



## SWP 5/90 OVERTIME: THE PROBLEM THAT WON'T GO AWAY

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#### OVERTIME: THE PROBLEM THAT WON'T GO AWAY

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Last year some 2,700 million hours paid overtime was worked in the U.K. at a cost of £14.2 billion. Employers paid £4.7 billion in premium for this luxury which many believe the U.K. economy can ill afford. Record levels of overtime endure in spite of high unemployment and a massive growth in new forms of employment contract and against the predictions. In the early 1980's many commentators were stating that overtime levels would fall under intense pressure from both rapidly increasing unemployment, (then about 1 million), and the increasing cost of premiums as pay increases were consolidated into basic rates for premium calculation.

Indeed in 1981, when manufacturing overtime stood at 9.37m hours per week, Keith Carby stated: "Overtime seems to be declining in response to the overall employment situation". Yet now over 14m overtime hours are worked in manufacturing every week and the trend continues relentlessly upwards. The proportion of overtime hours to basic hours worked in manufacturing is 50% above the 1980 level and 35% above even the boom years of the 1960's.

More use is made of overtime in the U.K. than by our international competitors. Why is this? Does this give us the competitive edge we need as 1992 approaches? Or do we lag behind in productivity, unit costs and quality? British managers are addicted to the use of an apparently inefficient and expensive way of working even though there are many new and fashionable alternatives. This article tries to disentangle types of overtime; to review the plant level issues; and finally to examine how systems of overtime reduction and management can help the economy and individual businesses.

#### CHARACTERISTICS AND TRENDS OF OVERTIME WORKING

The general characteristics of overtime working have not changed dramatically over recent years. However, since the Second World War overtime has tended to increase which has prevented total hours from falling at the same rate as basic hours. Men work four times more paid overtime than women: manual workers four times more than their non-manual counterparts. Married men and those between 25 and 50 years old also show a greater propensity to work overtime. Contrary to common wisdom there is little general correlation between overtime working and factors such as: skill level, job satisfaction level and union membership. Even pay levels are not

strongly associated with overtime working. There are, however, significant regional differences in overtime working levels which are much greater than differences in industrial or employee structures would support. Tradition, it appears, plays an important role in explaining the use of overtime.

#### PLANT LEVEL MANAGEMENT ISSUES

Managers in all sectors of the economy are concerned to control escalating labour costs. Even so, increased production through overtime is achieved at the expense of an average 50% premium loading on labour costs. Increasing overtime premiums and hours gives a multiplier effect which accelerates unit costs and is a key component of recent wage drift which is damaging the trading position of many price sensitive companies. In addition to the direct effect of overtime on unit prices, managers should be concerned about many other related issues - absenteeism; industrial relations; productivity of normal and overtime hours; and, topically, quality, (witness the excessive hours worked by signalling engineers prior to the tragic Clapham Rail crash). The sensitive manager will also be concerned about the welfare of his employees, an overtime related factor that should assume greater importance with passing years.

Yet overtime often remains ignored at the corporate policy level and lacks any formal decision analysis. Indeed the overtime decision may deceptively appear to be without long term commitment and therefore to be an easy or convenient option. There is a substantial body of evidence to show that overtime is used to avoid difficult planning or the analysis and the commitment needed for decisions to reorganise working time, implement training programmes and rational payment policies or to recruit new employees. In short, overtime is associated with poor management and sub-optimum pay structures.

The press on overtime has been severe as is colourfully illustrated by pejorative titles such as "The Strange Scandal Of Overtime", "Overtime, The British Industrial Disease" and "Overtime Working - A Matter For Public Concern" by our colleague Frank Fishwick. Indeed the hostile commentary has far outweighed that which would promote or condone the use of overtime and, not surprisingly, managers tend to be defensive about the issue. Typical reasons given for overtime include:

Managers 'perceive' that overtime is the most costeffective means of meeting demand;

Organisations wish to avoid commitment to fixed

staffing levels or patterns of work in the face of future uncertainties;

Managers believe that overtime is the most effective means to deal with unexpected and short-term staffing or demand problems;

Overtime is used to support otherwise inadequate pay structures;

Managers are unaware that real alternatives exist.

The reason why employees work overtime is, quite simply, to increase income; (although some researchers have suggested that employees are attracted to work longer in the absence of more acceptable uses of their time!). However, even the briefest review of the literature base reveals that the 'claimed' reasons for overtime working are questionable. Indeed, it has long been claimed that the bulk of overtime is systematic, i.e. is unrelated to swings in market demand or changing technical and production needs.

#### ALTERNATIVES TO OVERTIME

In considering the many alternatives to scheduling overtime, it is necessary to first establish the reasons for that overtime and the consequences, for both the organisation and the employee, of its elimination or reduction. In addition, overtime is often a sensitive issue at the industrial relations level, therefore unions and collective agreements will need to be carefully addressed.

The objectives of a research project on overtime working which is currently being conducted at Cranfield School Of Management include the development of a matrix-based model giving alternative and multi-faceted strategies for the reduction of overtime. Alternatives under investigation include:

Improving planning and scheduling systems;
Increasing productivity by changing payment systems;
Increasing flexibility by training;
Labour displacing capital investment;
Hiring additional employees;
Introducing or changing shift patterns;
Employing part-time, temporary or fixed term contract

workers, subcontractors, outworkers or homeworkers;

Staggering working hours;

Implementing preventative maintenance and

holiday shutdown maintenance schemes;

Average hours schemes;

Annual hours contracts:

Flexible working systems;

Job splitting or sharing schemes; etc.

Of course, its horses for courses, overtime induced by local labour market skill shortages can not be solved by hiring additional employees; whereas overtime which is used to smooth an annual seasonal demand peak, such as occurs in the marine leisure or chocolate industries, may be solved by an annual hours contract.

### THE MACRO-ECONOMIC AND EMPLOYMENT IMPLICATIONS OF OVERTIME

One body of opinion argues that the use of overtime may well be a valid and efficient response to managerial problems such as skill shortages, bottlenecks and demand peaks. A contra argument establishes the potential for lowering the ranks of the unemployed through programmes of cost effective overtime reduction.... thus the debate rolls on. At the social level however, there can be no argument against the immorality of substantial overtime scheduling alongside high unemployment. Indeed, the only debatable point is the extent to which the macro-economic argument is a matter which should concern the plant level manager rather than the Government.

It has long been suspected that overtime is used excessively within the U.K. economy. Certainly we lead the international overtime league and are almost alone among competing nations in not controlling overtime centrally, even though our technical and demand forecasting problems are not unique. Other Governments consider that central controls are essential. For instance, other E.C. countries apply legislative controls to overtime working, as does America via the Fair Labour Standards Act of 1938. Indeed, in the mid 1960's the causal relationship between overtime and unemployment was again asserted in the U.S.A. through *The Economic Report of the President* which linked the heavy use of overtime with curtailed job opportunities. It is interesting to note that over the last decade the U.S.A. has achieved far superior job creation to that of the U.K. The role of central overtime controls in comparative performance cannot be easily dismissed; indeed it is easier to establish that overtime prevents job creation.

As far back as 1978 the Department of Employment stated "if all the overtime hours

worked in manufacturing could be converted into full time jobs this would provide enough work for the registered unemployed in manufacturing".<sup>2</sup> For their part, in 1980, the T.U.C claimed "if overtime working were eliminated and the time spent on it redeployed, 1.3 million new jobs could be created"<sup>3</sup>, although they stated this was a simplistic presentation. More recently, Professor White of the Policy Studies Institute stated "total overtime worked is equivalent to around 1.25 million full-time jobs".<sup>4</sup>

Managers may note that little pragmatic action has yet been attempted to secure the reduction of overtime levels. Indeed, there appears to be a conspiracy, an unspoken and some would say unholy tripartite alliance, between the T.U.C., C.B.I. and Government departments, to resist the reduction of overtime. It is not enough to pay lip service to the potential for unemployment alleviation, action is long overdue. Even at the enterprise level, overtime reduction can be a matter of informed self interest for the professional manager.

In the U.K. last year paid overtime was equivalent to a staggering 1.5 million full-time jobs. Of course, the conversion of all overtime hours to new jobs is impractical. However, if only 15% of paid overtime hours were converted, this first round worksharing effect would yield 240,000 new real jobs. In human and economic terms even this low level of achievement would be remarkable and well worth a major initiative. Reinforcing this conclusion Professor White stated, overtime is "underestimated by official figures" Indeed, current research has shown that a substantial amount of unpaid overtime is worked, largely by non-manual employees, and therefore our figures are if anything conservative.

In the fight against unemployment there are two generic classes of weapon: WORKSHARING and JOB CREATION. We have seen above how overtime reduction itself is an important worksharing mechanism. Indeed overtime is doubly important in that any other worksharing measure can be rendered ineffective or even counter productive if it is offset by overtime hours paid at premium rates. This tendency, for total hours to fall at a lesser rate than normal hours, can be referred to as the 'leeching syndrome'.

Yet this is only one half of the analysis. Of equal importance in terms of unemployment alleviation, are the job creation effects of overtime reduction. Moreover, they are of crucial importance to the efficiency and competitiveness of the individual business. The job creation or second round effects of overtime reduction, at the macro-economic level, would reduce unit costs and improve

productivity, (output per hour), and quality. Improved competitiveness and resource allocation would follow such improvements, in turn stimulating demand for U.K. products and services both at home and abroad, thus giving economic growth. Employment prospects would therefore improve, as would the balance of payments.

In so far as employment would increase by both the *first* and *second round* effects of overtime reduction, the burden on the Exchequer would be lessened. This would give scope for further tax reductions or investment which would further improve demand and employment. We do not wish to attempt to establish here the complex economic argument which is perhaps simplistically summarised above. Our intention is merely to establish the importance of overtime as a key macro-economic variable. We would also make the point that the absence of central controls on overtime working in the U.K. may prove to be of increasing significance in the future, particularly with respect to the single European market.

#### PLANT LEVEL MANAGEMENT OF OVERTIME

At plant level many factors suggest that the time is right for a review of overtime working. For instance, there are increasing trends towards the harmonisation of working conditions and flexible working patterns. In addition, major structural changes in the composition of the work force are taking place, such as the growth in the service industries and part-time working. These factors, operating alongside the current growth of overtime, emphasise the need for action at all levels in the economy.

The three key elements of a Comprehensive Overtime Management Strategy involve, i) Corporate Policy, ii) The Overtime Decision and iii) Effective Overtime Controls.

Corporate Policy gives the context in which overtime policy is formulated and should involve consideration of overall corporate objectives, the manpower plan and demand forecast, any collective agreement limitations and opportunities, and the relevant environmental, social and macro-economic considerations. The overtime decision should be taken within the framework of corporate policy and this will involve cost-benefit analysis, a review of flexibility requirements and the identification and analysis of the reasons for the overtime and the alternatives.

If, in the event, the decision is made to schedule overtime, then it is necessary to manage and control that overtime effectively. This should involve systems to deal with authorisation, allocation procedures and scheduling and notice arrangements. It will also be necessary to monitor the productivity quality and costs implications for

both normal and overtime hours. Finally the decision must be regularly reviewed in order to prevent the overtime from becoming "systematic". We so often hear the comment "10 hours per man overtime were worked last week to meet unexpected demand and we've done so every week for the last 5 years".

Where demand is not expected to fall-off the decision between overtime and its alternatives is often centred around an analysis of costs and long and short term flexibility. For example, consider that the decision is between recruiting new staff or scheduling overtime, the primary analysis is to compare the overtime premium, typically 50%, with the total non wage labour costs of employing an additional person, typically equivalent to a 30% premium. Thus one would expect the primary analysis to be definitive, but this is not the case as can be seen from the escalation of overtime working over the last few years.

There are of course many other costs associated with both overtime and hiring additional staff. The associated costs which support the use of overtime may include recruitment, training, the learning curve phenomenon and fixed daily allowances. On the other hand, those associated costs which operate against overtime are more esoteric but non the less important, they include depressed productivity and quality during all working hours, manipulation of output or targets in order to maintain overtime levels, absenteeism and contingent management and industrial relations factors.

Comparison of the primary recurring costs generally show overtime to be significantly more expensive than recruiting new staff. Of course, such an analysis would only be rational if alternatives actually existed; for instance, where the necessary skills were locally available. Notwithstanding this argument, an important body of opinion is developing that administrative difficulties most effectively restrict overtime scheduling and the cost of overtime is in reality a secondary factor in that it is often simply not known. Such administrative hurdles are most effectively placed by corporate policy and by legislative controls which brings us back to the TUC, CBI and Government.

#### **CONCLUSIONS**

That overtime remains an economic, social and even a political problem for society, and a management problem for the firm, cannot be challenged. Yet overtime is not necessarily bad; it can be an effective and rational means for the plant level manager to deal with unforeseen difficulties and to meet demand. However, research shows that overtime is not, by and large, justifiable at the local level, moreover, at the

macro-economic level, overtime simply cannot be defended. Change must and will come.

Managers need information that will enable them to make rational decisions between overtime and the alternatives and to deal fairly with the valid earnings dependency syndrome and with the eradication of systematic overtime. Professional managers also need guidance in the control of that overtime which they continue to schedule.

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#### **REFERENCES**

- +1 Carby K 'The overtime dilemma' Institute of Personnel Management 1981
- Department of Employment 'Measures to alleviate unemployment in the medium term: work-sharing'

  Department of Employment Gazette April 1978
- 3 TUC 'Overtime-the British industrial disease'

  Labour Research April 1980
- White M 'Working life' The Economist The world in 1989 1988