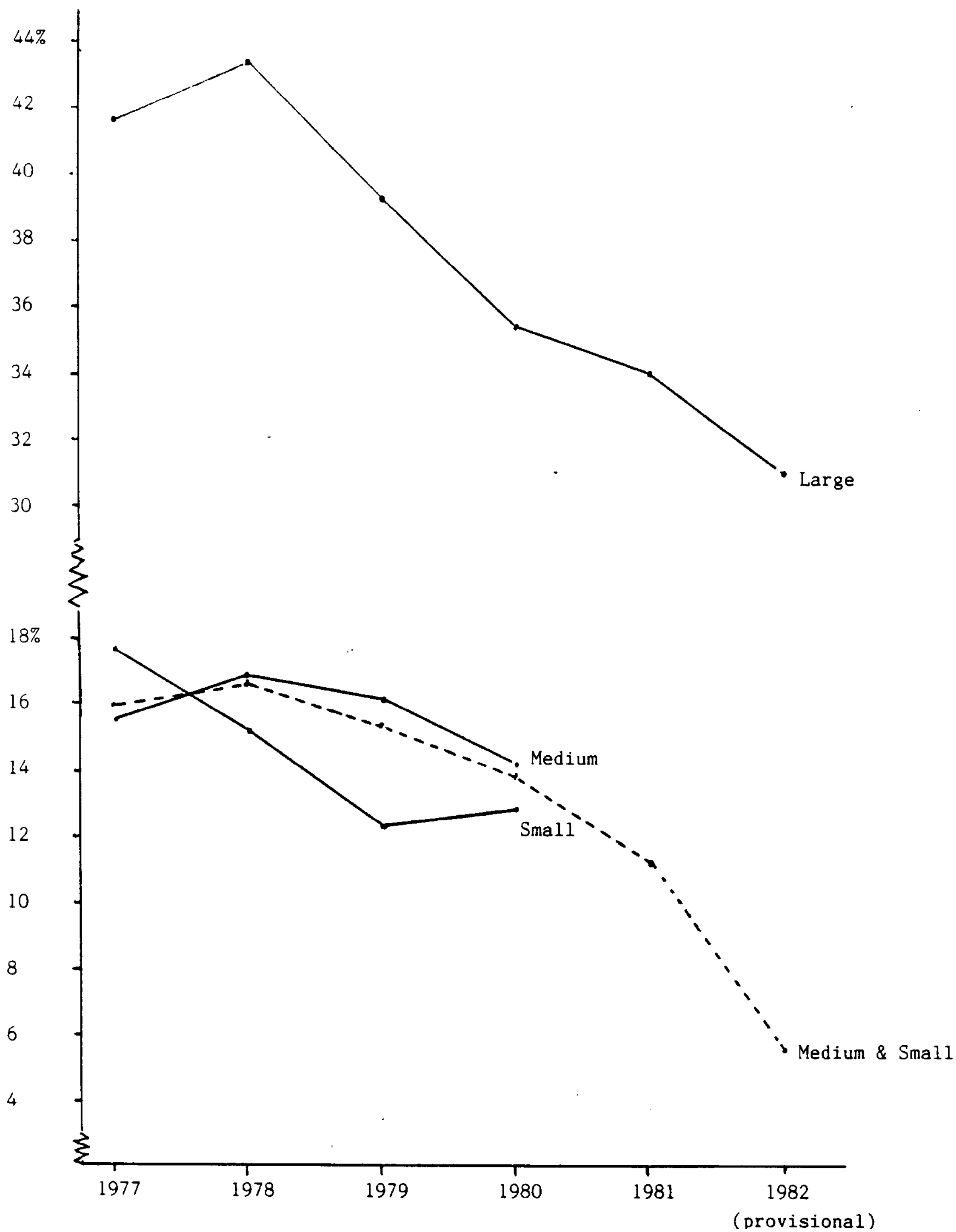


Figure 6

% GEARING REPRESENTING LONG-TERM FUNDS

(All companies)



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