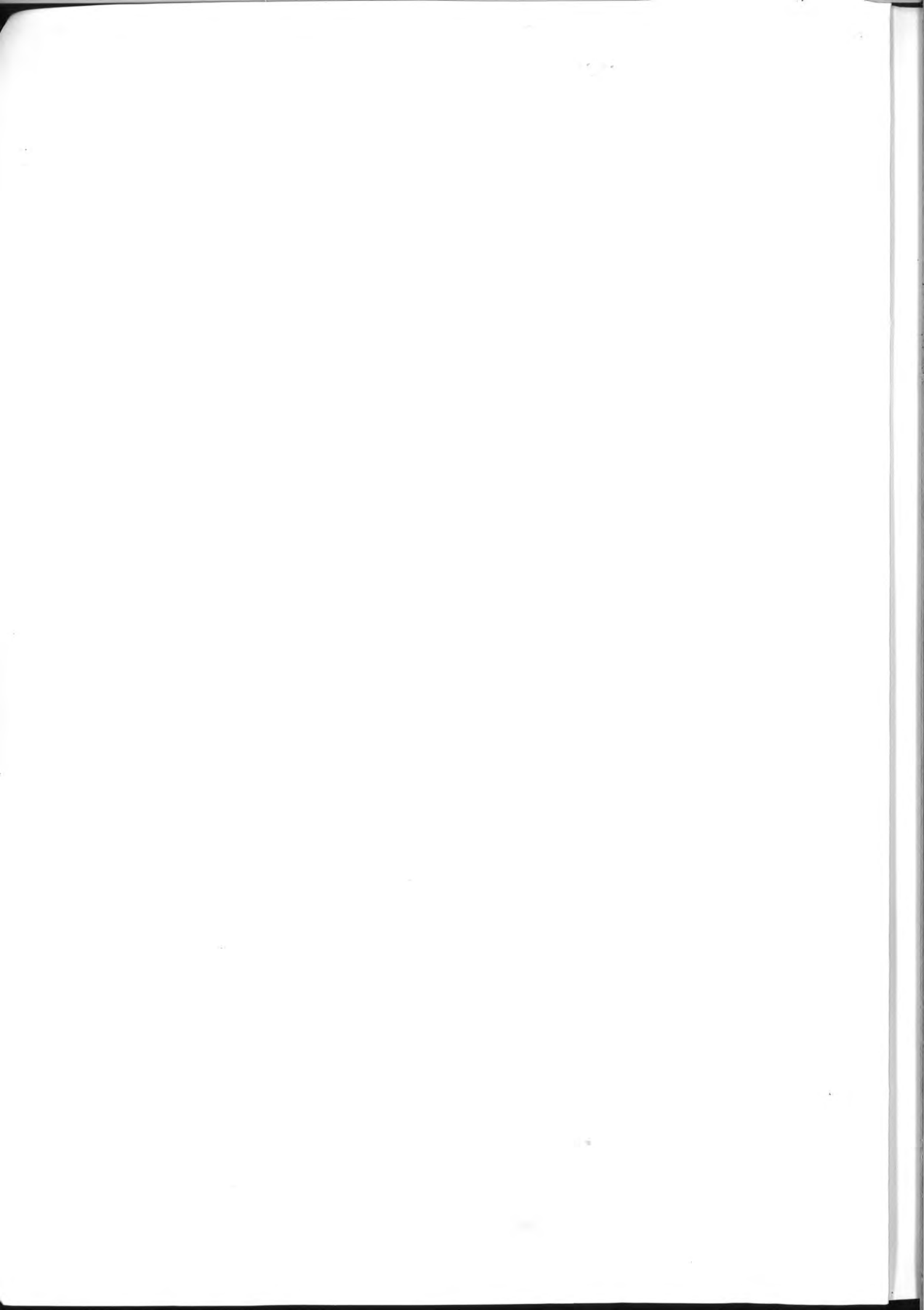




CHANGING WORKING PATTERNS

How companies achieve flexibility
to meet new needs



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to meet new needs

A report prepared by the Institute of Manpower Studies
for the National Economic Development Office
in association with the Department of Employment

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FOREWORD

There is nothing new about the need for change in the labour market. Change is and always has been the norm. More recently, however, there has been a sharper edge to things. Competition sets international standards, and failure to adjust to it exacts a severe penalty. Couple that with the onward rush of technology and the much increased uncertainties of financial markets, and there is little surprise that companies are constantly seeking to do things in better ways and to adjust more readily to the changing demands of markets and customers.

It was against this backdrop that the National Economic Development Office together with the Department of Employment commissioned the Institute of Manpower Studies to carry out a major study of changing working patterns and practices in four important sectors of the economy – engineering, food and drink manufacturing, retail distribution and financial services. The aim was to assess the nature, extent and underlying rationale of the changes in working patterns and practices that have been taking place, and to consider their implications for the competitiveness of British industry.

→ The researchers – John Atkinson and Nigel Meager – found that widespread changes in working practices have been introduced by companies in the past few years. These changes have been designed to improve competitiveness by increasing productivity and facilitating technological change; and to allow companies to respond more flexibly to changing market conditions. The study identifies and analyses conceptually the different forms of flexibility which companies have sought to introduce, particularly in ‘numerical’ terms (for example the use of part-time and temporary workers) and in ‘functional’ terms (for example multi-skilling). Together they can allow companies to fit more precisely the demand for labour to its supply, improve productivity and the use of capital equipment, reduce overtime and encourage employees to acquire further skills.

A summary of the findings of this study when still in draft was discussed at the meeting of the National Economic Development Council in December 1985, when it was agreed that the final report should be published.

I acknowledge with pleasure our indebtedness to the researchers responsible for the study and to the companies, trade unions and other organisations who so readily took part in it.

There is much in this report for companies and trade unions to study. The developments taking place present major opportunities to improve the country's competitive position and so to create more jobs. Where change is secured through consultation and negotiation, it is likely to last and to be effective in meeting the aspirations of companies, trade unions and employees alike. I commend this report to them and to all who interest themselves in the labour market.

John Cassels
Director General
National Economic Development Office



PART 1

1 INTRODUCTION AND SUMMARY OF MAIN FINDINGS

INTRODUCTION

1.1 This report is about flexibility in UK firms. In particular, it is intended to take forward our understanding of the extent and nature of recent changes in working practices in large UK companies ostensibly aimed at securing greater workforce flexibility. The research is designed to explore how far changes to manning practices have been introduced, what kind of changes they are and under what conditions different practices have emerged. The report also considers the implications of such changes for firms' broad employment policies and practices, for workers in those firms and for the labour market in general.

1.2 The report is divided into three main parts:

▲ Part 1 introduces the report by discussing in general terms what 'flexibility' means and what issues it raises, and by summarising the results of the research;

▲ Part 2 outlines the substantive findings of the study, looking first at flexibility in the number of workers and their distribution over time (Chapter 2), then at flexibility in the tasks performed at work (Chapter 3) and subsequently at alternatives to flexibility within the firm, such as subcontracting (Chapter 4). The final chapter in this part considers flexibility in the structure of pay systems (Chapter 5);

▲ Part 3 discusses these findings, looking first at employers' aims and intentions in introducing such changes (Chapter 6), then at the effects on workers and the views of their union representatives (Chapter 7) and finally reconsidering in the light of the research some of the unresolved issues which these changes have raised (Chapter 8).

1.3 This study is based on three sources of information; first, an extensive literature review; secondly, interviews with representative organisations such as employer and trade associations, trade unions, etc in each of the sectors chosen for the fieldwork; and thirdly, interviews with managers and trade unionists in 72 large firms in four sectors: engineering, food and drink manufacturing, retail distribution and financial services. A detailed analysis of this sample is shown at Appendix II. For the moment we should note that the firms

chosen for interview were all large ones (between them they employed some 660,000 full- and part-time workers) and were all faced with the need to accommodate substantial market or technological change in recent years. Thus the sample focuses on organisations which economic orthodoxy suggests are least flexible (large ones) when faced with a need to respond to change. In other respects, such as location and subsectoral characteristics, the sample is more balanced, but we can make no claims for its representativeness for all firms nor for companies in other sectors of industry (an area perhaps for further research). It was possible in only a few cases to interview local trade union representatives and thus it would be unwise to view their responses as necessarily representative of all the trade unions in the sectors studied.

1.4 The 'flexibility debate' has been widespread in the UK and the rest of Europe over the last two years. For this reason, and because flexibility itself is a notoriously slippery concept, we begin with a brief overview of the issues to which this research is addressed, before proceeding (from paragraph 1.18) to outline its main findings.

WHY FLEXIBILITY? THE PRESSURES FOR CHANGE

1.5 A full account of the factors influencing British employers and their perceptions of the need to change manning practices and obtain greater flexibility from the workforce would require a detailed economic history of at least the last 20 years. It is, however, clear from the research to date (see particularly CBI 1985, IMS 1985, OECD 1981) that three key pressures to innovate can be identified, one or more of which is invariably cited by employers.

1.6 *Consolidating productivity gains.* This first factor is associated with greater competitive pressures during both the recent recession and the subsequent upturn in trade. These have given rise to a need to improve productivity and cut unit labour costs and more particularly to develop policies and practices which consolidate and sustain higher productivity levels to meet current and future market conditions.

1.7 *Market volatility and uncertainty.* The second factor stems from the changing nature of market conditions experienced by employers. It appears that many firms now face markets which not only exhibit greater pressure of competition (domestic and international) but are also characterised by greater volatility and uncertainty. In this situation firms apparently feel a need to develop manning practices which enable them to adjust to larger and increasingly unpredictable fluctuations.

1.8 *Technological change.* The third factor arises from the increased pace of technological change, which has given companies the need for: (a) new manning practices to match today's technology; and (b) new manning policies or strategies to enable them to introduce quickly practices appropriate for tomorrow's technology.

WHY NOW? FACILITATORS AND CONSTRAINTS

1.9 But are these pressures themselves sufficient to explain the developments in working practices observed in recent years? Certainly these pressures have intensified lately, but it can nevertheless be argued that they have been present to some extent for many years prior to the recent recession. Such evidence as is available indicates that recent years have seen the relaxation of two important constraints, permitting new employment practices aimed at flexibility (and the extension of old practices into new areas). These are the constraints of labour market conditions and the industrial relations climate.

1.10 *Labour market conditions.* The growth of unemployment to historically high levels, and its persistence at those levels despite the recovery in output, are well documented. Such high unemployment levels and the absence of generalised skill shortages have meant that employers can generally be more certain of obtaining the kind of labour they require on the local labour market as and when they need it, and consequently they have less need to retain labour during troughs in their workload. At the same time workers may be more inclined to accept the pattern of jobs so produced, either because it gives rise to the

part-time jobs which they want or because they can find no alternative employment opportunities.

1.11 *Industrial relations climate.* The growth of unemployment has also had an effect on internal labour markets, in the sense that the experience and/or fear of redundancy and unemployment influence the industrial relations climate and the ability of companies to obtain from their workforces greater acceptance of new manning practices.

1.12 On balance, it remains unclear from existing evidence how important these labour market and industrial relations developments have been in facilitating the observed changes in working practices, and this was accordingly identified as a topic for further investigation in the present study. The key question must be, if the new practices depend on these changes in the environment, how sustainable will they be in the face of further changes in that environment?

WHAT IS FLEXIBILITY? THE EMPLOYERS' PERSPECTIVE

1.13 It is useful here to consider the model of the 'flexible firm' developed at the Institute of Manpower Studies. The model is helpful, not because it describes the situation of any actual organisation, but because it contains all the main parameters of change observed in the research work to date. It draws into a simple framework the new elements in employers' manpower practices, bringing out the relationships between the various practices and their appropriateness for different companies and groups of workers. The model is therefore used here as an analytical tool. Its purpose is to identify different types of flexibility, to demonstrate how employers tend to seek those different types of flexibility from different groups of workers and to suggest that employers are reorganising their workforces into different categories according to their own (possibly unique) needs for flexibility.

1.14 The model identifies four types of flexibility, as follows:

▲ *Numerical flexibility.* This is concerned with enhancing firms' ability to adjust the level of

labour inputs to meet fluctuations in output. There is a variety of practices which companies may adopt to achieve numerical flexibility, according to their own particular circumstances, but those most often reported are either the use of additional or supplementary labour resources to meet changes in the level of output, such as part-time, temporary, short-term contract and casual workers, or the alteration of the working time patterns of existing labour resources to meet changes in the level of output, which might again involve the use of part-timers or of varied shift patterns, overtime, 'annual hours', etc.

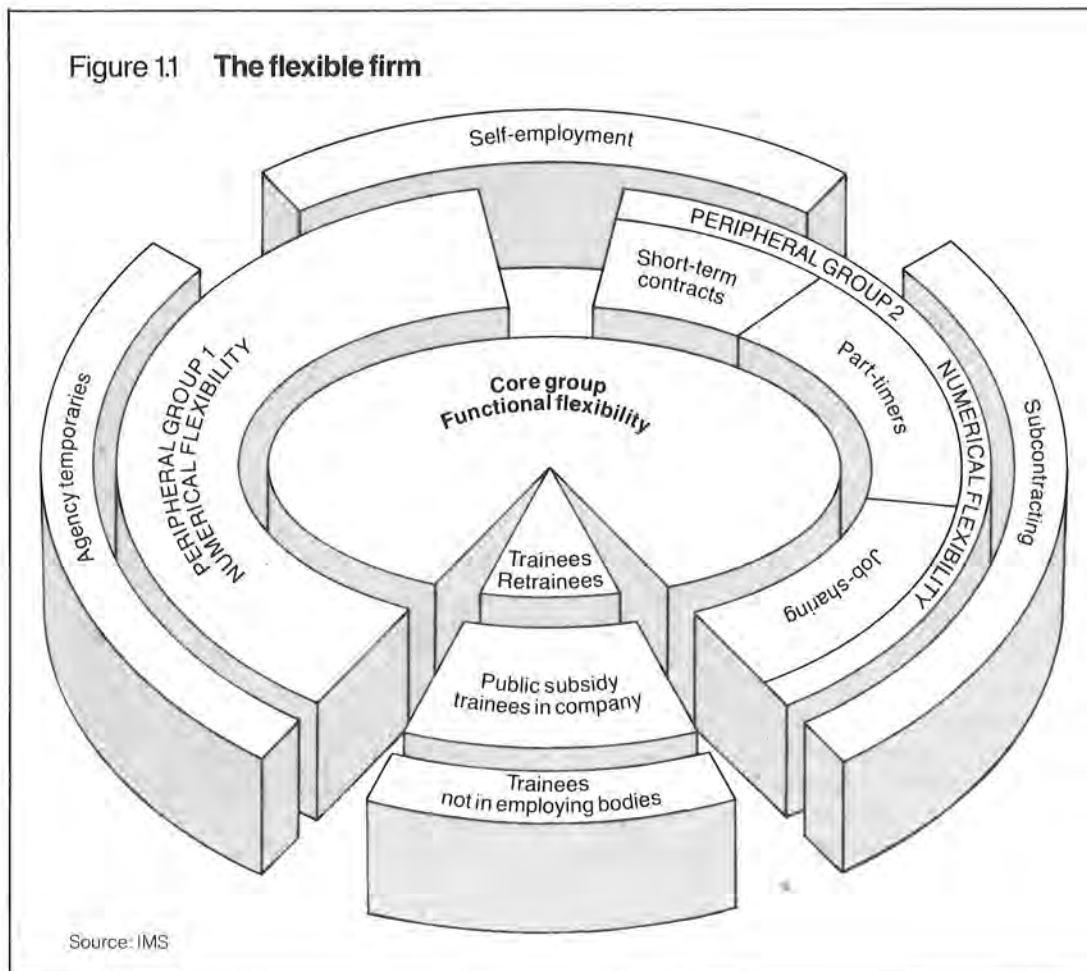
▲ *Functional flexibility.* This relates not to changes in the number of workers, but to changes in what they do. It consists of a firm's ability to adjust and deploy the skills of its employees to match the tasks required by its changing workload, production methods

and/or technology. It is concerned with the versatility of employees and their working flexibility within and between jobs.

▲ *Distancing strategies.* This third category involves the displacement of employment relationships by commercial ones, as employers may opt, for example, to subcontract rather than reorganise their internal manning practices.

▲ *Pay flexibility.* This final category is concerned with the extent to which a company's pay and reward structure supports and reinforces the various types of numerical and/or functional flexibility which are being sought.

1.15 The 'flexible firm', then, has geared itself up to achieve these flexibilities. Atkinson (1985) and IMS (1985) give a detailed account of the flexible firm, whose essentials are summarised in the Figure 1.1. It consists of a 'core' group



of employees surrounded by peripheral groups of workers who may or may not be employees. The peripheral groups, with appropriate contracts and conditions of service, provide numerical flexibility. Functional flexibility is achieved in the core, supported by appropriate incentives and rewards, possibly including enhanced employment security. In theory, this is possible because the peripheral groups soak up numerical fluctuations in demand. The core is the centre of the diagram; the surrounding ring is the periphery whose ready expansion and contraction achieves numerical flexibility; and the outer ring (of commercial subcontractors, specialist self-employed workers on project or fee-based contracts, etc) represents the adoption of distancing strategies.

1.16 Finally, we re-emphasise that the flexible firm is an analytical construct, which brings together into a common framework the changes which are occurring (often on a fragmented basis) and reveals their commonalities and the relations between them. It is presented neither as an example of a type of organisation which already exists nor as an ideal for organisations to aim at. A key question for this research is to ask how far such changes are actually taking place and how far they represent a conscious strategy to restructure the workforce into core and periphery.

FLEXIBILITY IN FIRMS: WHO BENEFITS?

1.17 So far the discussion has been conducted from the point of view of the employer, but it is clear that many of the changes outlined cannot be unambiguously regarded as being in the mutual interest of employers and employees alike. Indeed, there are emerging notable differences of opinion as to the objectives and effects of such changes, and there is considerable potential for industrial relations conflict over both the fact and the manner of their introduction. For example, trade union and some academic commentators (TUC 1985, ETUI 1985, Rubery, Wilkinson and Tarling 1981) have questioned whether such developments in working arrangements and practices are indeed associated solely with a

need for greater flexibility or whether they are also (or even primarily) pursued for some of the 'extrinsic' benefits they confer on employers (including weakening of trade union influence and power). Moreover, unions have objected to the methods by which such changes have been achieved – the argument being that the new practices have been unilaterally imposed rather than jointly determined by negotiation, agreement and consent and are opportunistic in taking advantage of current weakness in trade union bargaining power and high levels of unemployment. It is further argued that such an approach is short-sighted and destructive of harmonious industrial relations and that the new practices will be unsustainable in the longer run. The issue of mutuality of interest between employers and employees is therefore one of those which we seek to address in the research.

THE PRESENT STUDY: SUMMARY OF MAIN FINDINGS

1.18 The research for the present study was conducted in order to illuminate some of these issues; in particular, to explore the extent to which more flexible working practices had been introduced, to ascertain under what circumstances particular kinds of change might be found, to consider how permanent they might be and to look at their implications for employers, workers and job-seekers. The main findings are summarised in the following paragraphs.

BUSINESS STRATEGIES

1.19 Changes in manning practices reflect in large part changes in business strategies. The research identified great differences between the four sectors in the 'typical' business strategies being implemented by firms, and it is worth noting these at the outset.

1.20 In food and drink manufacturing firms, the typical business strategy involved a shift to low-cost, high-volume, continuous production plant, often involving rationalisation on fewer, product-specific sites. Such plant was intended

to exploit new technology, to improve quality and process control and to build in a capacity for quick switches between similar product lines. Respondents were either shifting to high value-added products and establishing their brand name as a market leader or securing volume through an orientation towards 'own label' products for the big food retailing multiples. For most this strategy involved the deployment of a high productivity, full-time workforce to secure the most cost-effective use of new technology with minimum downtime. As a result, many firms placed strong emphasis on functional flexibility among process and maintenance workers. Work scheduling typically involved attempts to reduce seasonal/market fluctuations if possible, or otherwise to use temporary seasonal workers. At the same time, we found a strong move towards contracting out non-hygiene related ancillary services where it was cost-effective to do so.

1.21 The engineering firms demonstrated greater diversity and a wider range of strategies but these often entailed a shift to a decentralised business organisation, frequently involving the concentration of production on fewer, best-practice sites. Firms were seeking to maximise the use of new technology within functions and where possible to integrate these functions through new technology. Most firms were attempting to promote 'build-to-order' methods, increasing variety and quality and reducing stockholding, while orientating production towards export markets. This led them to emphasise functional flexibility among skilled groups of workers, and to shed peripheral functions where cost-effective.

1.22 In retail distribution firms were either trying to increase the value added per square foot of sales floor or promoting price competitiveness (particularly in food retailing) as the main method of expanding market share. The latter strategy sought to secure price competitiveness through exploiting economies of scale (larger units), buying power and containing labour costs. All respondents were seeking to lower costs by reducing stockholding, coordinating sales and stocks and, most importantly, by reducing the number of employees in post through new technology. Most were intent on varying

opening hours to meet the local trading pattern.

1.23 In financial services most of our respondents were seeking to exploit their existing physical network of branches and diversify into other financial and non-financial services while reducing unit costs. This was leading them to reorganise the corporate structure to promote diversification where needed. Typically, firms were trying to maintain the network cover at reduced cost through the use of new technology, branch reorganisation, merger and six-day trading. All were intent on raising labour productivity through increasing the use of existing new technology to take up output growth. Diversification plus greater use of new technology was leading firms to improve the calibre of professional employees while systematising the jobs of clerical and branch staff.

1.24 We did not encounter any company in any of the four sectors which exhibited *all* the features illustrated in the IMS 'flexible firm - core/periphery' construct, and we found no evidence of *de jure* job security for core workers. Three common themes linking business strategies to manning practices were observed: a perceived need to improve the responsiveness of all factors of production to changes in business requirements; a shift towards decentralisation as a means of doing so; and a reluctance to increase the number of employees in the process. All three gave rise to pressures to increase workforce flexibility. We now consider how far the respondents demonstrated the types of flexibility discussed above.

NUMERICAL FLEXIBILITY

1.25 Numerical flexibility is defined as the ability of firms to adjust the number of workers, or the level of worked hours, in line with changes in the level of demand for them. Nine out of every 10 respondents had introduced changes to manning practices since 1980 designed to increase numerical flexibility. These changes were of four main types: temporary workers, part-timers, overtime and new shift patterns, and flexible working hours. The incidence of these four types of change varied greatly from sector to sector, with,

broadly speaking, part-time employment of more importance among service sector respondents, temporary working more important in manufacturing and flexible working hours more an aspiration than a reality, save amongst part-time workers. We now consider them in turn.

Temporary work

1.26 Among the respondents increasing numerical flexibility, temporary workers were employed in three out of every four cases. Temporary working had increased among 42 per cent of these respondents since 1980, yet traditional (seasonal, holiday and absence cover) temporary work appears to have changed little. We found that the increased use of temporary work in food and drink and engineering was associated with the creation of a buffer peripheral workforce as a hedge against market uncertainty, while in financial services it was more often employed as a hedge against any future job loss resulting from the impact of new technology. In retail distribution little pressure for change was noted, save for the use of YTS trainees as a form of peripheral workforce. Temporary work was largely restricted to unskilled and semi-skilled jobs and/or to jobs requiring non-company-specific skills, as firms declined to meet substantial training costs for temporary workers. We found that the increasing use of temporaries was opposed by trade unions more strongly in those firms without a tradition of using them. In most cases this opposition had conditioned the terms, but not the fact, of their use. Hence, except in retailing, most temporary workers received the same basic pay rates, but less favourable conditions of employment, than permanent workers.

Part-time working

1.27 Among the firms increasing numerical flexibility, part-time workers were employed in three out of every four cases. Fewer than one in every 10 manufacturing firms had increased their use of part-timers, while in financial services two-thirds, and in retailing nine out of every 10, were making greater use of part-

timers than they had in 1980. The two main factors underlying the growth of service sector part-time working were a desire to match manning levels more precisely to fluctuating customer patterns during the working day and the reduction of labour costs through substituting part-time labour (with significantly lower non-pay costs) for full-time labour. Opening hours in retailing which would attract premium rates for full-time staff were more likely to be covered using part-timers on non-premium rates (where possible). Like temporary working, the increased use of part-time workers was generally limited to unskilled and semi-skilled jobs requiring minimal training. This permitted substantial use in retailing and restricted their use in financial services. However, job systematisation, associated with new technology, was believed to have reduced this constraint in both sectors, particularly in financial services.

Overtime and new shift patterns

1.28 Overtime working was common in all sectors except financial services. In the manufacturing sectors the use of overtime had increased among three-quarters of our engineering firms, but among only 12 per cent of food and drink firms. However, in both these sectors we observed a move to reduce systematic overtime, to increase managerial control of overtime and to construct shift systems which did not incorporate overtime. In the service sector the picture was quite different. In the (few) firms using overtime in financial services, its incidence had been increasing, largely to cope with Saturday opening. However, although more heavily used in retailing, only a quarter of retailing firms reported increasing their use of overtime since 1980. In fact, overtime working among part-time workers in retailing had grown considerably, but it was not classed as overtime by our respondents as much of it attracted no premium rate. We saw no evidence of any similar shift away from premium payments for overtime in manufacturing.

1.29 Eight out of every 10 manufacturing firms increasing numerical flexibility had changed their shift systems to achieve it, but among service sector firms changes to shift

patterns were most common among part-time workers, with new, and generally shorter, shifts emerging.

Flexible working time

1.30 Only one firm (in food and drink) had moved to a system of contractual annual hours. Elsewhere, flexible working hours were restricted to part-time workers, whose working time patterns were increasingly defined as minima with additional hours to be supplied as required, or as a fixed number of hours with the distribution of those hours within the week to be determined as required. In general, service sector respondents were very reluctant to require full-time staff to work flexible hours, or indeed to roster worked days. Flexitime was generally seen as a 'perk' for employees.

FUNCTIONAL FLEXIBILITY

1.31 Functional flexibility is defined as the ability of firms to reorganise the competences associated with jobs so that the job-holder can deploy such competences across a broader range of tasks. This may involve horizontal enlargement of competences at roughly the same skill level (eg electrical/electronic craft skills) or vertical enlargement, which may either be upwards (eg operator/quality control) or downwards (eg maintenance/operator).

1.32 We found that a shift towards greater functional flexibility was restricted largely to manufacturing firms. Nine out of every 10 manufacturing respondents had been seeking to increase the functional flexibility of their workforces since 1980. This falls to two in 10 in retail distribution and just over that figure in financial services.

1.33 Among these manufacturing respondents we observed three main types of increased functional flexibility: (1) horizontal enlargements within maintenance areas; (2) vertical and horizontal enlargements within process and operator areas; and (3) vertical enlargements between different areas. Within maintenance three-quarters of our respondents

seeking to increase functional flexibility had achieved a limited overlap between maintenance craftsmen, only one-third had achieved dual-skilling even within electrical and mechanical trade groups and only 15 per cent had achieved it across the electrical/mechanical divide.

However, in process and operator areas, all those firms who had sought it had increased the mobility of operators between jobs at similar skill levels (30 out of 31 firms). Fewer firms had achieved functional flexibility across group boundaries, particularly where this involved different status or union membership, although new test, inspection and monitoring equipment had enabled operators both to move into both inspection roles and to conduct routine maintenance tasks. The main constraints to functional flexibility identified in manufacturing were union demarcation, training implications and (much less often) health and safety considerations.

1.34 Among service sector respondents the situation was radically different. Achieving increases in functional flexibility was not generally reckoned to be an important priority for our service sector firms. They either had it by tradition or they could get it relatively easily.

1.35 In food retailing we found a high level of mobility between tasks among shop staff where jobs were unskilled. This was traditional and had not changed significantly in recent years. Department stores and non-food chainstores were more constrained and generally sought to build up expertise within departments, but many had developed floating staff trained to move between such departments. New technology had increased the potential for such low-level mobility by systematising jobs but increasing use of part-time workers had correspondingly reduced it. In financial services there remains a substantial amount of traditional functional flexibility, but this was being undercut through increasing levels of part-time work and increasing recruitment of specialist senior staff. As in retailing, new technology has increased the potential for clerical level job mobility in financial services, and with lower levels of part-time working than in retailing the net effect has been to increase such mobility.

DISTANCING

1.36 Distancing is defined as the displacement of employment contracts by commercial contracts, as exemplified by subcontracting. It is an alternative to flexibility rather than another form of flexibility. Seven in every 10 respondents had increased their use of distancing since 1980. Of these, 90 per cent had increased their use of subcontracted ancillary services, 51 per cent had increased their use of subcontracting in non-ancillary areas and 22 per cent had increased their use of self-employed workers. Increased distancing was associated with a wish to concentrate corporate resources on areas of comparative advantage, to find cheaper ways of undertaking non-core activities, to shift the burden of risk and uncertainty elsewhere and to reduce (or contain) formal headcount and wage bill.

PAY FLEXIBILITY

1.37 Pay flexibility is defined as the ability of firms to adjust pay structures to encourage functional flexibility, match market rates for scarce skills and/or reward individual performance. We found that about two-thirds of our firms had changed their pay structures to secure greater pay flexibility.

1.38 In manufacturing pay flexibility mainly involved the introduction of new pay systems to encourage the acquisition and deployment of the additional skills associated with functional flexibility. These were of two types: a multigraded structure reflecting and encouraging skill acquisition and a simplified structure with fewer, broad grades. The first was often reported to be a transitional phase towards the latter. We found very few cases (six out of 26 reporting changes) where 'individual' restructuring had been introduced in manufacturing.

1.39 Although increases in pay flexibility were less common in the service sector, they were by contrast principally concerned to encourage individual performance through such devices as merit pay, commission payments, performance assessment, etc. However, diversification within financial services had led to the creation of new pay systems for subsidiaries in different subsectors in order to

avoid the constraints of an inappropriate pay structure.

CORPORATE STRATEGIES

1.40 Having considered the extent and nature of these observed changes in manning practices, we go on to ask how far they derive from conscious and long-term corporate employment strategies. We found that the impact of recession had generally heightened awareness, at all levels in firms, of a need to change working practices to maintain competitiveness. This varied directly with the impact of recession on organisations and was therefore less evident in the service sector. Combined with increased management communication direct to the workforce and (in a few cases) the erosion of union bargaining rights and organisation on site, the net effect had been to reduce union opposition to change.

1.41 Firms tended not to have long-term manpower strategies comparable with their business strategies, save in cases where the latter entailed major technological change. Observed changes in working practices in manufacturing in particular were therefore much more likely to have been devised and initiated at site level than centrally. Further, while most of the observed changes could not truly be represented as enforced, they had often been secured because of a shift in collective bargaining strength towards the employers, resulting from (real or threatened) job loss associated with recession. This was particularly true in manufacturing. Neither union nor management respondents generally regarded this situation as permanent. Indeed, most management respondents in manufacturing relied heavily on the permanence of that imbalance in collective bargaining strength, and on the continuation of high levels of unemployment, to maintain the changes in working practices they had achieved. Few thought the former likely, and while most thought the latter more likely few saw it as sufficient on its own either to maintain the changes already achieved or to permit further changes.

1.42 Changes to pay structures, the impact of new investment and greater stress on direct

communication with workers were widely regarded by managers as ways of maintaining the achieved changes. Single-status terms and conditions and explicit employment security agreements were neither widely observed nor mentioned in this context.

1.43 The main constraints to achieving greater flexibility observed were: (1) inadequate skill levels and training resources, which slowed the pace and limited the extent of change towards functional flexibility; (2) status differences, both staff/manual and union membership differences, which constrained movement and, where combined, often prevented it. Legislative and other institutional factors were generally regarded as much less important than internal, domestic ones. Our service sector respondents were generally less constrained by either of these factors.

1.44 Firms' orientation towards securing greater flexibility was generally inward-looking and distancing initiatives had been strongly constrained by operational and cost considerations to particular, usually ancillary or support, activities such as cleaning, catering, security, transport, etc. Retailing, with the growth of concessions, franchises and 'store-in-store' trading, was the only significant exception.

1.45 The changes observed in firms provide some confirmation about the growth of segmentation in the labour market. At any given level of skill our respondents were likely to require both functional and numerical flexibility, but as skill levels rose so did the emphasis on functional flexibility. As a result, this differential emphasis was producing markedly different contractual, working time, pay and job content regimes between groups of workers.

FLEXIBILITY AND WORKERS

1.46 Peripheral forms of employment such as temporary and part-time jobs had grown among our respondents since 1980. Such forms entailed 'intrinsic' or unavoidable shortcomings for workers; in particular, they tended to lack employment continuity and security. In

addition, as such jobs were inclined to require only low-level skills, and their peripheral status tended to inhibit investment in training from employers, workers in them were unlikely to enjoy substantial opportunities for advancement on internal labour markets. These shortcomings were accentuated because they were often overlaid with 'extrinsic' or avoidable ones, which apparently had little to do with achieving flexibility and more with reducing employment costs. In particular, most peripheral status workers enjoyed substantially worse provision of non-pay benefits than did their core counterparts and, although most respondents paid *pro rata* hourly rates for peripheral workers, the actual administration of pay tended to disadvantage them, particularly in regard to part-time work and overtime premia.

1.47 We found that the advantages sometimes claimed to flow from peripheral status were likely to be enjoyed by very small numbers of freelance professionals in shortage occupations. Significant advantages did accrue to core workers, however. In particular, access to retraining, job enlargement and the acquisition of higher skills had begun to open up some 'career' movement for manual workers which they had not previously enjoyed. Although full-blown staff status was rare for manual workers, most core workers had enjoyed some piecemeal progress towards harmonisation since 1980. However, explicit employment security agreements for core workers were not observed. Most often, particularly in manufacturing, any change towards security entailed no more than a reduction in the threat of job loss rather than anything more positive.

1.48 Looking at the wider labour market, the growth of segmentation seems likely to increase the volatility of employment patterns, giving rise to more short-term interrupted employment while at the same time reducing access to core status jobs. In addition, we would expect firms to shift their recruitment orientation to workers not aspiring to core status, particularly if service sector employment continues to grow.

1.49 Firms saw a potential problem arising out of 'poaching' of reskilled manual workers. In addition, they were increasingly reluctant to

train peripheral workers, yet widely feared that nobody else would either. However, this was not generally regarded by our management respondents as a problem for most peripheral workers, save in the case of subcontracted specialist work (eg pattern making, jig and tool making, etc).

FLEXIBILITY RECONSIDERED

1.50 In the light of the findings of the research, we reconsider some of the issues raised in the introduction.

1.51 First, we need to ask how far the initiatives being introduced are likely to promote the desired end of a more flexible and responsive workforce. This research demonstrates that, despite their lack of long-term employment strategies, our respondents had generally introduced changes explicitly aimed at securing the different manning implications of their business strategies. Most respondents saw achieving greater flexibility as a necessary, but not a sufficient, condition for securing their business plans. Although the changes were extensive (viewed across firms), they did not often represent qualitative breaks with previous manning practices within individual firms nor did the changes to manning practices observed encompass major changes to existing company cultures.

1.52 We should therefore also consider how far the changes achieved can persist under different internal and external conditions. We conclude that to achieve change most manufacturing respondents had relied heavily on a shift in the balance of collective bargaining strength, which they believed to be temporary. This reliance was less marked in the service sector. Very few firms had instituted employee relations strategies intended to sustain, far less extend, their initiatives, save where substantial capital investment had occurred.

1.53 An important issue is whether segmentation is increasing as firms seek different flexibilities from different workers. We conclude that segmentation had increased among our respondents precisely because the type of flexibility they sought varied between skilled and unskilled groups. As a result, peripheral workers (particularly part-time ones) were confined to low-skilled jobs as access routes upwards through internal labour markets were denied them.

1.54 A major concern of some commentators is the possibility that the growth of peripheral workforces implies a 'low skill - low tech - low productivity' workforce. This research confirms that firms who had strongly committed themselves to the use of substantial proportions of supplementary peripheral workers in order to achieve numerical flexibility (primarily our retailing respondents) had found this ability to secure versatility from their workforces inhibited. However, where functional flexibility had been the dominant aim, firms tended to rely on traditional practices like overtime and shiftworking to secure numerical flexibility. Further, peripheral forms of employment were, in general, found only in occupations where employers had not sought, and did not expect to need, much versatility or a high level of skill. We conclude that employers have not sought to introduce low skill - low tech jobs so that they can be filled with workers employed on a peripheral basis, but rather that where such jobs exist anyway employers have seen advantages in so filling them.

1.55 Finally, we need to consider whether employers' needs for flexibility can be secured in a fashion consistent with the interests of workers. We conclude that the reskilling often implied by functional flexibility is generally in the interests of employer and employee alike, but that some of the extrinsic shortcomings associated with peripheral status do not contribute to flexibility. Rather, they represent attempts to cut labour costs.

PART 2

In Part 1 of this report we outlined in general terms the four main approaches to securing flexibility which employers appear to seek – numerical, functional and pay flexibility and the use of ‘distancing’ to make the achieving of flexibility somebody else’s problem. We now go on to look in detail at the ways in which our respondents had been trying to secure these various flexibilities over the period since 1980.

Part 2 consists of four chapters, each concerned with one of these approaches. Chapter 2 deals with numerical flexibility, Chapter 3 with functional flexibility, Chapter 4 looks at distancing and Chapter 5 deals with pay flexibility. In each case we examine in detail how, and how far, our respondents have sought to secure these flexibilities, taking into account the big differences between the firms involved and the sectors in which they were operating.

2 NUMERICAL FLEXIBILITY

INTRODUCTION

2.1 As we have seen in Chapter 1, numerical flexibility is concerned with employers' ability to adjust employment levels to workload, period by period. As that workload fluctuates, employers respond to it either by changing the number of workers deployed (ie the use of additional workers) or by changing the distribution of worked time (ie the use of existing workers). This chapter considers how this is achieved and in particular looks at changes in the manner and extent to which it has been achieved since 1980. But first we need to ask how far our respondents have been seeking to achieve greater numerical flexibility since that time.

NUMERICAL FLEXIBILITY – IS IT INCREASING?

2.2 Firms have always required numerical flexibility to some extent, to deal with workload fluctuations during the working day, week or year and to adapt to the changing relationship between output produced and labour required as technology changes. We have argued, however, that the pressures on employers to be flexible in this sense have intensified recently for one or more of the following reasons:

- ▲ Fluctuations have become larger, more frequent and more unpredictable;
- ▲ Under increasing competitive pressure companies have become less able to bear the short-term costs of *not* being numerically flexible;

▲ The costs of becoming numerically flexible have themselves reduced.

2.3 If this is so, and our discussion in Appendix III of recent developments in the four sectors with which we are concerned suggests that it may be, then we would expect firms to demonstrate changes in their manning practices intended to increase their ability to be numerically flexible. We asked our respondents in firms whether they had been seeking to make themselves more numerically flexible since 1980, making it clear that we were concerned with significant and deliberate changes to manning practices, rather than small-scale and incidental ones. The results are summarised in Table 2.1.

2.4 Without wishing to pre-judge how important these changes might have been in a portfolio of other corporate employment priorities, and bearing in mind the orientation of our sample towards large firms, it is clear that roughly nine out of every 10 of our respondents had been seeking to increase the numerical flexibility of their workforces since 1980 and had introduced significant changes to manning practices in order to do so. Behind this apparent homogeneity there lies enormous diversity, as will be discussed later. For the moment we should note that as the nature of the fluctuations differs between firms and between sectors, then so must the manning practices adopted to meet them.

THE DIVERSITY OF CHANGE

2.5 In discussions with our respondents it became clear that the key factors which

Table 2.1 Numerical flexibility: all sectors

Sector	No of firms participating	Seeking to increase numerical flexibility since 1980	Recording no significant change or reduction
Food & drink	16	15 (94%)	1 (6%)
Engineering	19	17 (90%)	2 (10%)
Retail distribution	20	18 (90%)	2 (10%)
Financial services	17	14 (82%)	3 (18%)
Total	72	64 (89%)	8 (11%)

determined how they approached their increasing requirement for numerical flexibility were (a) the frequency and timing of fluctuations, and (b) the predictability and scale of fluctuations.

2.6 Under (a), fluctuations may occur within the working day (peak customer times in shops, banks, restaurants, etc); within the working week (there is a Saturday sales peak in retailing, which in turn creates a Tuesday peak in cheque-clearing and credit card companies); within the month (individuals getting paid at the end of the month again create a peak in the workload for some financial institutions); or within the working year (there are summer and winter peak demands for different kinds of food and drink, seasonal production peaks in agriculture, Christmas sales peaks in retailing, seasonal claims peaks in insurance, etc). It is clear how the time pattern of fluctuations may affect the form in which numerical flexibility is sought – thus, for example, the short-term (daily, weekly, etc) fluctuations were more likely to be handled, if regular, through use of supplementary part-time workers or other variations in shift patterns. The longer-term (seasonal) fluctuations were more likely to be met by the use of a pool of temporary or casual labour (or perhaps by extended overtime working).

2.7 Turning to (b), the predictability and scale of fluctuations, it is clear that in most industries the kinds of fluctuations described above are in some sense inherent in the structure of the business and so are largely predictable in their timing and size. Many fluctuations are much less predictable, however, and again they vary in their time span and duration – from the long-term cyclical fluctuations associated with the economic cycle to short-term shocks associated with exchange rate or commodity price changes, sudden changes in the weather, new orders (or cancellations of orders) and one-off peaks due to special projects or new product launches. The degree of surprise attached to a fluctuation will affect a company's response – a sudden large order with a short delivery date may leave a company no choice but to work overtime, whereas the same order with longer notice might have been scheduled into production troughs or resourced with a team

of temporary workers. Equally, uncertainty as to the size and duration of the fluctuation may be important – many companies will use overtime or manning with temporaries at the launch of a new product/service, until they are more certain of the long-term sustainable level of demand.

2.8 Thus there must be inherent differences between the patterns of workforce fluctuations simply on account of timing, scale and predictability. However, our discussions showed that the diversity of approach to numerical flexibility taken by our respondents was far greater than these factors would suggest, and these are best considered by looking in detail at the various forms of manning to which our respondents had in fact turned. There are four of them:

- Temporary workers;
- Part-time workers;
- Overtime and alterations to shift patterns;
- and
- Flexible working time.

2.9 In the next four sections of this chapter we will consider them in turn. In each case we will briefly cite previous studies and our discussions with sectoral 'experts', etc but the bulk of what follows will be drawn from our 72 respondent firms.

TEMPORARY WORK

Evidence from previous studies

2.10 In a labour market in which, reinforced by social attitudes and protective legislation, 'permanent' employment contracts have become the norm, temporary work has nevertheless continued to exist, primarily as a means of meeting the short-term labour requirements of employers who experienced seasonal workload fluctuations or of providing cover for permanent employees on holiday, sick leave, maternity leave or other forms of absence. Historically, the proportion of temporary workers in the employed workforce has been dominated by two trends (Meager 1985):

- ▲ A cyclical pattern in which the proportion of temporaries varied with the economic cycle as

employers laid off their temporary workers first in the downturn and rehired them in the upturn;

▲ A structural shift towards an increasing proportion of temporary workers due to a long-term secular increase in the relative importance of sectors (and occupations) which use a relatively high proportion of temporary workers. The shift from manufacturing to services is particularly important here.

In recent years, however, the UK temporary work labour market has also undergone significant changes as a result of the pressures described in this report (greater volatility, uncertainty, reluctance to be caught with a large permanent workforce in the face of a downturn in demand, etc).

2.11 Examples of these types of changes abound in the recent literature. Meager (1985) documents the recent growth in the use of temporary labour by British employers, which, although falling short of an 'explosion of temporary work', stands at about 7-8 per cent of the employed workforce and is on an upward trend. Its use is now increasingly associated with a specific desire for numerical flexibility, as well as traditional absence and holiday cover. Well-publicised developments in individual companies include:

- ▲ The use of short-term contract employees at British Alcan plants (Brown 1985);
- ▲ The creation of three categories of manual employees at Findus: permanent staff and two

rings of temporaries and casuals (IDS Report 449, 1985);

- ▲ The maintenance of a register of casual workers at Lyons Tetley (Industrial Relations Review and Report 334, 1984);
- ▲ The use of a buffer of 'supplemental employees' on 10-month contracts at Control Data (Leek 1985).

2.12 As far as sectoral variations in the extent and nature of the use of temporary workers are concerned, there is little previous evidence. As reported in Meager (1985), the IMS postal survey of temporary work conducted in October 1984 showed very little variation in the extent and use of temporary workers by broad industrial sector - about three-quarters of employers in most sectors were found to use temporary workers. Using the original data from the IMS survey to examine the use of temporary workers in the more narrowly defined sectors under study in the present research, some inter-sectoral variation was found, although the numbers of cases are too small for any firm conclusions to be drawn. The figures are nevertheless of interest as background and are shown in Table 2.2.

The table is self-explanatory, except that it should be noted that although all the retail organisations used temporary workers, the extent of use appears relatively small. This may be attributed to the survey's taking place in October, before the main wave of Christmas temporaries had been taken on.

Table 2.2 Use of temporary workers by sector. Findings of 1984 IMS Temporary Work Survey

Sector	No of employers	No using temporaries	Average % of workforce temporary	No who had increased use of temporaries since 1980
Food & drink	16	12	8.3	7
Engineering	47	38	3.6	20
Retail distribution	11	11	3.2	10
Financial services	9	6	2.1	4

Note: The population of firms in the above table is different from those studied in the bulk of this report.

Source: IMS

Results of the current study

2.13 Against this background we may now turn to the results of our own study. There is no clear distinction between permanent and temporary employment. The definition used here is the one used in the previous IMS study (Meager 1984), ie a temporary worker is one whose employment at an establishment is recognised by both the firm and the worker to be for a limited period, whether or not the worker is actually employed by that firm, by an employment agency or is self-employed. It is immediately clear that major sectoral differences exist in both the degree of use and the changes to traditional patterns of use. The results of our study are shown in Table 2.3.

Table 2.3 is not at all concerned with the traditional uses of temporary workers, such as holiday cover. Rather it contains only those 64 firms who were identified in Table 2.1 as seeking to increase their numerical flexibility and considers their use of temporary workers for this purpose. It is clear that the extent of use varies from about half our engineering respondents to all the food and drink firms. Similarly, the proportion who have increased their use since 1980 varies from less than a quarter of the retailing firms to over half in financial services. We now go on to consider each sector in turn.

Temporary work in food and drink

2.14 The hiring of temporary unskilled and semi-skilled production workers was widespread among our food and drink

respondents and apparently increasing, particularly in companies which had not undergone major recent investment in plant and machinery and an increase in capital intensity. Generally, the forces leading to an increase in the use of temporary workers stemmed from growing cost pressures and greater uncertainty about the success of new product launches in an increasingly competitive market. Also observed were pressures associated with requirements for shorter lead times for orders and shorter product shelf life from the high-volume, quality-conscious multiples.

2.15 These pressures are, of course, in addition to the more traditional use of temporaries in the sector to cover seasonal fluctuations. But the very fact of this widespread traditional response to seasonal variation in demand and supply meant that the increasing use of temporary workers was rarely a practice which generated workforce or trade union opposition. Further, it was felt by some of the sectoral representatives that numerical flexibility through the use of temporaries was particularly common in small, non-union firms (excluded from the present study) and, as noted in Appendix III, there are over 5000 companies in food and drink with fewer than 200 employees.

2.16 In addition to this general pattern, two points should be noted. First, several food companies saw the increased use of temporaries not merely as an extension to a traditional activity but as something fundamentally new – part of an overall strategy to build in flexibility to cope with any eventuality. This was particularly true of larger multisite companies who had been subject to a strategic

Table 2.3 Use of temporary workers: all sectors

Sector	No of firms seeking increased numerical flexibility	Temporary workers currently in use	Increased use since 1980
Food & drink	15	15 (100%)	7 (47%)
Engineering	17	9 (53%)	8 (47%)
Retail distribution	18	12 (66%)	4 (22%)
Financial services	14	13 (93%)	8 (57%)
Total	64	49 (76%)	27 (42%)

're-think' in a number of manning areas (including greater functional flexibility). At least two of these had begun to recruit most or all new operatives on a temporary fixed-term contract basis (for a few months) before making them permanent. This provides an easily adjusted buffer to cope with fluctuations and a useful screening device for potential recruits to the permanent workforce. Secondly, the more capital-intensive firms increasingly went to considerable effort to avoid the need for temporary workers by attempting to 'flat-plan' the workload throughout the year, or if this was not possible using overtime or internal redeployment instead. This latter option was particularly common in companies with a large number of products such that operatives could be taken from a line with slack demand and used to man an extra shift on a line with peak demand. Similarly, multiplant companies would often cope with peaks or uncertain new product demand by making use of other plants with excess capacity, in some cases in other countries. Whether or not the use of temporary workers was seen as the first option in meeting fluctuations depended, then, on such factors as the size and structure of the company and whether the company culture was orientated towards the traditional use of seasonal workers.

2.17 All the food and drink companies who made use of temporary workers paid the 'rate for the job' and most provided terms and conditions identical to those provided to regular employees (although, *de facto*, temporary workers were often excluded from service-related benefits).

Canned Savouries plc in its north of England plant, employing 700 workers, has traditionally made use of temporary operatives to handle seasonal workload fluctuations. The company has a winter peak in demand, which it has attempted to handle by 'smoothing' production throughout the year. It has never yet managed to achieve this fully (and high interest rates have reduced its attractiveness), hence the need for up to 100 temporary workers. The temporary workers are brought in with the formal consent of the trade union under an agreement which grants the temporaries the right of first refusal on any permanent vacancies. Having

had this arrangement in place for some time, the company has found it relatively easy to increase the proportion of temporaries, as the long-term reduction in permanent headcount has begun to impair its ability to meet fluctuations internally (as a multiproduct, multisite operation, however, it is often able to redistribute production internally to meet seasonal fluctuations or to handle its many new product launches). It takes the temporaries on a 'quasi fixed-term contract' basis (ie the contracts specify that the jobs are to last 'not longer than...') but in other respects they receive identical pay, terms and conditions to equivalent permanent workers.

Temporary work in engineering

2.18 In engineering the patterns of use of temporary workers were similar to those described for food and drink, particularly in companies where major technological change had not occurred and cost-cutting pressures had provided a desire to reduce overcommitment to a permanent workforce at a time of uncertainty. As in food and drink, the use of temporary workers was largely confined to semi- and unskilled manual operatives. At the same time, companies in all four sectors reported a growth in the use of contract professional and technical staff – in data processing, etc – and this was particularly marked in engineering with its higher requirement for electronic, technical and draughting skills. In many cases, however, this growth was associated more with the tightness of the relevant occupational labour market than with a quest for greater flexibility.

2.19 A number of important differences between the two sectors emerged, however. In particular, there was no strong tradition of seasonal use of temporary work in engineering and thus employers considering extending the use of temporary work did not have this traditional base on which to build. Almost half our respondents did not wish, or were not able to use temporaries in any systematic manner but used only the occasional agency or short-term contract employee for holiday cover or for occasional one-off special projects. In these cases we noted that reduced permanent headcount, with less 'built-in surplus', had

frequently resulted in a slight increase in such use.

2.20 Secondly, this lack of a 'seasonal' tradition, plus a higher level of unionisation in engineering, combined to produce much greater workforce opposition to the principle of use of temporary workers than was found in food and drink. That said, however, several of the companies reported that the use of temporaries was now (reluctantly) accepted by the unions, whereas it would not have been five years earlier.

2.21 Thirdly, this lack of seasonal demand pattern, and the more storable nature of the product, has meant a greater ability to 'flat-plan' production in engineering and hence fewer predictable fluctuations in workload. The tendency has been to deal with short-term unpredictable fluctuations – sudden orders, special projects, etc – from stock, or increasingly (given high rates of interest and other pressures militating against large inventories) via overtime. To the extent that there has been an increase in the use of temporaries in engineering, then, it has been largely a more strategic approach to deal with longer-term uncertainties associated with the economic cycle and with market shifts by building up a buffer of temporaries in the upturn in order to be able to reduce manning cheaply in any subsequent downturn. As in food and drink, the temporary buffer is commonly used to recruit into the permanent 'core'. Further, and again as in food and drink, there was no observable tendency to provide temporary workers with less favourable pay, terms and conditions than their permanent counterparts.

2.22 These three features, the lack of a temporary work tradition, union opposition and the use of temporaries as a buffer at a time of market volatility, are clearly shown in the two examples described here to illustrate the above analysis.

Presscraft Ltd, employing 2500 workers, faced a growing problem of market unpredictability. It supplied (from five plants) components for the motor industry and reported that its customers were reluctant to increase basic orders but would increasingly resort to short-term increases in demand of

up to 30 per cent. This gave the firm the problem of a continual prospective decline in orders (from 130 back to the basic 100), although continued one-off increases to orders meant that actual production was fairly stable (at 130 or thereabouts). The company had been obliged to reduce stockholdings as a result of financial pressure from its parent company, and so could not meet the orders this way. Instead, it resorted to a combination of overtime and temporary workers. Overtime was restricted by custom and practice to around 20 per cent of basic hours and management did not wish to increase it further, citing cost, productivity and absence as the main constraints. The traditional form of numerical flexibility did not plug the gap and so a new form was introduced, in the shape of temporary production workers on contracts of up to 12 months and on notice of a week. The plants were all strongly unionised, with UMAs in all of them, nor had there been any use of temporaries in the past. Nevertheless, union agreement was forthcoming on the use of temporary labour, subject to certain limitations. First, payment was at existing hourly rates (but they were not covered by the pension scheme, the life assurance scheme, the company sick pay scheme and the redundancy agreement); secondly, no roll-over beyond 12 months of service was permitted on a temporary basis; thirdly, any temporary employee would be given priority for permanent vacancies, and would become automatically permanent if still on the books after 12 months; and finally, although the agreement did not specify levels of use, 'the stewards start to grumble if it reaches 10 per cent of the production workforce... either because it threatens overtime earnings or because they feel we should recruit permanently'. None of these provisos were seen by management as a real constraint. At the time of our interview, overtime was running at 16 per cent of basic hours and temporary workers at 9 per cent of the production workforce.

Switch Gear Ltd, an electrical engineering company in Scotland with 1150 employees, was seeking to consolidate employment after a substantial demanning exercise. It was hoping to achieve this through mobility of

production operatives between production lines, and the collective bargaining 'price' for such mobility was an annual commitment to maintain production employment at a particular level – for 1985 it was 709 workers. The company was faced with a need to man up to meet fluctuations in the volume of demand, and was reluctant to use overtime because it had encountered problems of control (one in, all in) in the past which had proved expensive to buy out. It agreed with the local unions (EETPU and AUEW) that temporary appointments would be made to all positions in excess of 709. No temporary appointments had been made in the past and it was conceded by management that without an explicit guarantee of continuity for the 709 it was most unlikely that agreement would have been forthcoming. Again the rate for the job was agreed, with the proviso that the starter rate should apply for the first two months of temporary contracts. Conditions of employment were identical to permanent workers, save for pension contributions. Priority would be given to temporary workers in filling any vacancies arising from wastage among the 709. The temporary workers were on three-month contracts and each quarter a joint management–union meeting would decide on the appropriate level of temporary workers for the coming quarter. No temporary worker would be employed in this way for more than 12 months. At the time of our interview 105 workers (15 per cent of the production workforce) were employed on this basis and the scheme had been running since November 1984.

Temporary work in retailing

2.23 We found significantly less movement from the traditional patterns in retailing. Of course, there is a long-term traditional use of temporary workers to man up for Christmas, sale periods and other seasonal trading peaks. There was no apparent general trend towards an increase in the use of temporaries for this reason, although some companies had reduced their permanent headcount in recent years and being more tightly manned had required proportionately more temporary workers to

meet sales peaks. Conversely, at least one company had been able to reduce its requirements for temporaries at Christmas and sale times as a result of a major fall in labour turnover among the permanent staff. This increased the reservoir of experience among the company's sales staff, who were more able to cope with the extra workload than was the case when a high proportion of staff were raw recruits.

2.24 An important variant of temporary working was the use of YTS in retailing. Although we found YTS trainees in all four sectors, they were most evident in this one, particularly in food retailing. Most of our retailing respondents with YTS trainees regarded them as a part of the workforce for whom there was no long-term commitment to employment. Thus in effect they acted as a 'buffer' workforce which might be taken on permanently if business prospects warranted it or, alternatively, placed back in the labour market if they did not. At the same time, the period of the traineeship permitted evaluation of trainees for subsequent employment. Clearly, these aspects of the use of YTS in retailing may not be the main reasons for the substantial take-up of the scheme in this sector but they were widely mentioned by our respondents as relevant to the achievement of numerical flexibility over the course of a year.

2.25 Many companies had, in addition to regular, several days a week part-timers, a force of one day (often Saturday) and/or evening part-timers, and although the practice varied between companies, in several these workers were employed on a temporary or casual basis (sometimes drawn from a register of such people) and would work intermittently for the company. In many cases, such workers were 16–17 year old students, recruited on contracts which were either explicitly fixed-term or mutually recognised as not permanent. Most companies felt that the use of such workers, along with part-timers as a whole, would grow as opening hours continued to lengthen (particularly in the event of Sunday trading being introduced). In some companies it was common to extend the hours of these evening and Saturday part-timers during Christmas and other seasonal peaks in addition to or in place of recruiting a separate force of full-time

temporaries for the duration of the peaks. This was found particularly in food retailing, where the seasonal peaks consist of relatively short, but intense fluctuations in an otherwise flat trading pattern and tend to coincide with holiday periods – Christmas, Easter, bank holidays, etc. A number of large chainstore companies with central distribution operations used temporary warehouse staff prior to Christmas and sale times. Again, this was a use which was increasing proportionately in some cases as greater productivity was being achieved from permanent staff.

2.26 Once again, the most important constraint here was one of skill and training. Our respondents were reluctant to bear substantial training costs for such temporary staff, and as a result their use was restricted to the least skilled jobs. Several strategies for overcoming this constraint were identified. The most common was the 'pool' of temporaries who built up job and product knowledge in the course of repeated periods of employment; then there was the use of ex-employees who retained some elements of skill and insight; then there were a variety of redeployment strategies involving the moving of permanent staff from the least skilled jobs to man up more highly skilled jobs and backfilling with temporaries. Nevertheless, this constraint was operative for virtually all our respondents, most strongly in department stores and more specialist retailing outlets and least strongly in supermarkets. We found no industrial relations constraints on the use of such labour in retailing, even in unionised companies. However, in contrast to the two manufacturing sectors, we found several cases where retailing temporaries received lower hourly wage rates than their permanent equivalents (as well as less favourable non-wage benefits). Labour market constraints on recruitment of temporary shop assistants were felt only in central London (several chainstores paid significantly higher rates to London staff for this reason).

2.27 An example of these deployments was found in a chain of photoprocessing shops:

Photoprint, a chain of photographic and developing processing retail outlets, face a massive summer peak in business resulting from the holiday trade, with 50 per cent of their business conducted between June and

September. This is met by recruiting temporary staff on one, two and three-month contracts, starting in May and building up to a peak of 280 temporaries in addition to a permanent staff of 714 full-timers and 460 part-timers. The temporary staff are restricted to sales work and the permanents move over to operate the film-processing mini-labs. The temporaries are largely excluded from processing work, not so much for health and safety considerations but mainly to avoid damage to negatives and faulty processing. Most of the temporaries are part-time workers also, usually working 15 hours a week, with both management and workers seeking to keep earnings below NI thresholds through rewarding any overtime with time off in lieu fairly quickly. The temporaries tend to be either students on vacation or ex-employees (labour turnover is high at 43 per cent). The company recognises no union for collective bargaining purposes, so there are no effective industrial relations constraints. Nor were labour market constraints mentioned.

Temporary work in financial services

2.28 As Table 2.1 shows, temporary workers are least well represented among the workforce in financial services in terms of numbers, although almost all our respondents used some and over half had increased the number used since 1980. Our discussions confirmed that such increases that had occurred had been from a small base and rather limited in scope. Most of our companies used temporaries (sometimes ex-employees) for holiday cover, etc. Like retailing, branch banking and building societies have short trading cycles with peaks within the day, week or month, and flexibility in working time patterns is the key to achieving the numerical flexibility to deal with this. (As in retailing, however, some of the building societies used part-time Saturday staff who were employed on a temporary contract basis, as distinct from their regular part-timers.) At least one company, however, had a pool of casual clerical workers and VDU operators on call for coping with head office peaks in processing of transactions which could not be

met through the usual use of part-timers. However, our discussions suggested that coping with fluctuations in trading patterns during the day, week or season had not led to an increase in the use of temporaries on any major scale in financial services.

2.29 Banks (and building societies to some extent) have had a traditional paternalistic approach to manning and a clearly defined internal labour market with ports of entry mainly at the bottom, together with a career-orientated labour force. If anything, this culture has tended to militate against the use of temporary workers. Some companies are beginning to experiment with a greater use of 'non-career' staff (mainly part-timers), and as part of this are considering the use of temporary workers. The traditional approach, with a secure long-service workforce buttressed by service-related benefits (cheap mortgages, etc), was being increasingly questioned in a world of slack labour markets and increasingly competitive product markets. One building society, for example, had brought in a temporary clerical workforce to deal with the recent changes to mortgage interest relief and the accompanying extra workload. It had continued the use after the initial requirement had ended, as it saw temporaries as a useful means both of screening potential permanent recruits and of 'breaking-up' the traditional internal labour market. The temporary staff are now used as a fluctuating buffer to cope with workload variations arising from new product launches, etc.

2.30 Another source of the growth in temporary work in financial services is the process of technological change itself. Certainly this has led to the increased employment in many of our respondents of computer and systems specialists on fixed-term contracts to deal with installation of new systems. But the main effect noted was for firms to man up with temporaries in those sections where jobs were expected to be lost when the installation was completed and a new system came on stream. This was obviously done not just to cut the cost of demanning but also to preserve as much as possible of the employment security tradition (and to keep within 'no redundancy' agreements in some cases). Again, the use of temporaries as a buffer in this way was

restricted to relatively mundane clerical jobs.

2.31 In insurance companies, too, there was traditionally little regular use of temporary workers (except for the usual holiday and absence cover), although some companies did use fixed-term contract labour (or sometimes ex-employees on a casual basis) to deal with seasonal workload peaks (mainly winter claims). Virtually the only cause of change here was as a buffer against technological job loss for permanent staff.

PART-TIME WORK

Evidence from previous studies

2.32 The growth of part-time, predominantly female, working is already well documented; between June 1974 and March 1985, while the proportion of women in the employed workforce grew from 40.1 per cent to 44.4 per cent, the proportion of part-timers among those women grew from 38.3 per cent to 46.3 per cent. The important point for our purposes is not so much the scale of this growth as its unevenness, for as we have shown in Appendix III, while part-time working has been expanding in the service sectors in recent years, it has contracted in the two manufacturing sectors with which we are concerned. Clearly, a sector-by-sector analysis is needed to establish how far the overall growth in part-time working is due to firms' changing practices and how much is due to structural shifts in the relative importance of firms and industries with different practices (see Clark 1982).

2.33 As argued earlier, it is as yet unclear exactly how much of the growth in female part-time work is driven by demand factors (more women offering themselves for part-time work because of the greater demand from employers) and how much by supply factors (employers offering more part-time jobs because they perceive a greater availability of women entering the labour market wanting part-time work). It seems undeniable, however, that demand side factors are important. This was shown, for example, both in the IMS case studies (IMS 1985) and in research recently conducted for the Department of Employment (Robinson and Wallace 1984). The latter

concluded, again on the basis of case studies, that:

'The research findings indicate that the patterns of employers' demand for labour are the principal reason for the sustained growth in part-time employment, at a time when an adequate number of full-time workers are available. Employers' preferences for part-time rather than full-time labour were essential to the adoption of more cost-effective employment policies dictated by pressures to improve efficiency in highly competitive conditions. The advantages of employing women for part-time work were most apparent in low paid jobs... In manufacturing the benefits to the employers derived from maximising the utilisation of capital equipment and from the ability to maintain continuous production without incurring premium rates for overtime or shift working. In service industries the use of part-time labour allows managers greater freedom in matching labour demands with changing patterns in operational or customer requirements and simplifies the implementation of a five day working week for full-time employees when business hours are extended to six days. By relating working hours more closely to labour requirements, employers could contain wage costs, and at the same time created part-time jobs with a wide variety of working hours. The increasing diversity of working schedules served to augment the numbers of women willing to work for less than a full-time week, in some instances at unconventional hours' (our italics).

2.34 There are two key demand-side factors emerging from previous studies. First, that part-time working facilitates the cost-effective matching of manning to output fluctuations and enables fuller utilisation of fixed assets. The second is that such labour can often be cheaper per worked hour than comparable full-time labour, particularly where premium rates are involved for full-timers. They are not the only ones, of course – higher hourly productivity rates for part-timers and higher ratios of worked to non-worked time have also often been claimed. But they are widely agreed to be the central issues driving more firms to use more part-timers.

2.35 The previous IMS work suggests that it is flexibility through the better matching of

employment levels to workloads ('cheaper use of labour') rather than the extrinsic benefits from a lower cost per hour of part-time labour ('use of cheaper labour'), or lower unionisation rates, or higher productivity, among female part-timers, which dominates employers' rationales in shifting towards part-timers. Nevertheless, the secondary, extrinsic advantages were identified and the lower non-pay costs of part-timers were frequently cited. The relative strength of these two factors requires more investigation and it seems likely that this varies between sectors and between firms of different size and degree of unionisation. Robinson and Wallace (1984) found that although 'there was no discrimination in the hourly rates paid for jobs in the same grade, the operation of wage payment systems allowed men on low basic rates to augment their earnings by overtime, shift premia, bonus and other pay components which were far less frequently available to women'. Further, savings on National Insurance contributions may be a significant benefit to employers and Robinson and Wallace found that 'In service industry establishments, gross weekly earnings of 20 to 70 per cent of female part-timers were beneath the threshold for contributions to the National Insurance Scheme'.

2.36 Other recent work which has examined the growth in part-time work includes Ballard (1984), who looks at the patterns of work and the situations and attitudes of women part-time workers and Industrial Relations Review and Report 320 (1984), which usefully summarises the findings of a survey of 50 (named) organisations which use part-timers and which again singles out flexibility of cover as the major motive for extending their use. Detailed recent examples of how individual companies make increasing use of part-timers are found in Industrial Relations Review and Report 334 (1984) (Lyons Tetley) and British Institute of Management (1985) (Marks and Spencer, Whitbread Retailing and others).

Results of the current study

2.37 Against this background we can now turn to examine the experiences of the firms taking part in this study. Major differences

between sectors are again evident. The results of our study are shown in Table 2.4.

Table 2.4 is concerned only with firms who had been increasing their numerical flexibility since 1980 and shows how their use of part-time workers varied. It is clear that all the service sector respondents used part-time workers – in retailing more than nine out of every 10 such respondents had increased their use of part-timers, as well as two out of every three in financial services. In manufacturing we found a lower use of part-timers (in engineering much lower) and a negligible increase in use (less than one in 10). We now go on to consider the sectors in turn.

Part-time work in food and drink

2.38 Most of our respondents in food and drink used some part-time workers. Leaving aside the fairly small number of cleaners, canteen and office clerical workers, we found only one substantial area of use. This was production operatives on part-time morning or (more usually) evening shifts, and for the most part it was a contracting number. The jobs themselves were mostly unskilled and the main reasons for the contraction had been a combination of (a) a general reduction in unskilled labour as automated equipment displaced many of the less skilled jobs; (b) fairly widespread agreements between unions and management that under circumstances of demanning part-time jobs would be the first to go; and (c) an increasing drive for continuous and semi-continuous production with an associated need to reduce changeover times and

roster full-time workers across 168 or 120 hour working.

2.39 The one firm which demonstrated an increase in part-time work stands out as the sole example of a contrary trend. It is therefore worth describing in a little more detail, but we would emphasise its uniqueness. Elsewhere the elimination of part-time working was proceeding apace.

Bakewell Limited is part of a large multiplant company, and it produces relatively short-run batches of products to be sold under supermarkets' 'own labels'. Although the company has invested heavily in new technology, the process is still inherently labour-intensive. No production run lasts longer than eight hours and the baking mix and packing machines then have to be changed for the next run. The company has moved to semi-continuous operation (120 hours, compared with 108 previously), but given the flexibility required for small, frequently changed runs, this operation is manned overwhelmingly by operatives working mainly five × five-hour shifts rather than full-time shifts. The change to part-time shiftworking was planned over several years, all new recruits are taken on as part-timers and many of the previously full-time operatives have converted to part-time (some under the DE job-splitting scheme). As well as providing the flexibility required for frequent line changes, the part-time shiftworking has reduced unit labour costs (via elimination of paid meal breaks) and enabled the company to cover for absence by asking someone to do a 'double shift' (without incurring premium rates).

Table 2.4 Use of part-time workers: all sectors

Sector	No of firms seeking increased numerical flexibility	Part-time labour currently in use	Increased use since 1980
Food & drink	15	12 (80%)	1 (7%)
Engineering	17	5 (29%)	1 (6%)
Retail distribution	18	18 (100%)	17 (94%)
Financial services	14	14 (100%)	9 (64%)
Total	64	49 (77%)	28 (44%)

Part-time work in engineering

2.40 In engineering the pattern was very similar, except that several companies, particularly in the heavy mechanical end of engineering, had a predominantly male workforce and part-timers only in office jobs. In this sector, again only one company had increased its use of part-timers. Some part-time jobs had been lost through contracting out ancillary functions and part-time shifts (mainly in light electrical, electronic and domestic appliance assembly work) were tending to disappear in the face of greater automation and capital intensity.

2.41 So, taking the two manufacturing sectors together, it is evident that the main reason for the small and declining use of part-time working among our respondents was a lack of any intrinsic perceived advantage for management in sustaining or increasing use of part-timers on a substantial scale. Certainly it is true that the male domination of the workforces of our respondent firms was important; certainly there was strong union opposition to part-time encroachment; certainly the displacement by automation of many of the unskilled assembly/processing/packing type of jobs had also played a part. But in the main we found that management strategies in these sectors did not focus on part-timers as appropriate forms of manning. The position was quite different in the two service sectors.

Part-time work in retailing

2.42 In retailing all the firms studied used part-timers in substantial numbers. In food retailing firms the proportion of part-timers in some stores reached almost 80 per cent of headcount and in all but four cases the proportion of part-timers had increased since 1980. Among the firms seeking to increase numerical flexibility of the workforce all but two (6 per cent) had demonstrated an increase since that time. It is no exaggeration to say that for retail distribution part-time working has become the dominant form of numerical flexibility sought. Part-time working was, however, restricted largely to sales assistant and cashier occupations, and almost wholly to

females. With the exception of a few supervisory jobs, the administrative and managerial hierarchy among these firms in stores and offices remained full-time, as did most jobs in distribution and warehousing.

2.43 At the risk of oversimplification, most retailers studied had a workforce consisting of three broad groups (other than head office and administrative staff):

▲ Full-time, permanent staff; this is the 'core' of experienced staff, containing the highest proportion of males, and is the main source of material for promotion to management jobs;

▲ Part-time, permanent staff, consisting mainly of female workers with domestic commitments, working at peak weekday times (notably midday);

▲ Part-time, evening and weekend staff (permanent or temporary), consisting of a mixture of staff similar to the permanent part-timers, together with young people (often older school students) working a small number of hours, often on temporary contracts (they may equally be boys or girls).

Generally, the proportion of workers in the second and third categories in the retailing workforce has been increasing under a number of pressures.

2.44 First, the two factors noted in 2.34 – precision planning in order to make cheaper use of labour and reduced hourly costs in order to use cheaper labour – were writ large among our labour-intensive retailing respondents. Intensive competition and squeezed margins, particularly in the retail food multiples, have meant that there is a strong need to match manning levels during the day and during the week to fluctuations in customer demand. This need for 'precision planning' has, therefore, given an impetus to the use of part-timers, even at *pro rata* wage rates. In addition, however, we found the further incentive of lower non-pay hourly costs cited by all our retailing respondents (saving on National Insurance contributions and pension schemes mainly) and lower hourly pay rates in a quarter of them. At the risk of oversimplification, it would appear that 'precision planning' provided our respondents with an orientation towards the use of part-timers in the first place but that the

organisation of both their shift systems and jobs was carried out with an eye towards further cost savings – principally through the construction of shift systems which would keep earnings below NI threshold levels where possible, but also through limiting job content in such a way as to permit and justify an hourly pay rate differential between full- and part-timers. Some companies were aware, given the different sex distributions of their full-time and part-time labour forces, of the danger of indirect sex discrimination if part-timers received a lower rate. Further, some companies claimed to obtain higher productivity and quality of service from part-time staff.

2.45 Superimposed on these pressures, there has been a trend towards more varied and extended opening hours, on weekday evenings and weekends. These developments have been met to some extent with rotated full-time work, but more usually they have led to an increase in the use of part-timers. This was done in two ways: first, by extending the working hours of permanent part-time staff, usually on a voluntary basis, but increasingly against a contractual commitment to work more hours as required. This was somewhat constrained by National Insurance thresholds and by employee domestic commitments, however, and it would be wrong to lay too much stress on the compulsion – by and large it was done by mutual agreement. Secondly, this extended cover was achieved through greater use of separate evening and weekend part-timers – the third category of worker noted in 2.43. Both these routes had the advantages of (a) not disturbing greatly the fixed working time patterns of most of the full-time workers; (b) substituting workers on a basic rate of pay for those who would otherwise be on premium rates; and (c) using labour which attracted lower non-pay costs. All the firms to whom we spoke had their own (often very complicated) system of rules covering who worked when, who would be asked to work more hours and how they would be paid. But in general we found that the more opening hours shifted away from a regular 9–5 pattern, the more the manning practices shifted from permanent full-time work to (often temporary) part-time work. Companies studied were almost unanimous in their feeling that a general introduction of

Sunday opening would result in a further proportionate increase in the use of part-timers.

2.46 It is worthy of note that several employers felt that there would be a limit to the increase in the ratio of part-time (and temporary) staff to full-timers, although few were clear exactly what the limit was (few wanted to see the proportion of full-timers fall below about 30 per cent of headcount, however). Beyond this limit, it was argued, productivity and quality of service would suffer, as the 'peripheral' workers would have too little support from the 'core', and the 'core' would itself be put under considerable strains. Further, several companies felt that they had to keep a pool of full-timers sufficiently large to produce the required volume of promotions into supervisory and managerial posts. Some of the companies studied appeared already to be approaching these constraints. Clearly, the limits on the extent of part-time working were mainly those imposed by the skill, product knowledge and customer service requirements of retailing firms and these varied considerably, with the highest part-time ratios (70 per cent or thereabouts) achieved in food retailing and the lowest (20–30 per cent) in department stores and those specialising in expensive (carpets, furniture, etc) or specialist (cameras, electrical equipment, etc) product lines. Again, the principal underlying constraint here is the cost ineffectiveness of providing substantial training for workers who will deploy those skills only for a few hours a week. It would appear that this general constraint is somewhat susceptible to external and cost factors – for example, the higher proportions of part-time staff covering Saturday trading in many stores and the fairly widespread intention (and in Scotland the practice) of using a significantly higher proportion of part-timers for Sunday trading to enable full-timers to avoid, or at least minimise, unsocial hours working. Union and labour market constraints were once again of relatively less importance here.

2.47 These trends and their limitations are exemplified in the cases discussed below:

Paperchain Ltd, a chain of newsagents stores participating in the study, had resolved the problems of seven-day operation and extended opening hours almost entirely through the use of part-time staff. Their 380

stores were mostly manned with one full-time store manager and up to three full-time equivalent workers wholly supplied by female part-timers. There were a number of advantages claimed, as follows. First, manning levels were wholly determined by a centrally imposed formula linking sales value per hour with staff cost. Thus, the cheaper the staff cost per hour, the higher the manning level likely to be achieved at any level of sales. This predisposed the company to use part-timers on account of their lower non-pay costs, mainly NI and sick and holiday pay, but the more important reason was the fluctuating sales value per hour during the course of the day and week. This did not just predispose, but obliged the company to use large numbers of part-timers, working individually negotiated patterns of hours which varied greatly in their distribution but which tended to keep pay below the lowest NI threshold. That this was the more important rationale is evidenced by the virtual absence of part-time labour in any of the administrative, warehousing and distribution functions of the business. A second factor was that as the company extended its product ranges towards those yielding higher sales value per square foot, so the regular trading patterns were increasingly disturbed. Although all workers, both full- and part-time, were contractually required to work additional hours to meet such new patterns, part-timers did so at non-premium rates, and further, according to management, were 'more likely to accept it and more likely to accept time off in lieu rather than payment'. Finally, the use of part-time 'Sunday only' staff permitted full-timers to avoid Sunday working. This aspect of the use of part-timers was increasing, not for cost reasons (the part-timers also received premium pay at the same rate as full-timers) but to take the pressure off full-timers. By offering part-time Saturday and Sunday only jobs, the company hoped in the future to achieve regular five-day operations on weekdays for its full-timers, while improving the calibre of its weekend staff (the job would pay up to the equivalent of 30 time-rate hours) to the extent that keyholding and cashing-up activities could be conducted by such staff.

ABC Foodstores, a supermarket group with 120 major food retailing stores and with some 16,000 employees, had a marketing orientation towards increasing their sales to customers in social categories A, B and C in the more affluent areas of the country, involving a high-quality, wide-range product strategy. Much of the manning strategy adopted by this company reflects the classic supermarket case – a high proportion of the store workforce made up of part-time, low-skill, low-cost labour working time patterns to match daily and weekly customer flows. This proportion has fallen to 58 per cent currently and in the newest stores it is closer to 50 per cent. This contraction is not due to union pressure or labour supply problems. It is a result of the growing requirement for greater product knowledge and a higher level of customer service and the growth of more specialist product lines like pharmacies, for example. This involves a recruitment orientation towards 'slightly better calibre' shop staff, who it is felt are more likely to be attracted to full-time positions, and an increase in training activities, which it is felt are likely to be more cost-effective if directed to full-timers and part-timers with long service (the current wastage rate for part-timers is 30 per cent). A subsidiary reason is that it is hoped to contain 'shrinkage' without increasing levels of supervision through curtailing the use of part-time and casual staff. Paradoxically, this retreat from very high levels of part-time working comes at a time when EPOS is automating and simplifying much of the checkout work and providing easily available data on customer flows, both of which make precision planning through part-time staff easier to organise.

This classical approach to the use of supplementary part-time and casual workers was found in two quite different retail chains. In the first, Everopen Ltd, a chain of supermarkets employing 30,000 staff, the proportion of part-timers has grown to approaching 70 per cent of store staff over the last six years. The relative simplicity of such jobs, particularly in newly designed stores with EPOS systems operating, means that customer service is interpreted more simply as having enough people in post at

any one time to deal with deliveries and quickly get produce into the shop and to open sufficient tills to avoid delays. At the same time, costs are reduced per worked hour; although pay rates are equivalent, NI, pension and overtime premia costs are reduced. So part-timers are used mostly on the main business days, Thursday, Friday and Saturday, both during the day and to facilitate late night opening, as well as a regular twilight 6–10pm shelf-filling shift. In addition, top-up student casuals are used on Friday nights and Saturday. It is reckoned by the management that a part-time component of 70 per cent is the most they can sustain.

The second chain is Cosyfit Ltd, a furniture retailer with 180 outlets, employing nearly 5000 staff. Here the part-time labour is at a much lower level, 26 per cent, but has risen from 20 per cent in four years. Manning levels are determined centrally by a formula linking staff costs to a proportion of sales. The composition of the agreed staff budget is a matter for local discretion. In this case, part-timers are mainly used to cover Saturday, which is the peak trading day, and to provide cover for Sunday and evening opening as required. Their contracts commit them to work up to 30 hours per week; their usual hours and their distribution are stated, but with a proviso for extension (with notice) as needed. Most, in fact, work eight to ten hours per week. All terms and conditions are *pro rata*, with most benefits accruing on a length of service basis. The company estimate that, taking into account headcount costs (workwear, training, canteen subsidy, etc), the actual cost of two part-timers is slightly more than one full-timer, so their rationale for using such labour is wholly based on the idea of precision planning.

Part-time work in financial services

2.48 Our financial services respondents, like those in retailing, made considerable use of part-time workers and for many of the same reasons. About two-thirds of our respondents who were seeking numerical flexibility had

increased their use of part-timers to achieve it. However, it had not grown on such a wide front as among our retailing firms, and the extent of use in particular firms was much less than in retailing. We also noted considerable differences in the patterns of use between sectors within financial services, so it is worth looking at them separately.

2.49 Changes have taken place in banking, particularly branch banking, and, as was noted earlier, there has been considerable growth in the use of (mainly women) part-timers at a time when permanent headcount has been static or declining. This use of part-timers is a supplementary workforce to cover branch peak trading times during the week – notably lunchtimes on a Friday. Apart from pensions, such workers tend to receive pay and all benefits on a *pro rata* basis. The cost savings are made through their being there only when needed and because of higher productivity (both because the bank can save on meal breaks, etc and because the part-timers are able to work more intensively over a short shift than would be feasible for an equivalent full-timer). At least one bank studied had increased its ability to 'precision plan' the use of part-timers by moving from traditional part-time contracts (specifying the number of hours to be worked per week and which hours and days are to be worked) to a more open-ended contract specifying only the number of hours to be worked per week, with the actual rota to be agreed 'as required' with the bank.

2.50 It should be noted that although the use of part-time branch staff is growing in the banks, and as such represents a significant break with the tradition of having all bank employees as 'career staff', part-timers still account for a very small part of total employment. In 1982 female part-timers (the only data available to us, but virtually a proxy for all part-timers in banking) stood at 6.8 per cent of total headcount in the London clearing banks; by 1985 it stood at 8.9 per cent. Among Scottish clearing banks the penetration of part-timers is significantly higher, 12.9 per cent in 1982 and 13.9 per cent in 1984. Sources in the industry judge that this Scottish level is approaching the maximum for banking operations. Further, the figures include large numbers who work on shifts in centralised 'factory-style' cheque-

clearing operations. This is a traditional use which has not been growing in the companies studied. A similar (again traditional) use of large numbers on part-time rotating shifts to cope with multiple but regular workload fluctuations (daily, weekly, monthly) occurs in the credit card companies. These bank subsidiaries are the largest proportional users of part-timers in the sector, and part of the observed growth in the use of part-timers in the sector as a whole is attributable to the expansion of the credit card companies.

2.51 Analogous to the issue of Sunday opening in retailing is the question of Saturday opening by banks. Unlike the retailers (and unlike building societies – see below) banks which have opened on Saturdays have not generally opted for the use of part-timers or temporaries but have taken ‘volunteers’ from the full-time staff (who are paid a premium rate). The desired Saturday trade is not cheque-cashing, etc but selling securities, advising on loans, etc, so well-trained and experienced staff are required. It is not as yet clear whether this pattern will continue as extended opening spreads – a possible alternative is the move to shift rotas for full-time branch staff. The situation currently is that our banking respondents recognised the skill and training constraints on the use of separate part-time Saturday staff but were not (with one exception) sufficiently confident about the permanency of Saturday opening to introduce six-day rosters.

2.52 Building societies make somewhat greater use of part-time workers than do banks, particularly in England and Wales. In 1977 they accounted for 7.8 per cent of headcount in the sector; by 1984 this had risen to 18.1 per cent. Their use in the societies has traditionally been similar to that observed in retailing. However, some of the societies studied were manifesting an increased use of part-time staff (in an attempt to keep wage costs down by matching manning to workload more efficiently) and more flexible and varied hours patterns. As with the banks, the part-timers are mainly female (often ex-full-time employees) and are employed as cashiers, dealing with the public, and clerical/secretarial support. Another similarity with the banks was that part-timers in the building societies studied received wages

and all benefits (including mortgage subsidies) *pro rata*. The sole exception here is that the building societies studied also had a large category of ‘Saturday only’ part-timers who, as in retailing, tended to be on lower pay rates and did not receive *pro rata* benefits.

2.53 It should not be thought that all building societies follow this pattern. Just as in banking, there are strong cultural factors influencing manning practices; one of the bigger societies interviewed, for example, so valued the long service and commitment of its staff that it fiercely resisted the use of part-time staff to meet business fluctuations, relying instead on the versatility and mobility of its full-timers to shift from back to front office jobs at peak times and for lunch cover. It is of interest to note that both banks and building societies have traditionally experienced considerable functional flexibility at all occupational levels (see Chapter 3). Several of the companies studied expressed a concern that the growth in the use of part-timers – who tend to be trained to a lower level than full-timers and who work on standardised, ‘packaged’ tasks – might ultimately impair this traditional functional flexibility and inhibit the company’s ability to deploy people on any tasks as required.

2.54 In both the banks and building societies studied there were also technological reasons for the growth in the proportion of part-timers (see also Rajan 1984). Most of the computer-related technological change has affected ‘back office jobs’ where many of the full-timers are located. The new technologies have both reduced the labour requirement and integrated previously separate functions (most of the building societies, for example, no longer have separate mortgage sections, arrears sections, etc in each branch). The part-timers by contrast are mainly counter staff, for whom the requirement has grown as business has grown (despite the introduction of automatic teller machines, etc). Further, in some companies there has been not only a reduction in the number of full-timers in ‘back office’ jobs but also some substitution of part-timers for full-timers as automation and the introduction of standard packages for many clerical/secretarial tasks have made it easier to parcel up some tasks into chunks to be done in a short period

by a part-timer (eg the sending out of standard correspondence to customers, the processing of mortgage and other loan applications, etc).

2.55 By contrast, the insurance companies studied manifested neither large numbers nor a significant growth in the use of part-timers. Companies did use part-time clerical and secretarial staff in a traditional way (for copy typing, etc) in both branches and head offices. Branches did experience the peaks and troughs of customer demand during the working day and working week which were found in the banks and building societies, but it seems that most insurance branches were too small to allow for the kind of supplementary shifts found in banks and building societies (a typical branch might have a salesman and a general receptionist/clerk/typist).

OVERTIME AND SHIFTWORKING

Evidence from previous studies

2.56 The use of overtime and variations in shift patterns are traditional approaches to securing greater flexibility in working time patterns. Indeed, the two are often intimately connected in that as demand increases a company may expand its use of overtime up to the point where it becomes economic to change the pattern of shifts. These responses differ from those examined above in that they involve changing the working time pattern of existing employees, rather than adding extra workers, to achieve numerical flexibility. Of course, it may be that in changing to a new shift pattern some more workers need to be recruited – putting on a night shift, for example – and in such a case shiftworking could be seen as a source of flexibility which incorporates both types of response.

2.57 Looking first at overtime working, its use in manufacturing firms has increased substantially in the last four years. Thus, whereas in 1980 29.5 per cent of all manufacturing operatives were working overtime (an average of 8.3 hours per operative), latest Department of Employment figures for June 1985 show 36.5 per cent

working overtime (at an average of 9.1 hours each).

2.58 These trends may seem paradoxical in the light of the increased ease and reduced cost of recruitment on the external labour market since the growth in unemployment. Nevertheless, given the increased volatility and uncertainty of demand in many industries, companies who are unsure of the ease and cost with which they can *shed* labour in the event of an unforeseen downturn may look towards overtime as a relatively painless way of adjusting manning levels in the short run. On the trade union side, most unions have a policy stance at a national level which opposes the working of systematic overtime at a time of high unemployment – the 1984 conference of the Confederation of Shipbuilding and Engineering Unions, for example, passed overwhelmingly a motion calling for a 10-hour limit on the amount of overtime worked in any four-week period, along with legislation to eliminate systematic overtime. Case-study evidence, however, suggests much greater ambiguity on the part of the workforce and local workplace representatives, and the IMS studies (IMS 1985, Meager 1985) threw up several examples where local union opposition to the use of temporary workers was centred not just on their insecurity of employment or inferior terms and conditions, but also on the consequent loss of overtime opportunities for existing permanent employees. It is not, therefore, surprising to find, at a time when the pressures for numerical flexibility have intensified, that employers in manufacturing are increasing overtime as an easy way of achieving that flexibility mutually acceptable to both sides.

2.59 As far as shift patterns are concerned there is less that can be said in general terms about trends, although a recent study concludes that 'up to a third of manual employees now work some kind of shift pattern – a proportion which could well grow in the future, as employers seek to maximise the use made of more expensive capital equipment and extend the hours that services are available' (Industrial Relations Review and Report 303, 13 September 1983).

2.60 As detailed by the numerous studies of shiftwork conducted by the European

Foundation for the Improvement of Living and Working Conditions (see European Foundation 1979), there is a large variety of shift patterns which may be adopted according to the circumstances of individual industries and sectors. In manufacturing in particular (but also in some head office data processing and similar functions in all sectors), the cost of new high-speed capital equipment often dictates the need for higher utilisation rates and hence a move to continuous or semi-continuous working and appropriate shift patterns to achieve this flexibility without resorting to costly overtime. Examples of such changes were found in the previous IMS Studies – see also the cases reported in Blandy (1984); the change to five-shift working at American Can (Industrial Relations Review and Report 288, 1983); and the new shift patterns for CAD technicians at Westland Helicopters (Industrial Relations Review and Report 321, 1984). IDS Study 335 (1985) also reviews recent changes in shift arrangements and provides seven (named) case studies.

2.61 In service sectors the major force for change in shift patterns (or for the introduction of shiftworking) has been the increasing length and variety of opening hours (as documented in the previous sections for shops, banks, etc) and the requirement for longer operating hours on some items of capital equipment such as computers. In general, very little is known about the patterns of and rationales for shiftworking in the service sector, except that they are more likely to be associated with rostering full-time staff across six- and seven-day opening than with manning up 24-hour operations.

Results of the current study

2.62 We now turn to the four sectors included in the present study, to see how employers in those sectors used overtime and varied shift patterns to enhance their numerical flexibility. Table 2.5 shows the use of overtime working among the firms who were seeking greater numerical flexibility and how far it had increased since 1980.

Once again, this table is concerned solely with those firms who were seeking to increase numerical flexibility over the period since 1980, and with those in which overtime featured as a substantial manning practice rather than an incidental and restricted activity affecting only a handful of workers. What Table 2.5 shows is the high incidence of overtime working in all the sectors except financial services. All the financial services firms now using overtime on a significant scale had increased their use since 1980, as indeed had almost three in four engineering firms. The growth in retailing had been more modest, and in food and drink negligible. We will return to these data below as they reflect very different approaches to the use of overtime working.

2.63 Table 2.6 shows how far respondents who had been seeking numerical flexibility had changed their shift systems in order to get or increase it. We were unable to collect data on the current extent of shiftworking – largely because practices varied greatly from site to site among our multisite firms and from occupation to occupation within firms.

Table 2.5 Use of overtime: all sectors

Sector	No of firms seeking increased numerical flexibility	Overtime currently in use	Increased use since 1980
Food & drink	15	15 (100%)	2 (12%)
Engineering	17	17 (100%)	12 (71%)
Retail distribution	18	16 (89%)	5 (28%)
Financial services	14	6 (43%)	6 (43%)
Total	64	54 (84%)	25 (39%)

Table 2.6 Changes to shift patterns: all respondents

Sector	No of firms seeking numerical flexibility	Substantial changes to shift systems					
Food & drink	15	12 (80%)					
Engineering	17	15 (88%)					
Retail distribution	18	<table border="0"> <tr> <td rowspan="2">}</td> <td>Full-time</td> <td>5 (28%)</td> </tr> <tr> <td>Part-time</td> <td>15 (83%)</td> </tr> </table>	}	Full-time	5 (28%)	Part-time	15 (83%)
}	Full-time	5 (28%)					
	Part-time	15 (83%)					
Financial services	14	3 (21%)					

Again, only firms making substantial changes and only those seeking numerical flexibility are shown. The results show that a high proportion of respondents in manufacturing had changed their shift patterns but that changes in the service sector were on a more restricted scale, save for part-time workers in retailing. We now proceed to examine the results for shiftworking and overtime in the four sectors in turn.

Overtime and shift patterns in food and drink

2.64 Without exception the food and drink firms studied made regular use of overtime, but it was among those respondents who did not have continuous or semi-continuous production that the traditional patterns persisted. As we have seen, the food and drink companies were faced with two major types of workload fluctuations: (a) predictable seasonal fluctuations; and (b) less predictable fluctuations associated with market shocks, new product launches, etc. Overtime was used by most respondents to resource both types of fluctuation, but particularly by those with discontinuous production. Small seasonal fluctuations would be dealt with by overtime, and some companies made quite sophisticated calculations of how large an increase in demand would need to be before overtime became uneconomic and it would therefore be necessary to take on a shift of temporary workers. With the less predictable fluctuations, companies tended to allow a longer precautionary 'margin of error' and would work larger amounts of overtime for longer, until it became clear whether the demand

change represented a long-term sustainable increase. There is nothing new in this traditional pattern.

2.65 Most companies who had moved towards continuous production, however, (usually associated with new capital investment) had adopted full-time shiftworking to achieve fuller utilisation. There was a general trend in the companies studied to increase the weekly hours during which the machinery was operated, with continuous operation most marked in the brewing subsector. Almost without exception, this remanning was designed to eliminate the need for built-in overtime from both process operators and maintenance workers. Our interviews suggested that this was the main reason why so few of our respondents in this sector had in fact resorted to more overtime working – they had so rearranged their shift systems as to operate 168 or 120 hours without the need for overtime and this had more than offset any increase in 'precautionary' overtime.

2.66 Often this reorganisation went a lot further than simply adding on extra shifts; in many cases the lengths and rotation patterns of the shifts were also changed. One company, for example, moved from working 120 hours per week (with three crews working five eight-hour shifts per week) to 144 hours (with four crews working three 12-hour shifts per week). Thus, with no capital outlay the company was able to increase production time by 24 hours per week. In addition, the longer shifts reduced product waste (which occurred mainly at shift changeovers) and absenteeism – ie if individuals were working only three (12-hour) rather than five (eight-hour) shifts there would be a greater disincentive to take a day off (at

the cost of a third of a week's pay rather than a fifth).

2.67 This attempt to eradicate systematic overtime was widespread even among those firms who did not have very capital-intensive, continuous operation plant. It was being widely questioned by almost all our respondents for maintenance and process workers alike. Several firms showed clear evidence of a shift towards rostering weekend and evening maintenance into basic time rotas, for example. Similarly, reorganisation of shift patterns occasioned by reductions in basic hours had led a minority of our respondents to reschedule all production into basic time hours through revising shift schedules.

2.68 Running parallel with this widespread move to reduce overtime working was an equally common trend towards increasing management control of the use of overtime. This reassertion of control appeared to have no greater basis than a crude shift in bargaining power. It had led firms to remove some of the 'Spanish practices' like 'one in, all in' and 'job and finish' and to remove minimum pay guarantees for overtime shifts.

2.69 Finally, it is of interest to note that in those companies still retaining substantial numbers on part-time shifts, it was possible to work significant amounts of overtime without incurring premium rates. Indeed, in the single company which had greatly increased its use of part-timers (by moving towards semi-continuous operations, mainly staffed by short part-time shifts), the ability to use part-timers from one shift to cover for absence in adjacent shifts was part of the motivation for the change. The company was thereby able to avoid production loss and overtime costs. The only other notable trend in shift patterns in the food and drink companies studied occurred in those companies who were providing fresh-baked food, fresh-cut sandwiches, etc to the retail multiples. Growth in this market had meant an increase in night work at the companies concerned.

Overtime and shift patterns in engineering

2.70 The general picture for engineering was

similar to that in food and drink manufacture; however, the relative importance of the components was reversed. Small batch production was much more common among our engineering firms than in food and drink, and as a result plant start-up and shutdown costs were generally less. While we still observed pressure to increase the continuity of production in engineering, it was not the overriding imperative that many of our food and drink firms faced. Even so, we still found substantial evidence of a movement away from systematic overtime working. This was particularly evident among the firms who had made significant investment in modern computer controlled machinery and were moving towards multiple shift patterns to increase the utilisation of this equipment and secure adequate return on capital. Continuous working did not always imply new shift patterns, however – thus one company had introduced 'ghost manning' at night on some lines whereby the machines were run unmanned at night, having been programmed to switch themselves off in the event of breakdown, etc. But what it did imply was a move away from built-in, committed overtime.

2.71 In the food and drink sector this trend had virtually obliterated the increased level of overtime working resulting from market uncertainty and fluctuations. In engineering it had not, and the traditional use of overtime as a quick, short-term and cautious response to increases in demand was dominant. A net increase in overtime working was found in seven out of 10 of our engineering respondents seeking to increase numerical flexibility and it was frequently characterised as a means of 'first-line' response to demand fluctuations, particularly in companies which had reduced headcount considerably during the recession. In one company which had experienced large redundancies and 'mothballed' much plant, remaining employees were taken off short-time working as demand picked up. Then they worked overtime until it was clear that the demand increase was sustainable, and a machine line was then brought back into commission with new shift, etc.

2.72 Although this appeared to be the main factor lying behind the relatively high number of engineering firms who had increased their

use of overtime, there are three other factors which should not be ignored. The first is eloquently summed up by a production manager at one of our Scottish respondents: 'We've always run on a high level of overtime working, but we turned the tap right off in 1980... since then we've increased overtime working, but we're getting back to normal, not doing something new'. The second is something new: where the capital intensity of production has increased in engineering, and where PLC-controlled equipment has been deployed into 'flexible manufacturing systems', then the dominant need to secure continuous production was again found (as in food and drink). Our respondents in these firms certainly looked to rostered continuous working and the appropriate non-overtime shift patterns rather than to overtime working. Even those respondents who had not gone so far down this road reported that in future their use of shifts was likely to become more important, and overtime correspondingly less so, as a means of responding to output fluctuations. The third factor is associated with the reduction in basic hours in engineering. We had expected that this would have given rise to a greater predisposition to use overtime, but in fact our respondents generally had been successful in building productivity levels up to accommodate the reduction and if anything reported that the reduced basic hours had had a bigger effect on shift patterns than on their overtime propensity.

2.73 In addition to providing genuine flexibility, however, there were several engineering companies in which overtime had become institutionalised and management felt there was an industrial relations constraint to removing it, either by bringing in an extra shift (mainly for production workers) or by introducing new rota and shift patterns (so that, for example, maintenance work could be brought out of overtime into standard time). The wish to remove systematic overtime was an important motive in introducing new shift patterns in some companies, as was the wish to accommodate reductions in the working week. Sometimes these pressures operated in concert; thus, for example, one company working five \times eight-hour day shifts, when faced with the reduction of the working week to 39 hours, moved to a pattern of three \times 10 plus one \times

nine (rather than four \times eight plus one \times seven). This yielded a double benefit. The longer shifts (almost) paid for the reduction in the working week and the move to a four-day week for production workers enabled the company to 'engineer out' structural overtime in regular maintenance, which could be planned for the fifth day.

2.74 As in food and drink, we found a major shift towards managers increasing their control over when and how overtime would be worked. Again, this appeared to be largely a question of relative bargaining strength.

Overtime and shift patterns in retailing

2.75 In retailing, the dominant finding was of a widespread desire to reduce levels of overtime working among full-time employees as a means of responding to predictable fluctuations in business. Thus, overtime was becoming increasingly seen as appropriate only for unpredictable, experimental or 'one-off' trading fluctuations. So, experiments with Sunday trading, bank holiday opening and variations from anticipated trading patterns (possibly due to weather-related factors) were frequently met by overtime working among our respondents. As a general rule, however, and subject to the constraints identified earlier, our respondents preferred wherever possible to use supplementary recruits (part-time or temporary as appropriate) rather than resorting to overtime from full-time staff. Further, most of them were assisted in so doing (to a greater extent than in any of the other three sectors) by the maintenance of relatively high levels of labour turnover. As a result, they could use supplementary recruits with greater confidence in their ability to backtrack quickly than could any of our other respondents faced with a similar problem.

2.76 Table 2.6 clearly shows a divergence between the use of 'overtime' for part-timers and for full-timers, with less than a third of firms having increased full-time overtime and more than 80 per cent having increased 'overtime' working from part-timers. As we have already indicated, the use of supplementary part-time labour itself facilitates

overtime working without overtime premia, which in most cases did not apply until worked time exceeded basic full-time hours in any week. Among our smaller respondents this was increasingly being introduced into contracts of employment, which would specify 'normal' hours but with a requirement to work additional hours as requested. There are obvious constraints on this practice, not least Wages Council regulations of premia for weekend working. All of our respondents applied such regulations, but most reported that they were not always so rigorously observed elsewhere in the sector, particularly among smaller firms. However, even among the larger firms in our sample, these requirements were being questioned. Most respondents were keeping a close eye on the outcome of the current dispute between ASDA Superstores (not among our respondents) and USDAW in Scotland over the issue of premia for weekend working for part-timers, and might be expected to attempt to introduce reduced premia if Sunday trading becomes regularised. Thus, in retailing the issue is not so much 'how much overtime?', but rather 'who works it, and how is it rewarded?'

Overtime and shift patterns in financial services

2.77 In financial services overtime working follows a similar pattern to that in retailing, but, because the use of supplementary staff is significantly less (on account of job content and tradition, principally), and because opening hours are less variable during the week, overtime working is generally restricted to Saturday opening (in the banks) and for absence cover and unanticipated trading peaks elsewhere in the sector.

2.78 Interestingly, our respondents in financial services recognised overtime working as a useful form of flexibility but resorted to it relatively little. This appears to be due largely to tradition and employee resistance. Significantly, the Saturday trading shift in most of the banks is not called overtime, nor is it contractually arranged as such; rather it is a 'separate contract' with a high basic payment not related to an overtime premium. Similar

issues of control also emerged; Saturday staff are 'volunteers' and, though formally this is what they are, there was little doubt in the minds of our union participants, nor indeed in those of most of our management respondents, that a significant degree of informal pressure to work Saturdays could be, and often was, applied. Most believed that, as in retailing, the more such trading hours became fixed, the more would rosters be introduced to cover six-day opening.

2.79 We came across only one case where rostered six-day working had been introduced in banking, though it is more common among building societies. Even those building societies who had not generally sought to use more supplementary part-timers have tended to use them more consistently on Saturday mornings in order to minimise rostering for full-time staff. They had not on the whole gone for overtime, as Saturday opening was traditional.

Overtime and shift patterns – constraints

2.80 Taking the four sectors together, it is clear that the most important constraints on the use of overtime and shiftworking were those of cost, control and acceptability. It was on these issues that much of the bargaining and planning which preceded any changes to traditional patterns had turned. For example, in both the manufacturing sectors one of the most widespread findings was that of management initiatives to assert (or reassert) their control over the sanctioning of overtime working. This involved attempts to remove systematic overtime, to incorporate regular overtime into shift patterns and to get away from the 'one in, all in' customs. Most respondents here had made considerable progress in achieving this control over the last four years yet had not, with the exception of some rescheduling of maintenance overtime, significantly altered the premium rates of pay for overtime. Concurrent with this research were the national negotiations in the engineering sector, which apparently touched on the issue of premia for overtime resulting from reductions in basic hours, and this was the sole indication of any likely movement here

(although we are unable to say how such issues might be resolved).

2.81 In retailing all three of these constraints were not only being questioned but have in fact considerably rolled back, primarily through the use of part-time workers' overtime. Outside Wages Council regulations it is costless (ie not usually attracting premium payments), increasingly controlled by contractual commitment and apparently acceptable to part-time employees, provided only that it is not continual or substantial enough to take earnings across the NI threshold. In financial services such constraints are beginning to make themselves felt as the need for weekend working increases, but as yet this need has not been so great as to require consistent attempts to reduce the constraints.

FLEXIBLE WORKING TIME

Evidence from previous studies

2.82 Overlaid on all the developments outlined in the previous sections has been the long-term secular decline in the length of the working week, with current trade union pressure for further reduction (the 1985 claim from the engineering unions to the EEF includes a reduction of working time to a 35-hour week). Under previous reductions in the working week some companies have looked to cover their costs through different shift patterns (see the case studies in Industrial Relations Review and Report 308, 1983 for examples of ways in which companies have changed shift patterns to cover reduced working time without increasing overtime). Others have gone for productivity bargains, higher utilisation rates, shorter break times, etc (for a summary of 50 companies who effected working time reductions in 1983/84 and the deals that were struck to pay for the reductions see Industrial Relations Review and Report 312, 1984).

2.83 What the case study results add up to is a widespread contradiction between reducing individual worked time and increasing production/opening time. This gap has largely been accommodated through the use of supplementary labour or the rescheduling of

blocks of worked time. Many companies now report that further increases in this tension will raise the cost of achieving the increased flexibility they require to deal with workload fluctuations and are looking to more radical reorientations of the basis for working time. This differs from the straightforward changing of shift patterns because it involves not the rescheduling of blocks of time, but the reorganisation of the blocks themselves. The most prominent (in discussion, if not in implementation) is the notion of 'annual' or 'contractual' hours whereby employees are contracted to work over a year or a season, etc an average number of hours per period (week, month, etc) such that longer hours worked in one period are offset against shorter ones in another and therefore do not incur overtime costs. Such restructuring may be fixed in advance (as in seasonal industries such as brewing and electricity supply) or may be more or less fluid subject to agreed ground rules (see, for example, IMS 1985). They may be determined by the employer (and most often are) or by the employee (flexitime). The attraction for the employer is clear (greater numerical flexibility at no extra cost); the attraction for the employee is less clear in pecuniary terms, although the potential for longer blocks of leave and time off in lieu during slack periods, some discretion in worked hours and a reduction in total worked hours may be attractive to some, just as rostered holidays and an irregular working pattern may not be.

2.84 To date, most developments in this area have occurred in Europe (see European Industrial Relations Review, Nov 1983, IDS Report 213, 1984, and Teriet 1982) and British examples are harder to find (one of the most innovative recent developments is that involving the introduction of 'committed hours' for individuals, averaged over a 12-month period according to workload requirements, which was introduced at Whitbread's Romsey depot in 1983 as part of an overall 'flexibility' package - see Industrial Relations Review and Report 346, 1985).

Results of the current study

2.85 The experiences of the companies

studied in the four sectors confirmed this general impression of few major recent developments in this area. Several of the companies had 'flexitime' systems for white collar workers. These were mainly of a traditional type, with 'core hours' during the middle of the day and flexible hours at the beginning and end of the day (various arrangements existed for carrying forward surpluses or deficits of hours). These systems, however, were seen more as a 'fringe benefit' to employees than as a means of securing better matching of manning to workload fluctuations. (Interestingly, one engineering company had successfully extended 'flexitime' to the shopfloor, which required that the workforce be divided into autonomous work groups, to whom the responsibility for ensuring full cover of all jobs was devolved.)

2.86 As far as 'annual' or 'contracted' hours were concerned, only one (food and drink) company had fully implemented such a system, although another (also food and drink) had small numbers of maintenance craftsmen working to a contractual 46-hour week. Several of the companies (all in food and drink and engineering) could see clear advantages to such a system as a way of reducing overtime costs and responding to trade union pressure for reduced average working hours, and some had set up internal working parties to examine the possibilities. Management opposition, and the possible extra administrative burden of such systems, were often mentioned as potential obstacles, as was trade union and workforce resistance.

2.87 In retailing and financial services we have already discussed the growth of upward flexibility in part-time workers' hours. Beyond this, neither sector provided an example of flexible working time. Where the deployment of supplementary staff is constrained (by skill and training considerations) then extended weekend opening certainly provides an incentive to break with current practices, yet it is unlikely that this will lead to anything more than a move towards five-day working rostered over six- or seven-day opening – most respondents took a line similar to one of our retailing respondents: 'Where we can't use separate weekend staff... we'll make ends meet with overtime... when the trading pattern settles down, we'll either go for rosters to cover all seven days, or we'll close the store on the least busy day'. The closure option was not widely mooted, save in the departmental and specialist retail stores where there was least recourse to supplementaries. A possible shift to flexible working time was barely on the agenda for these respondents.

2.88 Clearly, the whole issue of rescheduling of basic hours into more flexible blocks is tied up with the number of basic hours. In all the sectors reductions in basic hours required rescheduling to some extent, and our respondents all clearly saw the other side of the coin – that the price of such rescheduling might well be net reductions in basic worked time. On the whole, with a small number of notable exceptions, our respondents saw this as an issue for the future – a key one.

3 FUNCTIONAL FLEXIBILITY

INTRODUCTION

3.1 Just as numerical flexibility is concerned with how employers adjust the numbers of people employed, or the hours they work to changing workload levels, so functional flexibility is concerned with how they adjust the deployment of the people employed and the contents of their jobs to meet the changing tasks generated by that workload. It is clear that such a requirement is nothing new – reorganisation of the way in which jobs and people are deployed is a continuous process. However, just as we saw that employers had been seeking more numerical flexibility from their workers since 1980, we need to consider whether the need for functional flexibility has also been growing since that time.

FUNCTIONAL FLEXIBILITY – IS IT INCREASING?

3.2 As we have argued in Chapter 1, there is a strong *prima facie* case for believing that such a need is increasing, particularly in view of the technological, organisational, cost and uncertainty pressures in our four sectors discussed in Appendix III. This would imply that the need for greater functional flexibility can be attributed to one or more of the following factors:

- ▲ Skill boundaries are being blurred by technological change and this is accelerating;
- ▲ Cost pressures on headcount may lead to an increasing pressure to spread the available workforce over a larger number of tasks; and
- ▲ Growing uncertainty in product markets and process may require a workforce which is

capable of responding to as yet unknown changes in these dimensions.

3.3 The dominant pressures leading employers towards increasing their workforces' functional flexibility seem to be technological and organisational. If jobs can be regarded, crudely, as collections of tasks, then new technology may render existing job boundaries obsolete, in the sense that the most efficient grouping of tasks into jobs has changed. Alternatively it may, by automating some of the tasks, create a 'gap' in an individual's job which can be filled by other tasks. The cost pressures on headcount, and the increasing volatility and uncertainty in workloads, are also important contributions to the perceived need for functional flexibility. Companies having demanned, and simultaneously facing fluctuating, uncertain workloads, need to be able to deploy their remaining employees across a wider range of tasks than previously.

3.4 All this makes intuitive sense, but where is the evidence? We will go on below to consider the results of previous studies to see how far they can shed some light on the matter. But first, we present the findings of the current study. We simply asked our respondents whether they have been seeking to secure greater functional flexibility from their workforces since 1980. As before, we had first clarified with them exactly what we meant by functional flexibility, and made it clear that we were interested only in significant and deliberate changes in their manning practices. Their responses are shown in Table 3.1. It is important to emphasise that these responses cannot be taken as representative of UK firms as a whole because of the nature of our sample.

Table 3.1 Functional flexibility: all sectors

Sector	No of firms participating	Seeking to increase functional flexibility since 1980	Recording no significant change or reduction
Food & drink	16	14 (88%)	2 (12%)
Engineering	19	17 (90%)	2 (10%)
Retail distribution	20	4 (20%)	16 (80%)
Financial services	17	4 (24%)	13 (76%)
Total	72	39 (54%)	33 (46%)

3.5 Without wishing to prejudge how important these changes might have been in a portfolio of other corporate employment priorities, it is clear that nine out of every 10 of our manufacturing respondents had been seeking to increase the functional flexibility of their workforces. Among the service sector respondents the picture was less clear; in retailing only two in 10 had sought more, in financial services it was four in 10. We will discuss later how our respondents had sought to achieve this; for the moment we should simply note the important distinctions between the sectors. Clearly, among our service sector respondents the perceived need to increase functional flexibility is less important than in manufacturing, and in the case of retailing much less.

PREVIOUS STUDIES – WHAT CHANGES HAVE OCCURRED?

3.6 There is little or no statistical evidence on how widespread such changes in job content have been (indeed it is difficult to see how the extent of such changes might be meaningfully measured). There is, however, a wealth of case study evidence in this area, most of which deals only with manufacturing firms. Further, much of it (eg IDS Study 322, 1984 and the four case studies therein) refers to craft occupations, mainly it seems because this is an area in which traditional job demarcations (between trades) have been most marked and in which, accordingly, the achievement of flexibility is most notable when it occurs. The IDS study found, *inter alia*: that new technology and/or more intense competition were the motors driving the move to craft flexibility; and that such moves were often hindered by rigid pay structures, by differential pay, terms and conditions between different groups of workers and by conflicts between different bargaining groups and unions. The study also highlighted the importance of training, effective communication and planning in achieving flexibility and suggested that greater flexibility between craftsmen and other groups often depended on the achievement of prior flexibility within the craft group.

3.7 This second area of flexibility between craft and other groups (operators, technicians, supervisors and other white collar staff) has been less studied. The same can be said for flexibility within these other groups themselves (often areas where the technological pressures and the industrial relations constraints are less severe). A recent study of a number of flexibility agreements in companies, however, found, in addition to moves to combine and expand craft jobs, examples of team working, semi-skilled grades doing some craft work, craftsmen doing some semi-skilled jobs, the blurring of white and blue collar distinctions, changing supervisory roles and increased flexibility within the white collar 'staff' areas (Industrial Relations Review and Report 316, 1984). It is clear, therefore, that developments are afoot which extend well beyond the craft areas which have been the subject of most of the previous research.

3.8 The IRRR work and the IMS (1985) research both suggest that in pursuing their strategies of increasing functional flexibility employers have adopted a number of approaches, which can be divided into two broad categories.

▲ The 'piecemeal' approach: this consists of the extension or the changing of job descriptions. Thus, in the craft area, this might involve including part of what had previously been an electrician's job in the job description of a mechanical fitter, and *vice versa*. Alternatively, it might mean the abolition of the two 'core' jobs altogether and merging them as a single job with a wider job description (perhaps creating a new grade of 'craftician' or 'supercraftsman' in the process). The essence of this approach is that job descriptions defining jobs still consist of lists of tasks – a longer or different list than before, but a finite one.

▲ The 'principle' approach: this largely dispenses with fixed job descriptions based on lists of tasks. Instead, workers are divided into groups distinguished by competence or skill level and their deployment is 'as required', constrained by that competence. This involves the establishment of the principle of flexibility (constrained only by competence, health and safety, etc), after the fashion of the model which has traditionally existed in parts of the

service sector and in some white collar and managerial occupations.

Clearly, the second approach builds in fuller flexibility for the future than does the first piecemeal approach, which effectively creates new job descriptions which may themselves become rigid and outdated in time. In practical terms, however, strategies of the first type appear to be easier to negotiate and implement in the short run. Several of the earlier case studies from IMS suggested that companies had run into problems with overambitious strategies for introducing full functional flexibility immediately, and one of the conclusions of the detailed research on maintenance craft flexibility in process industries conducted at the Technical Change Centre (see Cross 1985) was that 'many companies were overly optimistic of the ease with which the "human" aspects of introducing new plant and equipment could be resolved'.

3.9 While the TCC work has concentrated on process industries (food and drink, chemicals, energy, etc) and looked mainly at the technical requirements for achieving greater flexibility and at what the newly flexible jobs will look like, it also examines the industrial relations and training implications of the changes (see Cross 1985, Mitchell and Cross 1984). This work reinforces the IDS conclusions and shows problems arising because 'hybrid craftsmen do not fit easily into existing craft union representative structures' and 'many existing payment systems for craftsmen only recognise commonality, not differences'. When it comes to negotiating change at the workplace, Cross (1985) found that 'those companies which could conduct all their own bargaining at the site had a major advantage over those companies which still pursue a centralised bargaining structure'. On training, the key deficiency thrown up by the TCC work involves the initial lack of information, coordination and cooperation between industry and the relevant education and training bodies.

3.10 These issues will be examined further when we report the results of the current research in the following section. It should perhaps be re-emphasised, however, at this stage that, although it is possible to detect a clear feeling that job boundaries in manufacturing industry are changing faster and more

fundamentally than before, hard evidence is limited to the research based on case studies (described above) and well-publicised 'leading edge' examples. Recent developments reported in Industrial Relations Review and Report include, for example:

▲ Mobil Oil (Coryton Refinery), where a flexibility package included a new flexible 'refinery craftsmen grade', the abolition of demarcations and restrictions in the craft areas and a joint agreement on the future development of craft/operator flexibility. All this was supported by a new system of area rather than union based representation (IRRR 323, 1984);

▲ Cadbury (Somerdale plant) – significant increases of flexibility within both operative and craft area and some blurring of the boundaries between the two (IRRR 328, 1984);

▲ Lucas Electrical – the development of a 'modular' manufacturing system with each module containing a new grade of 'manufacturing craftsmen' spanning a number of previously separate trades (tool setting, first line maintenance and quality inspection) (IRRR 331, 1984);

▲ Westland Helicopters (Milton Keynes) – operators to programme CNC tools; group working with cross-trade working in the mechanical areas; multimachine manning, and the production control and inspection functions to be combined in a single, skilled individual (IRRR 336, 1985);

▲ Perkins Engines (Shrewsbury) – numerous detailed revisions to job content and working practices in both engineering and production areas, plus a general commitment to perform duties outside normal jobs as requested and subject to competence (IRRR 340, 1985).

While there is no shortage of examples, then, it should be noted that the IMS work found cases of companies who were *not* looking for substantial (or in some cases any) increased functional flexibility in the senses described here (in craft or other areas). These companies were happy with existing specialisations and clear job definitions. Even in the craft areas this acceptance of the *status quo* was by no means a reluctant acquiescence to union 'intransigence'. Often it was management who saw no need to

change the *status quo*, or who believed that the cost of change would exceed the benefits. Several companies claimed not to want to incur the extra training and wage costs of creating a cadre of multiskilled craftsmen, especially as they felt that they would then see such craftsmen 'poached' by other companies.

3.11 Finally, it should be noted that the previous IMS work found several companies (particularly small companies, service sector companies and non-unionised companies) where this whole question of functional flexibility was not an issue simply because it was something that had traditionally occurred – management would be more able to require any employee to undertake any task for which he/she was trained and competent. This may be the main reason why the issue of functional flexibility has been less well studied among service sector firms. It may also explain why relatively few of our service sector respondents in the current study said they had been seeking greater functional flexibility – they already have enough. We will look at this further below.

FORMS OF FUNCTIONAL FLEXIBILITY

3.12 Now we go on to look in a little more detail at how our respondents had sought greater functional flexibility. When considering numerical flexibility, it was quite simple to distinguish between four main forms which fell into fairly distinct categories. This is not the case with functional flexibility and it means that we must first of all consider in a little more detail exactly what our respondents were trying to achieve under this blanket term 'functional flexibility'.

3.13 It will be helpful to start by setting out a general framework which enables us to distinguish between the different types of functional flexibility being sought in the companies and sectors under study. Let us begin by defining a 'job' as a collection of tasks allocated to an individual. There is nothing immutable about the particular combination of tasks which comprises a job. Jobs have the shape they do for a variety of historical, organisational and technical reasons, and may

vary from firm to firm and change as a firm's circumstances change.

3.14 We can locate a job in a firm's organisational structure by means of a grid or matrix. The horizontal lines represent distinctions between skill or occupational level (eg craft, semi-skilled, unskilled; or technician, technologist, graduate engineer; or typist, secretary, office supervisor, manager, etc). The vertical lines represent functional area of work (production, distribution, maintenance, sales, administration, etc). Figure 3.1 gives two highly stylised examples. Again there is nothing absolute about where the lines are drawn – it depends partly on convention and convenience and partly on inherent differences between groups of tasks which define skill levels and areas of work. A job can then be represented as a box in the grid. Some boxes

Figure 3.1 Occupational and functional classification of jobs (examples)

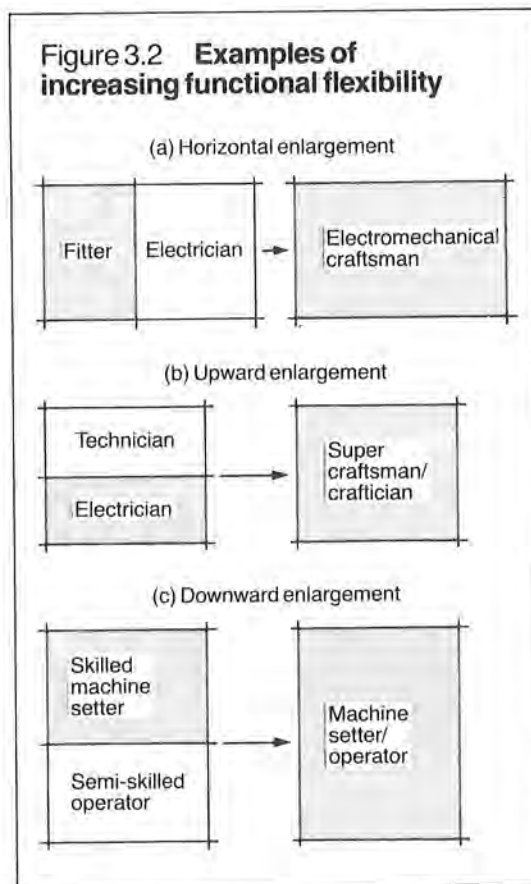
		Functional Area		
		Distribution	Sales	Purchasing
Occupation/ skill level	Administration director			
	Despatch manager	Sales manager	Purchasing manager	
		Salesman	Buyer	
	Despatch clerk	Sales clerk	Purchasing clerk	

		Functional area		
		Production	Maintenance	
Occupation/ skill level	Operations director			
	Works manager		Chief engineer	
	Production foreman		Foreman-electricians	Foreman-engineers
	Skilled machine setter		Electrician	Fitter
	Semi-skilled machine operator	Assembler	Electrician's mate	Fitter's mate
	Labourer			

will cover more than one square in the grid and not all squares will be contained in a box representing a job. The model is simplistic, but is a useful device, first for distinguishing between those kinds of changes which do represent functional flexibility and those which do not, and secondly for distinguishing between various types of functional flexibility.

3.15 The essence of functional flexibility is that it is associated with a company's ability to enlarge boxes in the grid. Other changes which may take place, notably movement of boxes around the grid or shifting the vertical or horizontal lines, do not by themselves constitute increased functional flexibility (see para 3.18).

3.16 Thus, Figure 3.2 gives some examples of the kind of box enlargement which represents an increase in functional flexibility. As the three examples show, the enlargement may take place in a sideways, upward or downward direction.



▲ Example (a) shows an increase in functional flexibility through the development of a

multiskilled craftsman – a mechanical fitter acquiring electrical/electronic skills, previously the province of an electrician. This can be conceptualised as a sideways expansion of the fitter's job box by the addition of extra tasks. In this case the fitter has added some new tasks from a different knowledge area, albeit conventionally defined as being at the same skill level;

▲ Example (b) is an upward enlargement of the job box, whereby an electrician adds a number of high-level diagnostic electronic skills to his portfolio and includes within his job box the tasks which were previously the preserve of a technician;

▲ Example (c) represents a downward enlargement, whereby a skilled machine setter no longer simply sets machines but also undertakes the semi-skilled tasks of operating them.

All these examples differ, but they all have in common an expansion of the job through the inclusion of tasks which were not previously part of it, and as such they represent an increase in functional flexibility.

3.17 This shift/enlargement of job content is the key to functional flexibility. However, there are three factors which we should note which make the picture a little more complicated:

▲ Extent: how far into the proximate job box might a worker expand his skills and deploy them? Clearly, there is a lot of difference between full-blown dual-traded craftsmen and a marginal overlap of skills;

▲ Duration: the picture may also change according to when the flexibility is called into play: it may be continuously and permanently (eg the trained-up electrician may do the full 'craftician's' job all the time); it may be as and when required (the fitter may still spend most of his time on mechanical work and exceptionally do electrical repairs); it may be as short-term cover (the setter may simply stand in for an absent operator);

▲ Location: in some organisations the vertical lines may not represent different knowledge areas but different locations or parts of the organisation. Thus we might find an insurance company in which the underwriting department is completely separate from the

claims department. A change whereby an underwriting clerk would also do claims work (and *vice versa*) is an increase in functional flexibility, even though the clerk may be exercising essentially unchanged clerical skills across a wider area. We might also wish to include changes whereby, say, nurses would work on different wards, bank staff work in more than one branch or operators shift between product lines as increases in functional flexibility of this type.

These distinctions should not loom too large for present purposes; the cases are still all examples of functional flexibility because they all represent an increase in the range of tasks which are, or might be required to be, done as part of a given job.

3.18 However, we need to be clear what sort of changes do not represent functional flexibility. For example, the transfer or permanent redeployment of workers from one job box to another does not. This may involve no significant movement in skills (despatch clerk to sales clerk) or some increase in skills (sales clerk to telesales). These are moves of the job box around the grid and do not represent increases in functional flexibility, unlike the clerk whose job is expanded to include telephone sales or the labourer who is promoted to operative on a machine crew but still retains the requirement to undertake labouring tasks as and when required. These latter cases *do* represent examples of functional flexibility. Nor does promotion, so long as it entails a permanent shift and is not a requirement to 'work up' or 'work down' as required, represent functional flexibility. Finally, there is the case where the job box has not enlarged but where the lines on the grid have shifted through technological or organisational change. Thus, if the materials handling tasks of the labourer are automated so that the operator can load and unload a machine by pressing a button, the labourer being redundant, there is a (trivial) sense in which the operator is also doing the ex-labourer's tasks, but this is not an increase in flexibility in a functional sense. Similarly, the introduction of standard underwriting computer packages may enable a clerk to do what previously required a trained underwriter, but this is very different from a clerk being trained up to do an underwriter's

job as and when required, which would confer greater functional flexibility. Such cases, therefore, where technological change shifts the horizontal lines in the grid, effectively eliminating the labourer's or the underwriter's job, do not of themselves enhance anybody's functional flexibility, although they may make such enhancement more easily achievable.

FUNCTIONAL FLEXIBILITY: RESULTS OF THE CURRENT STUDY

3.19 Having set out the basic concepts of functional flexibility in some detail, we may now examine how the companies studied in the four sectors had set about achieving greater functional flexibility and the types of functional flexibility they sought. It is convenient here to discuss the engineering and food and drink sectors together as manufacturing respondents, since the differences between manufacturing and services are much more pronounced than those between the industries. However, in view of the differences emerging in Table 3.1 between retail distribution and financial services, we will still take these separately.

3.20 Within each sector, we consider first the operational areas of the companies (ie production and maintenance areas in the manufacturing companies and stores and branches in the service sector companies). This is because it was in these areas that most of the major initiatives towards functional flexibility were taking place and where most of the inter-sectoral differences were found. We consider the office, administrative and overhead areas separately, because although changes were occurring in these areas they were regarded as much less of an issue in most of the companies and the patterns of change were similar between the sectors.

FUNCTIONAL FLEXIBILITY IN MANUFACTURING

3.21 In food and drink and engineering the main types of increased functional flexibility observed were:

- ▲ Horizontal enlargements of jobs within maintenance areas;
- ▲ Vertical and horizontal enlargements of jobs within process and operator areas;
- ▲ Vertical enlargements both upward and downward between areas, eg maintenance/operator, craft maintenance/technical maintenance, supervisor/quality control/operator.

These are discussed in turn below.

3.22 Most of the companies studied had achieved changes in at least one of these areas. There was a clear correlation between the extent of technological change in a company and the number and extent of such manning changes which were found – those companies which had made the least investment in microelectronic process control technology had also made the least change to the functional organisation of jobs (the main exception to this rule occurred within operative areas – a number of companies with relatively traditional processes and relatively antiquated plant and equipment had nevertheless achieved a significant degree of functional flexibility amongst semi- and unskilled operatives). It is important not to draw too strong and too simple conclusions of cause and effect here. Although in some companies it was clear that new capital investment had necessitated changes to working practices, in others the relationship was less direct and it was more that the same cost pressures and management attitudes which had led to new investment being undertaken had also led to changes being made in working practices.

Manufacturing maintenance areas

3.23 Table 3.2 shows the results of the current study in engineering and food and

drink maintenance areas. Once again, it is important to stress that we are concerned here only with those firms who had sought to increase the functional flexibility of their workforces, in these cases 17 out of 19 engineering firms and 14 out of 16 in food and drink.

The table clearly shows that those manufacturing firms who had been seeking functional flexibility had focused on their maintenance areas as a key area for change.

3.24 Traditional distinctions, particularly between mechanical and electrical trades, had always been reported as a source of discontent to management in manufacturing industry, but it seems that recent technological changes have increased the perceived urgency of redefining the craftsman's job. In particular, the greater integration of mechanical, electrical, electronic and hydraulic elements in production, process and materials handling equipment has meant that most machine faults can no longer be diagnosed and rectified by individuals skilled in only one traditional craft. Further, the integration of larger numbers and types of machines, and increasingly their central computerised control, have meant that effective plant maintenance needs plant or system-specific understanding of the relationship between different items of equipment. Finally, high-speed, high-volume process equipment requires rapid diagnosis and repair, and the traditional, interactive dialogue between craftsmen of different disciplines is too cumbersome and slow (see also Mitchell and Cross 1984). This requirement was found to be greatest among food and drink respondents with new plant. Downtime in engineering was found to be rather less of a problem due to the greater incidence of batch production. But the introduction of flexible manufacturing systems, and the concentration of engineering

Table 3.2 Functional flexibility and manufacturing maintenance

Sector	No of firms	Increased functional flexibility in maintenance areas
Food & drink	14	11 (79%)
Engineering	17	15 (88%)
Total	31	26 (84%)

production on fewer multipurpose machines, increasingly replicated these pressures for engineering maintenance craftsmen.

3.25 In practice, the companies manifested a variety of changes to craft jobs, the least radical of which can be described as a small enlargement of a maintenance craftsman's job box to include what was previously part of another (usually adjacent) box. In its simplest form, this did not involve any training or skill acquisition but resulted from an agreement that a craftsman would undertake work which had always been within his capability but traditionally lay within another craft. Most frequently this involved interpenetration of skills within the mechanical trades or within the electrical trades and, in fewer cases, between these trade groups. Thus an electrician's job would have been expanded to include part of what had been the sole preserve of a fitter, so that, for example, he would not have to call in a fitter to unbolt a motor before he could take it off to the shop for repair. Similar horizontal enlargements of the job box often occurred within the civil trades, and many companies, especially those who had reduced their building maintenance workforce, now expected craftsmen to undertake low-level work in other trades. All 26 respondents who had sought to increase functional flexibility in craft areas demonstrated examples of this sort of change, where they had not been occluded by a more substantial one.

3.26 In most cases, this job expansion required training and the addition of extra skills: either new skills – an electrician undertaking electronics works and thereby expanding his job into a technician's area; or traditional skills – a fitter undertaking some basic welding, etc. The key element in all these

changes is that they involve an expansion of the job by the addition of tasks which: either are 'trade-neutral', and whose attachment to a particular trade is a matter of convention rather than of skill content (eg undoing the bolts holding a motor); or are relatively minor parts of another trade or occupation. It is important to note that none of these changes involve violation of any groups' 'core trade' – the fact that a fitter might be called on to isolate a piece of electrical equipment before removing it does not mean that he would also be expected to rewire it himself. They are essentially marginal overlaps of trades. Table 3.3 shows their incidence; three-quarters of these firms had increased or achieved this limited overlap since 1980.

3.27 However, much less common than these marginal enlargements was radical job enlargement of the kind illustrated in Figure 3.2, where a craftsman's job was expanded to include most of the tasks previously found in another's job, including the 'core skills'. Such changes might require training – as in the development of full 'dual trading', which is horizontal enlargement (Figure 3.2a); or the creation of craft/technicians, which is upward enlargement (Figure 3.2b). Alternatively, in cases where the jobs are expanded downwards (as in Figure 3.2c), little or no training may be required. Although, overall, these radical changes were rare, they were more likely to occur between 'adjacent' or related trades – thus it was more common to find fitter/welders, plumber/pipefitters or electrician/instrument mechanics than cross-traded craftsmen who spanned the electrical/mechanical divide. Table 3.4 shows the incidence of such radical job enlargement.

It is evident that while three-quarters of our

Table 3.3 Incremental functional flexibility in manufacturing maintenance

Sector	Firms seeking functional flexibility in maintenance	No achieving limited cross-trade working
Food & drink	11	8 (72%)
Engineering	15	12 (80%)
Total	26	20 (77%)

Table 3.4 Radical functional flexibility in manufacturing maintenance

Sector	Firms seeking functional flexibility in maintenance	Dual trading within trade groups	Dual trading between trade groups
Food & drink	11	5 (45%)	3 (27%)
Engineering	15	3 (20%)	1 (7%)
Total	26	8 (31%)	4 (15%)

respondents who had been seeking to increase functional flexibility in their craft areas had achieved a limited overlap between maintenance craftsmen, only a third had achieved dual skilling even within electrical and mechanical trade groups and only 15 per cent had achieved it across the electrical/mechanical divide. Such radical enlargements of craft maintenance jobs were encountered most often in food and drink respondents, largely on account of the generally weaker demarcations in the sector. In engineering they were more covert, more likely to depend on custom and practice than on formal agreement and therefore (possibly) equally prevalent but less obvious.

3.28 We found only three firms in food and drink and one in engineering who had introduced full dual trading.

The most extensive example of change was found at Snackpack Ltd, a food processing company who exhibited all the above forms of change and had developed a grading structure to support the gradual move towards increased flexibility. That company's craft system is shown in schematic and stylised form in Figure 3.3. The system has five grades and there is scope for promotion through the grades (the company provides training as required). Thus, a craftsman can be promoted from the bottom grade by being 'flexible' (ie working at anything within his competence – without training). The next grade is a fully trained dual-traded craftsman. Above this, the 'supercraftsman' will have acquired a number of technician-level electronic and diagnostic skills. The top grade is a full-blown technician, who will be a systems specialist. The ultimate objective is that the two lower grades will eventually disappear through attrition and promotion.

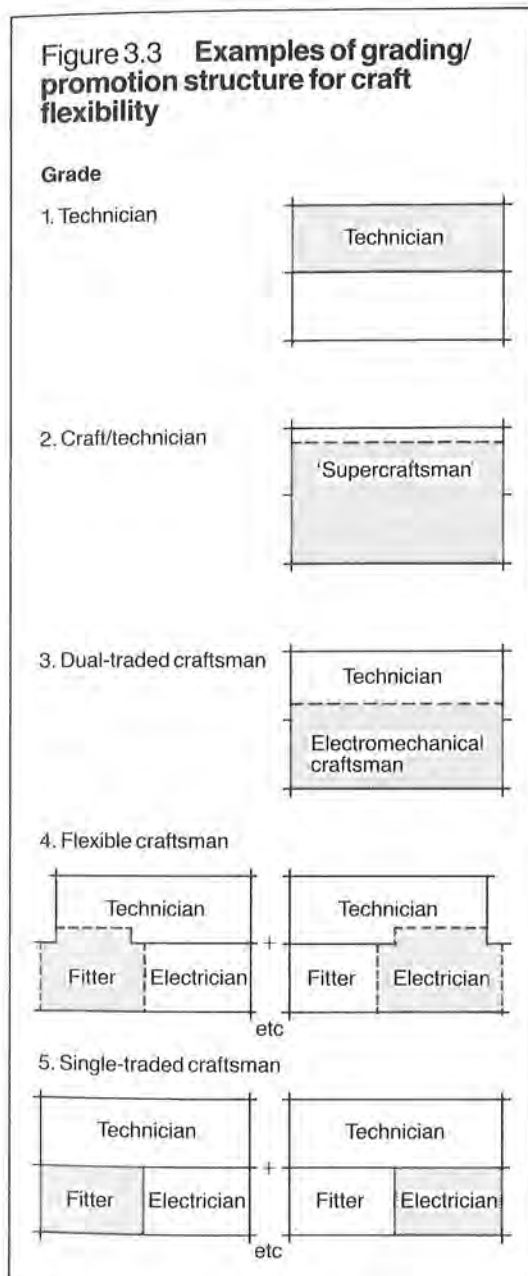
In addition, at all grades, there is some job expansion downwards (not shown in the diagram), with craftsmen taking on some line operation responsibilities.

In Choc-o-Bar Ltd, employing 2700 workers making confectionery, substantial technological change had meant that the craft workforce had been increasingly integrated with production and had become dedicated to particular lines and responsible for all maintenance work on such lines. A similar five-grade pay structure had been evolved to reward the acquisition of new skills to permit this form of deployment, with a contracting rump of generally old single-craft workers in the lowest grade.

In Flashgadget plc, a fast-growing electronic engineering firm with 700 employees based in the southeast, the maintenance demands of its flexible manufacturing system were so sophisticated that 'we literally could not operate without maintenance staff who are competent in both the electronic and the mechanical aspects of the job'. This is achieved through recruiting electrical engineering craftsmen who have some electronics knowledge and then intensively training them in mechanical trades. A graded pay system encourages this skill acquisition, as does an individual appraisal system. The company is on a greenfield site and recognises no union.

3.29 It must be emphasised that about a quarter of the manufacturing companies had made negligible changes, if any, in the direction of craft maintenance flexibility of the type described here. Many of these argued that craft inflexibility did not cost them very much; that informally the craft workforce was more flexible than would appear on paper; and that

Figure 3.3 Examples of grading/promotion structure for craft flexibility



the cost of 'buying in' a system like that described in Figure 3.3 would greatly exceed the benefits. The vast majority of companies interviewed had increased the interpenetration of the various elements of their maintenance workforce but most had not achieved, and many had not sought to develop, full dual trading. In view of the focus in the literature on the emergence of 'dual-skilled' and

'multiskilled' workforces this is perhaps a surprising finding. Yet bearing in mind the depth of training required to achieve and maintain competence in two trades, the opportunity costs of such training in terms of foregone output, the output loss, equipment damage and personal safety considerations if these are not sustained and the possible industrial relations problems consequent on such a strategy, it may seem more understandable that most firms have adopted a gradual and cautious approach.

Manufacturing production/ process areas

3.30 Turning to the next main area of change in manufacturing – flexibility within non-craft operative areas – traditional demarcation lines and industrial relations constraints were generally far weaker than in craft areas and the extent of change in most companies was mainly determined by technological requirements subject to training and organisational constraints. Most companies felt that for any new production process there was little to prevent them changing the configuration of tasks as required. The majority argued that they had always been able to secure greater flexibility from this part of the workforce and/or that the flexibility had recently increased.

3.31 Table 3.5 shows how almost all the firms who had sought to increase the functional flexibility of their workforce had attempted to reorganise production/process area jobs on a more flexible basis.

3.32 Table 3.5 shows also that of the 30 firms who had increased functional flexibility among their production/process workforce, all had achieved a greater flexibility in mobility of operator labour between jobs at roughly the same skill level.

Thus, for example, in Amalgamated Ales Ltd, a brewer and one of the few food and drink companies which did experience significant demarcations within production operative areas, the company had recently been able to negotiate a major increase in functional flexibility at a new plant.

Table 3.5 Functional flexibility in manufacturing production/process

Sector	No of firms seeking increased functional flexibility	Increased functional flexibility in production areas	Increasing mobility between operator jobs
Food & drink	14	14 (100%)	14
Engineering	17	16 (94%)	16
Total	31	30 (97%)	30

Traditionally, operatives were specialised as fork-lift drivers, keggling line operatives, bottling line operatives, cleaners-up, etc; now management is able to move people horizontally (from a keggling line to a bottling line for example) as required.

3.33 In cases where the variation in skill level was small, it was common to find a single 'operative grade', with uniform pay and a 'do anything as required' clause in the job description. The 'as required' question is an important one; several companies felt that there were clear organisational and administrative advantages in individuals being specialised and 'knowing what their job is'. Excessive rotation between jobs was felt to be disruptive of both efficiency and motivation (as it broke up social groups on the lines, etc).

One company, Canned Savouries plc, for example, on the introduction of a new canning plant, negotiated with the union that any operator would do any job, with a single pay rate (the new technology had effectively removed any skill differentials by eliminating the labouring and materials movement jobs). This proved to be overambitious, and it was physically impossible to schedule and manage this degree of flexibility. The difficulty was compounded by the fact that the trade union, having accepted the notion of full flexibility, then attempted to control it by ensuring that every operative had his/her 'fair share' of every job. The result was excessively frequent and unnecessary job rotation (solved by breaking the workforce into 'teams').

3.34 Where there are clear skill differentials in the production area, the manufacturing companies exhibited few serious constraints to

flexibility 'upwards' or 'downwards' so long as the pay and training system was appropriately supportive, and almost all reported that such constraints had been reduced in recent years. Thus, increasingly, there were few difficulties in requiring a machine operator to do labouring or sweeping up or other 'lower-graded' work provided he/she retained his/her old pay while doing it. Equally, there were now fewer problems in requiring a machine operator to stand in for a fork-lift driver providing the appropriate training had been given and provided that he/she was paid the fork-lift rate when doing it (interestingly, no companies went so far as to pay an operator a permanently higher rate for having the ability to do a higher graded job; the premium applied only when the higher job was actually being done).

3.35 The most sophisticated approaches to functional flexibility in the operative areas, which ensured that rotation occurred only as required, and which guaranteed appropriate upward and downward flexibility, were 'team' or 'crew' systems attached to a particular line, machine or part of the factory. Several companies had such systems, which often involved promotion from the lowest entry grade with a limited range of tasks. As operatives were trained they were promoted to higher grades (some companies operated grade 'quotas' to avoid excessive wage drift), but would be required to do all lower-graded jobs as required. This results in a crew with varying degrees of functional flexibility up to the senior operator/chargehand, etc who can and will do all jobs on the line. The crew approach also has the advantage of obtaining a degree of flexibility while retaining social group cohesion. How and when this (downward) flexibility was brought into play varied between companies, but in some, particularly where the machine or

line could be operated largely independently of the rest of the factory, the day-to-day allocation of tasks on the line was devolved to the crew itself. Such an approach was facilitated by another aspect of functional flexibility in many companies, namely the trend to increased flexibility between operative and supervisory grades, with senior operatives becoming 'working supervisors' (this trend was also found in craft areas to some extent).

For example, White Goods Ltd, a large electrical engineering firm, had reorganised the basis of several of its production lines towards a cell system of manufacturing. Two reasons were given for this. First, a drive for 'zero defects' had required the extensive use of automatic test equipment during assembly and such equipment was not suited to the sequential assembly line manufacturing techniques used in the past. Its integration required the work to be organised into bigger blocks of component and subassembly production than in the past, and this pushed the manning practices in the direction of group working. The second rationale was straightforward demanning for cost reasons. Work groups were given responsibility not only for organising the work but also for maintaining quality levels. This involved agreement within the groups themselves to move between jobs within their area as necessary. It also involved integration of supervision and maintenance workers within each group. The whole process was accompanied by a shift from individual piecework to daywork on a common rate for a common grade of production worker, plus a group bonus scheme. So successful had this approach been that the company was introducing the system in its remaining production areas as fast as the investment programme allowed.

Group interfaces in manufacturing

3.36 The third major type of functional flexibility in production and process areas was that across the interface between (rather than within) different categories of worker. We found three main cases of flexibility here:

- ▲ The maintenance/operator interface;
- ▲ The craft/technician interface;
- ▲ The operator/supervisor/inspector interface.

3.37 Half our 14 food and drink respondents who had been seeking to enhance the functional flexibility of their workforces, and 40 per cent of the engineering firms, had achieved an overlap between operator and inspector/supervisor responsibilities. In every case this was an upward expansion of operator jobs rather than a downward expansion of inspectors and in every case it was facilitated by new, simpler to operate test equipment and driven by a striving to 'build quality in' rather than 'test for it afterwards'.

3.38 As far as the question of operatives undertaking craft-level jobs is concerned, there was little evidence of substantial change in most of the companies interviewed. Indeed, several stated that the more expensive and complex the plant became, the less they wanted operatives 'tinkering with it'. On further discussions it transpired that what they meant by this was a reluctance to engage operatives on breakdown-related work, but this did not prevent them seeking, and in 36 per cent of the cases getting, operatives to take greater responsibility for routine maintenance tasks, quality control and some setting and resetting tasks – ie essentially those aspects of the job requiring least discretion and initiative, which could be preordained.

3.39 In both these cases, the greater self-diagnostic capacity of the machines themselves, coupled with the greater integration of electronic circuits, meant that operatives could also diagnose faults either in the machine or in the quality of the end product and repair them (by unplugging a 'black box' and replacing it with another). The analogous diagnosis and repair on a traditional machine might have required a considerable degree of skill. Similarly with setting tasks – resetting and adjusting a machine using programmable logic controls requires much less traditional 'skill' than doing it manually, and provided such adjustments are fairly standard ones they can be adequately conducted by operatives. Several companies reported such an increase in operatives' area of responsibility – again, however, little training was involved and

it is not clear that this represents greater flexibility 'upwards' on the part of the operative; rather, it is again akin to a shift of a line in the grid of Figure 3.2, with part of the craftsman's job being 'automated' into a task that can be done by an operative. In so far as technical change appeared to have the effect in most manufacturing companies of reducing the number, and skill level, of tasks required by process operatives, the tendency was to reduce the numbers of operatives and/or to spread them more thinly across the plant, adding a number of other deskilled tasks to their job (including some which on old equipment might have been craft level).

3.40 We encountered very few examples of flexibility across the craft/technician divide. For example, in engineering, craftsmen would maintain and operate CNC machines and might reset them during production to change tolerances, but reprogramming would usually be conducted solely by technician grades. Both craft and technician grades might work together in groups dedicated to particular machining centres and there would be some informal flexibility, but this was generally on a small scale. In food and drink there was more extensive interchange of craft and technical tasks, but even here our respondents generally reported little change.

Functional flexibility in manufacturing – constraints

3.41 Before going on to consider operative functional flexibility in the service sector, it is worthwhile discussing some of the constraints on the achievement of greater functional flexibility. Almost without exception, our management respondents cited union demarcation as the principal factor constraining such movement, in some cases irrespective of the fact that the company concerned did not actually wish to secure greater flexibility. The movements made by several respondents which are exemplified here show that in practice such union attitudes are far from being absolute constraints; rather they condition the extent, the pace and above all the manner of implementation of such changes. While it is clear that our non-union respondents had a freer hand in achieving such changes, and had

generally achieved rather more, this cannot be taken to imply that unionised firms could achieve no changes, or that such changes were achieved 'over our dead bodies'. We found a very widespread readiness among employees and their representatives to acquire enhanced skills, subject to provisos on pay, training and safety issues, but the critical constraint was encountered when such acquisition would involve skills previously the sole preserve of a different bargaining group. Nor was this an absolute constraint, as the manning practices we have just described illustrate. But it was a serious one, quite strongly restricting the scope for enhanced functional flexibility. The 'catch 22' observed here was that many firms reported a high degree of informal flexibility; while it remained informal they were less able to provide training and reward the deployment of enhanced skills. This required formal agreement, which would bring out the conflicting interests of the different unions; and this issue was not one which our management respondents wished to raise. Hence the finding above that where cross-trading (for example) had occurred it was generally limited in extent. Where such union demarcations coincided with status differences (white collar/blue collar), then the barrier was substantially stronger.

3.42 The most widespread constraints cited by respondents who had moved furthest were inadequacy of skills, the resulting costs of retraining and shortage of training resources. The perceived inadequacy of existing skills was directed at both internal and external labour markets, while the lack of internal training resources was often resolved by going outside to buy in the necessary training – most frequently from equipment suppliers. The most pressing inadequacy reported was that of competence in basic electronics and particularly electronic control systems. In general, firms reported that it was easier to train and retrain people with electrical skills than people with mechanical skills to acquire competence in electronics and mechanical tasks, and easier to retrain young people rather than older ones. We were unable to gather any evidence as to how true this might be, but these beliefs underpinned the current retraining practices among our respondents.

3.43 A third constraint, much less often mentioned, was the general health and safety issue. Bearing in mind the two previous constraints and what they imply for the extent and pace of change, all our respondents reported that not only were the changes they had introduced taken in full recognition of the need to avoid health and safety problems, but also that adequate training procedures could, and did, secure this. On the whole, our union respondents took the same line. We must accept this at face value, but feel obliged to report one contrary piece of evidence. One of our respondents who had introduced multiskilled maintenance operators in its plant reported to us that health and safety considerations were of great importance and had been fully accounted for by the rigour of their training and the caution implicit in their operating procedures. We subsequently found out (from another source) that some months before our visit a maintenance worker had been electrocuted in the plant.

FUNCTIONAL FLEXIBILITY IN THE SERVICE FACTOR

3.44 We now turn to the question of functional flexibility among operatives in the service sector. However, although there are many common features, there are also more distinctions which need to be made between financial services and retailing than were found in manufacturing. Therefore we will treat them separately.

Retailing – store staff

3.45 The extent to which our retailing respondents required their store staff to be functionally flexible depended largely on their place within the industry. To put it simply, the more homogeneous the product line and the cheaper each product, the greater the potential for functional flexibility. Thus, at one extreme supermarkets reported little difficulty in moving staff from one product line to another (shelf-filling skills are little influenced by the content of the can) or in moving them from one area to another (stockroom–shelf filling–checkout). It seems valid to regard this mobility between tasks as functional flexibility,

though, in reality, so unskilled were the individual tasks that the degree of versatility needed was minimised. At the other extreme, department stores and specialist retailers often saw little advantage in such movement and their sales assistants were much less capable of, and less required to demonstrate, such flexibility. Within this general distribution there was, of course, great diversity of approach, and two contrary points should be noted. First, specialist service counters in supermarkets (delicatessens, butchery, in-shop bakeries, pharmacies, etc) required a higher degree of specialist knowledge and consequent staff dedication; and secondly, most of the department stores had developed groups of employees whose specialism was floating – ie they combined generic selling skills with a competence in quickly familiarising themselves with specialist areas. Although both are worthy of note, they do not contradict the basic patterns observed. As Table 3.1 showed, 80 per cent of our retailing respondents had not sought to increase the functional flexibility of their workforces since 1980; these ‘floater’ jobs account for most of the rest.

3.46 As in financial services, one impact of new technology has been to introduce systematic procedures which, because they remove discretion, provide access to relevant information and simplify activities, increase the potential for movement between jobs. Whether this potential was taken up was largely dependent on the company’s selling strategy and its product range rather than any other factor. Apart from the ‘floaters’, we found little evidence of any important change in this area in any of the retailing firms interviewed. Such functional flexibility as was required could usually be secured, and in practice long had been, from among our respondents. We have already noted a marginal retreat in some firms from very high levels of part-time use. In effect, this represents their main constraint on securing functional flexibility – it is costly to achieve to any great extent from part-time workers because of additional training costs. In reality, the essence of flexibility in retailing lies elsewhere – we have already discussed the numerical aspects and we will turn to the contractual aspects in Chapter 4.

Financial services – branch staff

3.47 The traditional branch structure in banks, and also to a lesser extent in building societies and insurance, was based on the ability of staff to move between jobs (both horizontally and vertically) as required. Systematic job rotation and training in a variety of functions were seen as the necessary steps in an internal labour market which traditionally was virtually sealed off from the outside world and which was therefore heavily biased towards internal promotion. An important aspect of this promotion-led system was a capacity for downward functional flexibility (for example professional staff manning counters at peak times or to cover for breaks or absence), horizontal functional flexibility (between, for example, counter and branch office staff at a similar clerical level for the same reason) and upward functional flexibility (standing in for more senior staff, almost always unpaid).

3.48 Although this system still dominates the financial services branch structure, the changes which we have observed have involved the development of a cadre of lower-level staff who are effectively excluded from this traditional system. There are many reasons for this, but the main ones we observed were: first, their increasingly part-time working regimes mean that the costs of training for versatility are increased; secondly, despite market growth, technological change in the industry has significantly reduced headcount growth and thereby reduced promotion rates further; thirdly, recruitment is now increasingly conducted at several levels in the internal labour market rather than concentrated at the bottom, partly as a means of recruiting functional specialists and partly to increase the numbers of graduate employees; fourthly, particularly in banking, the structure of branches is changing towards concentration of the full range of bank services in fewer branches, with the remainder being satellite 'money shops', thus effectively reducing the range of tasks to be covered in such satellites.

3.49 The outcome of these developments is that the traditional 'career-based' sources of functional flexibility are becoming less prevalent, although it should be emphasised that throughout the sector they remain the main ones. We should note that the growth of

part-time working as yet represented only a marginal change to the traditional form of work organisation. Thus, of the 76 per cent of financial services respondents who reported 'no change' or 'reductions' in functional flexibility (Table 3.1), they mostly recorded no change from an existing high level of functional flexibility.

3.50 As discussed in para 3.18, we have not included the effects of technological change in deskilling jobs, and thus rendering them accessible to a wider range of workers, as *per se* a form of functional flexibility. Yet this is the dominant change in manning practices in financial services; most common was the use of computerised systems for most of the basic clerical-level tasks. The impact of the new technology on clerical tasks in financial services has been to systematise work, to replace discretion with rules, and to build such rules and systems into the software rather than into the heads of clerical staff through training and experience, and thereby to bring a wider and a higher range of tasks within the competence of such staff, irrespective of their status.

3.51 At a slightly higher level in financial service respondents, the very factor which was allowing a higher degree of job mobility to be achieved from clerical staff was inhibiting it in management staff. Above the level of clerical jobs, the trend to greater objectivity and rules displacing discretion was still observed, yet at this level such a movement cannot readily be incorporated into software. As a result, functional specialisation has increased, and several of our respondents claimed that 'the day of the all-rounder has long gone'. In general, our respondents had not found significant difficulty in responding to this; they had simply recruited better qualified people and developed career paths for them within broad specialist areas.

FUNCTIONAL FLEXIBILITY IN ADMINISTRATIVE, PROFESSIONAL AND MANAGERIAL JOBS

3.52 We conclude this account of change in functional flexibility by considering the

application of the concept to administrative and professional and managerial groups. We can consider all four sectors together here since in none of them had there been substantial change to existing practices, and certain common themes emerged across the sectors.

3.53 Traditionally, these occupational groups were felt by our respondents to have demonstrated a significantly higher degree of functional flexibility than the 'hourly paid', 'operative' or 'non-professional' groups which we have already discussed. Further, by tradition they are more likely to identify with management aims and less likely to develop strong group interests promoted by trade unions, although there are clear exceptions, like draughtsmen and supervisors. Thus, on the whole, they were believed to be intrinsically more flexible. Table 3.6 shows how many firms had been seeking to increase functional

flexibility from these groups of worker.

3.54 Pressures on company overhead costs, translated into demanning pressures in indirect areas, were found to have given rise to a requirement for greater versatility from those surviving the reductions, particularly in engineering and food and drink. But the most important factor here has been technological change and the resulting closer integration between production activities and indirect support activities such as production control and planning, component supply, progress chasing, material handling, quality control and draughting. Where this had occurred, our respondents generally reported very little difficulty in achieving the changes smoothly, though training and (in fewer cases) union membership divisions were reported as constraints.

Table 3.6 Functional flexibility and administrative, professional and managerial staff

Sector	No of firms seeking more functional flexibility	Seeking to increase functional flexibility in admin, professional and managerial grades
Food & drink	14	4 (29%)
Engineering	17	5 (29%)
Retail distribution	4	1 (25%)
Financial services	4	2 (50%)
Total	39	12 (31%)

4 DISTANCING

INTRODUCTION

4.1 Some companies, faced with an apparent need for greater numerical or functional flexibility, may decide that it is easier in management terms, or more cost-effective, to make the achievement of that flexibility 'somebody else's problem'. What this generally involves is the displacement of an employment contract by a commercial one as a means of getting a job done. This may entail a geographical distancing, but it is the contractual aspects with which we will be most concerned here. Thus, rather than organise its own workforce flexibly to meet peaks in workload, a company may simply contract out those peaks to another individual or organisation. Similarly, if it finds that a particular in-house activity can be made cost-effective only by increasing the functional flexibility of the workforce in that activity, it may decide that the costs (financial, administrative and industrial relations) to the organisation of achieving that flexibility exceed the costs of paying another organisation to provide the service in question. These are 'distancing strategies'. All organisations pursue them to some extent. In this chapter we will consider why they do it and whether they have been doing it more since 1980 as an alternative to securing flexibility from their own workers.

RATIONALES FOR DISTANCING

4.2 A number of concerns and considerations are taken into account by employers in assessing the relative advantages of changing manning practices and adopting distancing strategies. These include:

- ▲ A desire to concentrate the organisation's resources on its areas of comparative advantage, leaving the other areas to those whose comparative advantage they are;
- ▲ A consideration of the relative costs of undertaking an activity in-house and putting it out, when outsiders may be able to achieve economies of scale, exert monopsony buying power, achieve greater workforce flexibility, pay lower wages, etc;
- ▲ A desire to shift elsewhere the burden of risk

and uncertainty and the associated costs; and

- ▲ A desire to reduce the organisation's total headcount and wage bill.

The perceived importance of these issues for many organisations has increased under the changes in the economic environment documented in earlier chapters – greater competition and market pressure, volatility, uncertainty, etc. 'Why attempt to be more flexible to deal with these pressures if it is cheaper and easier to pay someone else to deal with them?' is a question that we might expect to have been widely posed.

IS DISTANCING INCREASING?

Evidence from previous studies

4.3 There appears to be no reliable statistical information which could be taken as a proxy for commercial subcontracting and which covers the period since 1980 in which we are interested. The most recent input-output data for the UK stops at the beginning of this period. Thus we are thrown back on qualitative sources of information. Although there is little enough of this, subcontracting (of services, of some parts of production, eg components, and in some cases of the whole production process itself) was found to have increased and to be still increasing in most of the case study companies reported in IMS (1985) and Meager (1985). Such growth has also been recorded elsewhere (Clutterbuck 1983). It is clear that we might expect a cyclical trend (contract out as growth increases; back in-house as growth slows), a long-term trend (to increasing specialisation) and a precautionary effect (at the onset of growth out of recession) to interact and to obscure any more general picture of change in this area.

4.4 Equally, companies may be moving towards a greater use of self-employed and agency-employed labour. There has been a growth in self-employment as a whole (as reported in MSC's Labour Market Quarterly Report, February 1985), but it is not yet clear how much of this is due to the substitution of self-employed for employed labour within the

established company sector and how much it represents a growing number of entrepreneurial self-employed consultants, etc setting up in business independently of the company sector. There also appear to be changes afoot in the agency market (Meager 1985, Isaac 1985) and there is a growing use of agency workers in those professional and technical occupations in short supply.

4.5 'Homeworking', 'outworking', 'networking', 'teleworking', etc may also be regarded as part of a 'distancing strategy', a way of reducing the employer's commitment to full-time, permanent staff while retaining some of the advantages (particularly direct control) which employment has over contracting out. This type of arrangement may also offer significant advantages to the homeworkers, particularly to females with children or domestic commitments. Hakim (1984a) has estimated that in 1981 there may have been some 660,000 homeworkers in England and Wales (just under 3 per cent of the labour force) and she concludes that this number has grown since the early 1970s, although the traditional manufacturing homemaker is now in a minority, with most homeworkers involved in white collar, service and professional activities (further details are provided in Hakim 1984b). There has recently been considerable interest expressed in some of the newer, more 'exotic' forms of homeworking, such as F International's freelance female workforce of computer professionals and Rank Xerox's networkers (see Huws 1984 and Upton 1984 for further examples and discussion of some of the issues involved). There is as yet no estimate on the extent of these less orthodox forms of homeworking, although, despite the volume of futurological literature which attaches a prominent role to 'teleworking' and its variants (see Handy 1984), there is no evidence to date that such activities have spread beyond small numbers of professionals working mainly for large computer and electronics (often multinational) companies.

4.6 A further example of 'distancing strategies' and the shifting elsewhere of the burden of risk and fluctuation may be seen in the growth of franchising and concessions (stores within stores, etc) in retailing. Little

detailed work is available on the growth of these forms of retailing, particularly concerning the employment implications of such forms.

4.7 Finally, we should perhaps note that another possible solution to workload fluctuations may be neither a strategy of increasing workforce flexibility nor one of 'distancing' by making someone else adjust to the fluctuations, but rather what is effectively the opposite of a distancing strategy, ie the company may eliminate the fluctuations and use its under-utilised facilities in low periods by selling its capacity and services to another organisation (a classic case is the company which, rather than contracting out its own transport and haulage services, decides to set up its transport operation as a business in its own right and carry other companies' goods on return journeys and in spare space on vehicles).

Results of the current study

4.8 Table 4.1 shows to what extent our respondents had sought an increase in distancing since 1980. Once more, it should be stressed that we were interested only in changes which were deliberate and of some substance. This means that we have excluded 'teleworking' and 'networking' from this table, as our discussions with our respondents confirmed the view outlined above that where such changes had occurred they had not involved more than a handful of individuals and seldom displaced their employment contract. It is clear that seven in every 10 respondents had increased their use of distancing since 1980 and that this was most prevalent in retailing and least in food and drink.

4.9 Table 4.2 shows the forms of distancing which were adopted or increased by those 51 firms who had sought to make more use of distancing practices. It is evident that the growth in subcontracted ancillary services is the main form of distancing to have increased and that non-ancillary activities are less likely to be reorganised in this way - though half these firms had made some changes here.

Contracting out

4.10 The dominant form of distancing strategy in all four sectors was a move towards

contracting out of activities (usually, as Table 4.2 shows, ancillary or service activities) previously done in-house. This trend was not a recent one, and many of the companies reported that they started down this route as long ago as the early 1970s. Nevertheless, an acceleration of this trend has been discernible in recent years under the 'Pressures for Change' documented in Chapter 1 and many of the companies were looking increasingly to contracting out to save costs, cut established headcount, concentrate the company's resources in its 'core' activities and export to others the risk and uncertainty associated with some other activities. This motivation was common across the sectors, and the actual changes taking place depended more on the circumstances of the individual firm and the nature and extent of the pressures upon it than on its sectoral characteristics. Nevertheless, we did identify

some features common to particular sectors.

4.11 In food and drink, several companies were unwilling to contract out cleaning and laundry activities because of the strict statutory hygiene requirements operating in the industry and a consequent desire to exercise direct control over the activity. Similarly, some food companies felt that it was not appropriate for the 'image' of a food manufacturer to contract out its catering activities. So our food and drink respondents had been less inclined to contract out key ancillary services (as Table 4.1 shows), but even so, where they had sought to distance themselves more it was still predominantly in these areas – security, site maintenance (gardening, painting, road maintenance, etc) – that they had focused.

4.12 In both engineering and food and drink, moves towards greater functional flexibility

Table 4.1 Distancing in the four sectors

Sector	No of firms participating	Seeking to increase distancing since 1980	Recording reduction or no significant change
Food & drink	16	10 (62%)	6 (38%)
Engineering	19	14 (74%)	5 (26%)
Retail distribution	20	17 (85%)	3 (15%)
Financial services	17	10 (71%)	7 (29%)
Total	72	51 (71%)	21 (29%)

Table 4.2 Forms of distancing: all sectors

Sector	No of firms increasing distancing	Contracting out ancillary services	Contracting out non-ancillary areas	Self-employment	Other
Food & drink	10	9 (90%)	4 (40%)	3 (30%)	1 (10%)
Engineering	14	13 (93%)	9 (64%)	1 (7%)	1 (7%)
Retail distribution	17	16 (94%)	13 (76%)	2 (12%)	0
Financial services	10	8 (80%)	0	5 (50%)	3 (30%)
Total	51	46 (90%)	26 (51%)	11 (22%)	5 (10%)

amongst production and plant maintenance craftsmen had given an extra impetus to an existing tendency to contract out building and site maintenance, as traditional civil trades did not fit easily into new pay and bargaining structures for multiskilled craftsmen.

4.13 In engineering, in addition to the increased contracting out of ancillary service functions (catering, cleaning, transport, etc), there has been a long-standing tradition of contracting out parts and subassembly manufacture at peak times and bringing it back in-house at slack times (the same is true to a certain extent in food and drink with contract packers, canners, etc). Some companies now appeared to be breaking this in-house/contract-out cycle and saying 'if we can't do it economically all the time, why do it at all?', and contracting out such activity permanently. Such moves were reinforced by tighter manning levels and more efficient deployment of permanent employees, so that there was no longer the capacity in-house for such work even at slack times. Thus there seemed to be an overall move towards outside purchasing of parts in engineering coupled with a tighter, more competitive purchasing policy requiring lower prices, higher quality and shorter lead times from subcontractors.

4.14 Some engineering companies were also beginning to contract out specialist tooling work (and using their own craftsmen purely for machine maintenance and tool repair rather than making new dies, etc). Again, however, this trend was not universal and one company had reversed a trend towards the contracting out of tooling work, as a result of a major agreement on functional flexibility within its own toolrooms, which gave the internal activity a cost advantage over competitors.

4.15 Retailing has shared the general trend towards contracting out of cleaning, catering, building maintenance, etc (except where direct control is crucial – eg merchandise cleaning in furniture stores). There is, however, a tendency, particularly in the large food multiples, towards bringing transport and distribution in-house, ie rather than having manufacturers supplying direct to stores, the retailers have the goods delivered to a central depot from which their own fleet takes *mixed* loads to individual stores.

4.16 It is in retailing that we found the biggest (in terms of headcount) impact of distancing. This involved the increasing conduct of business without commitment to employment contracts through the growth of franchising, concessions and store-in-store trading patterns. Table 4.3 shows how these patterns were reflected in increased distancing among our respondents since 1980.

4.17 Concessions and store-in-store trading had grown on a large scale since 1980, particularly, but not solely in department and other chainstores. This was justified in terms of specialist staff selling particular products, and in view of our comments in Chapter 3 on the relatively limited degree of functional flexibility among department/product-specific staff in such stores there is clearly some weight in this argument. However, in two companies the attractions of this approach had caused the use of concessions to spread into a major proportion of turnover – some 35 per cent in one case. Further, these firms deployed a bigger range of types of concession: orthodox concessions, internal concessions to previous employees, consultancy, etc. Franchising had also expanded in three of these firms. This was clearly limited to particular kinds of retail outlet and appeared to be more associated with

Table 4.3 Distanced trading in retailing
(17 respondents only seeking to increase distancing)

Method of distancing	No of firms
Subcontracting ancillary services	16 (94%)
Concessions/store-in-store	10 (59%)
Franchising	3 (18%)
Self-employment	2 (12%)

achieving rapid market penetration without committing substantial capital than with avoiding employment commitments. However, both types of distancing represent a shift in the employment structure of these retailing firms: away from traditional sales staff, buyers, etc towards administrators, marketing staff and general landlord functions.

4.18 Finally, the growth in self-employment which we observed among these respondents was negligible, save for two circumstances. First, in financial services we observed a major shift towards the use of self-employed salesmen. The rationale for such a change was in part employee pressure ('the best salesmen would

leave us if we didn't offer them self-employed status') but primarily a desire to turn fixed cost into variable cost through substituting commission for wages. Second was the growth of merchandising staff among some of our food and drink respondents. Here the picture was less clear; there was no immediately obvious rationale behind the move and not all of them had made it. Elsewhere, where we did observe growth in the use of self-employed workers, it was most frequently associated with labour shortage in the occupation concerned (systems analysts in many cases) and the distancing was often not driven by employer pressure, but by workers themselves.

5 PAY FLEXIBILITY

INTRODUCTION

5.1 As described briefly in Chapter 1, pay flexibility is concerned with companies' ability to change and adjust their pay and reward structures for one or more of the following reasons:

- (a) To be able to encourage and reward the group acquisition and deployment of new skills without significantly increasing the overall wage bill;
- (b) To be able to match market rates for groups of workers with scarce skills; and
- (c) To be able to reward individual performance, skill and flexibility, again without raising the whole pay structure.

Reasons (a) and (c) are largely concerned with supporting a company's initiatives in increasing internal functional flexibility, while (b) is concerned with a company's ability to adjust to the external labour market. We have included all three motives as they tend to give rise to the same sort of changes. These are:

Restructuring: changes to the pay structure itself which may affect groups or individuals;

Breeching: an ability to pay selectively outside the pay structure; and

Placing: discretion in placing people within the pay structure.

5.2 Our study is limited to flexibility in the structure of pay and is not concerned with flexibility in the general level of pay. The relationship between movements in the level of pay and employment which has dominated much of the discussion on flexibility elsewhere (see for example ETUI 1985) is therefore excluded from consideration here.

THE PRESSURES FOR CHANGE

5.3 For the most part, we found that the changes to our respondents' pay systems were intended to reinforce or reward greater functional flexibility, and therefore the pressures for change coincided with those underlying the drive for greater functional flexibility described in Chapter 3. In so far as there were other pressures they appeared to be twofold:

(a) The traditional management desire to motivate and retain individual 'high performers', perhaps sharpened by smaller headcount and the drive for greater overall productivity; and

(b) The persistence of skill shortages in a few occupations, coinciding with oversupply of labour in most occupations, had increased companies' desire to distinguish between the two in pay terms.

EVIDENCE FROM PREVIOUS STUDIES

5.4 Pay structures change continually in response to internal and external pressures, but previous work does not point to any accelerating trend in these directions recently. Several examples of group restructuring aimed at paying for new skills or matching market rates for scarce ones can be found in the published literature, but these occur mainly where new technologies have necessitated the creation of new grades for those who have acquired extra skills (eg Honeywell, Toshiba, ICL, reported in IR-RR 317, 1984). As far as individual restructuring towards more incentive-based pay is concerned, this is not new and various bonus, piecework and productivity payment systems have come in and out of fashion over the past 20 years or so.

5.5 Recent developments towards individual restructuring appear from the literature to have been largely confined to white collar and managerial occupations, where the notion of 'pay for performance' has always been well established. On the manual side, there is no clear evidence of any general erosion of the concept of 'the rate for the job', or even of any widespread desire on the part of management to move in this direction. Problems of performance assessment in the case of highly interdependent production jobs, and the difficulty of devolving payment decisions to first-line management on an objective basis, are often felt to outweigh the advantages that any move towards greater individual restructuring would confer. Nevertheless, the literature does contain a few examples of some companies (mainly in 'high-tech' industries) moving towards the concept of merit pay for manual

workers (this has occurred, for example, at a number of computer and electronics companies – reported in IR-RR 319, 1984, – and at Mobil Oil, IR-RR 323, 1984).

5.6 Overall then, the work to date suggests that there have been some relatively minor and marginal changes in pay and reward structures intended largely to reinforce developments in functional flexibility. No major examples of wholesale revision of approach or radical innovations are apparent, certainly nothing approaching the two-tier wage structures of some US companies (Ross 1985).

RESULTS OF THE CURRENT STUDY

5.7 The previous research on this topic, reported above, suggested that few radical changes were to be expected in the four sectors. In practice the case studies tended to confirm this expectation, but it was notable that most of the companies studied either had recently undertaken some (albeit marginal) change to their pay or grading structures or were in the process of instituting some such change. Table 5.1 shows how far changes to secure greater pay flexibility were observed. The table shows that about two-thirds of these companies had engaged in change designed to enhance the flexibility of their pay systems, and that this was generally most common in manufacturing, where firms had been most active in increasing functional flexibility.

5.8 Three general themes emerged from our interviews.

▲ In all four sectors, a majority of companies (including those who adhered firmly to the notion of 'the rate for job') felt that grading systems should be sufficiently flexible to encourage and reward (a) skill acquisition and development and (b) functionally flexible working practices where these were desired. In effect, we found a shift from 'rate for the job' systems towards 'rates for the jobs' systems, reflecting the progressive enlargement of the job box implicit in functional flexibility. As shown below, this had very different implications, company by company, for the actual shape of the grading structure – sometimes it implied a move to a more complex grading structure, sometimes it required a simplification of that structure. The common principle, however, was that companies were changing the number of grades, the differentials between them and the width of grade bands to reflect the changing technological environment and its skill requirements, in order to reinforce functional flexibility. Such changes to the grading structure were particularly notable in food and drink and engineering.

▲ Again in all four sectors (although to a lesser extent, and affecting fewer employees) many companies argued the need for a system which enabled them to move the pay rates of small groups of workers independently of the rest of the structure, in order to be able to match market rates. This might entail either 'breaching', or 'placing' changes, or both.

▲ Less commonly expressed (although found to some extent in all four sectors) was the need to reward individuals (rather than groups) for merit or performance. Systems enabling such

Table 5.1 Pay flexibility: all sectors

Sector	No of firms participating	No seeking greater pay flexibility since 1980	No recording no change or reduction
Food & drink	16	13 (81%)	3 (19%)
Engineering	19	13 (68%)	6 (32%)
Retail distribution	20	9 (45%)	11 (55%)
Financial services	17	10 (59%)	7 (41%)
Total	72	45 (63%)	27 (37%)

an approach, or moves towards such systems, were widespread for management and professional grades in all sectors. In other occupations, the intent or professed need for such systems was more common than their practical implementation, although examples were found in all sectors and were most common in parts of the (non-banking) financial sector and some subsectors of retailing.

5.9 In terms of implementing these changes, several approaches were observed. In unionised environments, especially in the two manufacturing sectors, changes of the first two types above were generally introduced through negotiation, often as a supportative part of a whole package on new technology and the reorganisation of working practices. Almost without exception, changes towards individual performance-based pay were anathema to the trade unions and had not been introduced in unionised areas. Where such changes had occurred, they were usually in non-unionised environments or in some companies where the workforce was represented by a relatively weak staff association. Table 5.2 shows the distinction between 'group' and 'individual' restructuring for those firms in all four sectors who had sought to increase the flexibility of their pay systems.

5.10 Finally, there were some examples of companies who had effected such change not by formally changing the payment structure but by informally allowing it to 'drift' (thus scarce skills would be recruited not through an explicit premium but by fitting them into the existing systems at a higher point on grounds of 'age' or 'experience'; individual performance would be rewarded not by an explicit payment

but by regrading or promotion on grounds of changed job content, etc). Sometimes this approach involved simply 'turning a blind eye' to the manner in which individual managers operated the pay and grading criteria.

Pay flexibility in food and drink

5.11 All 13 food and drink firms who had sought to increase pay flexibility had made alterations to maintenance workers' pay systems, 10 of them to process workers' pay systems and four to other groups of workers. Those moving towards greater functional flexibility in craft areas through the development of multiskilling had developed new group grading systems with higher grades for the newly flexible, cross-traded craftsmen. In several this meant a move away from the tradition of a single craft rate, and in some the new system was seen as a transitional phase, with the lower grades withering away in the longer run as their occupants obtained training and were promoted or, if untrainable, left or retired. The best developed such system in the food and drink sector was the grading structure in Snackpack Ltd, already described in Chapter 3 (see Figure 3.3). Several companies had developed a system which approximated to part of that in Figure 3.3. Generally, such systems were relatively easily negotiated between companies and unions so long as the appropriate training was provided by the company.

5.12 The only significant industrial relations issue associated with such systems arose when the system set up a promotion route across the craft/technician ('works/staff') divide or created a new grade of 'craftician' who spanned

Table 5.2 Pay flexibility for groups and individuals: all sectors

Sector	Firms introducing change	Pay flexibility for groups	Pay flexibility for individuals
Food & drink	13	8 (62%)	5 (38%)
Engineering	13	12 (92%)	1 (8%)
Retail distribution	9	5 (55%)	8 (88%)
Financial services	10	4 (40%)	9 (90%)
Total	45	29 (64%)	23 (51%)

that divide. Several companies reported resistance from technicians' unions to such developments as well as inter-union disputes over which union should represent the promoted craftsmen and 'crafticians' (in some cases this resulted in a compromise 'dual system' of representation, with individuals having the option of either union). Craft flexibility was not always, however, associated with a more complex grading system – in one company, for example, a unified craft rate was introduced and differentials abolished. This approach had two objectives: the abolition of previous craft differentials in the plant maintenance trades effectively 'paid' for the lower-graded craftsmen to do tasks associated with higher grades; and secondly, the building trades craft rate was raised to the level of that now prevailing in the plant maintenance areas as a *quid pro quo* for full flexibility between the different building trades.

5.13 Similar patterns were observable among operative areas in food and drink. Thus, on the one hand, we find a company introducing 'multi-semi-skilling' at the 'wet end' of its baking lines, where mixing, moulding, cutting, oven operating, etc were traditionally separate (but equally paid) jobs. This change was supported by a more complex grading system – such that an operator who acquired and deployed one other skill rose a grade, two skills two grades, etc. On the other hand, we found companies reducing the number of grades (in some cases, as in a new cannery, to a single operative grade) such that, with no pay differentials, there were fewer obstacles to moving people between tasks, machine lines or departments.

5.14 As a general rule, in both craft and operative areas, it appeared that pay and grading structure became more complex, with extra grades, when they were supporting initial moves towards flexibility which involved training and new skill acquisition. In some cases, particularly where the skill level of the entire workforce was being progressively raised, the more complex structure was an interim phase; as one of the most radical innovators said, 'What we've done is pushed up a ladder... once they've climbed it, we'll pull it up behind them'.

5.15 When, by contrast, the new systems

were to support greater flexibility which merely involved the willingness to deploy existing skills across a wider area, or where the jobs had been deskilled via new technology, they tended to involve consolidation and simplification of the grading structure into fewer, broader grades.

5.16 In many cases it was not a change in the grading structure (or not only that change) which was required to achieve greater functional flexibility but simply an agreement on paying people the appropriate rate when they stood in for a worker on another grade. Thus, several companies achieved 'upward flexibility' by training people in lower grades and paying them up to a higher grade for the duration of their working at tasks in that grade. Similarly, many had achieved downward flexibility through agreements to the effect that an individual, when working at a lower graded task, retained his own 'primary' grade. The fullest implementation of such a system in food and drink is described below:

Fizz 'n Foam Ltd, a manufacturer of bottled and canned drinks, recruited operatives into teams at the lowest grade, trained them in extra modules and promoted them to higher grades as vacancies arose (there being quotas at each grade), subject to each operative when promoted retaining a willingness to work at lower-graded tasks as required. This system generates a trade-off between total labour cost and the degree of flexibility achieved and the company can adjust the cost/flexibility equation by adjusting the grade quotas. Thus, for example, it can achieve maximum flexibility, with all team members able and willing to do every job on the line, by training and promoting every operative up to senior operative level, but only at the cost of paying all operatives the top rate. Alternatively, it may adopt the cheaper option, with a few operatives 'fully flexible' and the rest at varying degrees of lesser flexibility.

Several food and drink companies had made amendments to their pay/grading systems to cope with the problems of recruiting and retaining people with shortage skills – notably some computing and technical occupations, as described below:

Canned Savouries plc, which had rigid incremental scales for all clerical and administrative grades, was unable to recruit computer programmers because the system obliged it to start them at the bottom point of the admin scale. The company recently negotiated with the trade union an agreement whereby it could start such people part way up the scale (as long as it could be justified on the grounds of 'experience gained elsewhere'). This has only partly resolved the problem, however, as the company is still unable to progress such people above the scale maximum or to put them in a different 'job class'.

5.17 As expected, in food and drink respondents individual-based schemes were found only in non-unionised firms, except for managerial grades. Such schemes were, however, the norm for these grades, and most companies had a performance-based assessment system or were moving towards one. The organisation of such systems varied from company to company – sometimes, for example, there were wide pay bands for each grade, with placement within the band subject to management assessment of performance; in some cases there was an incremental grading system with performance assessment affecting rate of progress up the scale.

5.18 In clerical and other white collar areas subject to trade union representation, the norm was an incremental grading system, with increments based on length of service (or occasionally a 'simple rate for the job'). A few companies had introduced some element of flexibility into such systems by negotiating the ability to move some individuals up the scales faster than others – none saw the need for greater flexibility in clerical pay structures as a priority.

5.19 In manual areas, all the food and drink companies operated a 'rate for the job' system. Few expressed a need to reward individual performance, and in those which did the need applied only to skilled and craft areas. None had implemented an individual-based scheme; however, a few companies had introduced group or team bonus schemes (often based on productivity or value added measures). Many companies felt that the interdependence of jobs on the production line prevented objective

productivity measurement and reward (piecework, etc) and that systems based on individuals being assessed by their supervisor/manager/foreman were subjective and open to abuse, error and challenge to the extent that the divisive effects would outweigh the motivational ones.

Pay flexibility in engineering

5.20 In general, flexibility-related changes to pay and reward structures in the engineering respondents exhibited very similar features to those found in our food and drink respondents. For the sake of brevity, we will simply repeat the main areas of common ground, as follows:

- ▲ Pay flexibility was usually associated with a shift to functional flexibility;
- ▲ Moves to more complex group grading structures were observed, supporting greater craft and operative flexibility when that flexibility was based on skill acquisition and training;
- ▲ Moves to simplified/unified grading structures were observed, supporting greater craft and operative flexibility when that flexibility was based solely on the removal of demarcation lines, or where new technology had deskilled tasks and/or eliminated skill differentials;
- ▲ Moves, in operative areas, to greater upward and downward flexibility were facilitated by paying higher rates (temporarily) to operatives working at higher-graded tasks and guaranteeing existing rates to those working at lower graded tasks;
- ▲ The developments in manual areas have tended to be negotiated, with obstacles to change commonly related to inter-union disputes;
- ▲ Minor amendments to grading structures were observed to facilitate the recruitment and retention of employees with scarce skills – mainly in technical and professional occupations. When such occupations were unionised the amendments had been negotiated;
- ▲ Reward for performance was the norm for managerial and non-unionised white collar

jobs, but several companies exhibited a trend towards a higher proportion of pay being performance-related. In unionised white collar areas, change had been confined to a move to fewer, wider salary scales and greater discretion to move people up those scales at differential rates. In manual areas 'rate for the job' remained the norm, although a trend towards group bonuses was discernible.

5.21 The only notable general difference between trends in the two sectors was that, occupation for occupation, some of the engineering companies had got further down the line towards pay flexibility than was true in food and drink. This is on the face of it surprising, given that we found in Chapter 3 that engineering companies had faced greater industrial relations obstacles to increasing functional flexibility than had food and drink companies. However, it must be remembered that the engineering industry, characterised not by continuous processes but by assembly lines and batch production, has always been more amenable to individual-based payment systems through work measurement and piecework.

Flashgadget plc, an electronics company in small batch production with many rapidly changing products, had full flexibility (subject to competence and training) in all manual and non-manual areas – reinforced by harmonised terms and conditions. It had developed a merit-based pay system for all staff including production operatives, who move up an incremental scale according to length of service, acquisition of skill modules and performance appraisal by line management.

No other company had gone this far, although several had well-developed plans for merit pay for manual workers. Again, however, there was a clear division of opinion within the sector, with most companies firmly against the notion of individual pay for manual workers because of the administrative difficulties and presumed disruptive effect on employee morale.

5.22 'Radical' innovations in white collar areas were also more evident in some of the engineering companies than in the food and drink sector. Thus, one company had negotiated with the union to be able to pay technicians up to 15 per cent above or below

the rate for the job according to merit. Another had tackled the problem of paying for scarce computer-related skills by negotiating the ability to progress people on to a set of non-negotiated increments above a 'bar' representing the top of the scale negotiated with the union.

Pay flexibility in retailing

5.23 Table 5.1 shows that some 45 per cent of respondents here had made moves to increase the flexibility of their pay systems. We should be clear at the outset that this did not generally represent such a substantial change of practice as it had done for our manufacturing respondents. Firms in this sector had no major need to increase their functional flexibility, and as a result the changes we observed tended to be marginal alterations to existing systems and were largely intended as performance incentives within jobs rather than flexibility incentives between them.

5.24 Retailing shared the characteristics of the two manufacturing sectors with regard to pay flexibility for head office managerial and white collar staff. Thus, when non-unionised, they demonstrated a considerable discretionary performance-related element in pay and a tendency towards increasing the proportion of discretionary pay in the total reward package; when unionised, they demonstrated a predominance of 'rate for the job' or incremental pay scales, with a tendency towards greater management discretion over rate of progress up the scales.

5.25 As far as the store staff are concerned, the common pattern was for store managers to have some of their remuneration closely tied to store turnover and/or profits. The proportion of pay which is related to store performance varies significantly between chains, as does the formula for measuring performance – some chains base it on the 'bottom line', while others take account of factors beyond the manager's control, such as competitors' activity, national advertising policy, etc.

5.26 Below this level, the approach to pay flexibility for store staff varied somewhat between subsectors. In food retailing (particularly the multiple supermarket chains and other chains dealing in high-volume,

low-value, 'fast-moving consumer goods'), the general approach was to pay 'the rate for the job'. The view in most of these companies was that moving either to an individual incentive-based system or to an incrementally graded system did not make operational sense, as workers in these kind of stores did not satisfy the basic criterion for an incentive-based pay system, namely the ability to control their own output. Product knowledge had little relevance, and individual performance does not affect sales in a measureable fashion. Particularly in food, the customer's perception of price and/or quality is the key to sales volume, and store performance is really a function of management criteria and performance rather than that of sales staff. In those areas where quality of individual service and product knowledge were important (eg specialist delicatessen, meat, fish and wine counters in supermarkets), the tendency was to make these higher-graded, 'promoted' posts rather than to assess individual performance.

5.27 Only one company in this subsector did not fit this mould. This was a company with a strongly paternalistic tradition and a heavy emphasis on employee rights and security, and which was therefore somewhat constrained as regards the degree of numerical flexibility it could implement. Facing competitors who did not have these constraints, it approached the need to keep labour costs down with a policy of maximising functional flexibility, buttressed on the one hand by the commitment of the employees to the 'good' employer and on the other by a performance-based appraisal system for all staff.

5.28 The other companies in this subsector also had a requirement for functional flexibility, but as we have seen, functional flexibility has not traditionally been a problem in such stores, and companies have always achieved as much of such flexibility as they required. Most companies had 'horizontal' functional flexibility built into contracts and had rules and conventions to ensure that 'upward' functional flexibility was rewarded when it was exercised and that 'downward' functional flexibility did not result in loss of pay.

5.29 In the subsector selling lower-volume, high-value consumer durables and household goods, incentive payments to sales staff were far

more common and increasingly prevalent among our respondents, as product knowledge and selling techniques were seen as significantly affecting sales volume.

At Cosyfit Ltd, for example, every employee was on an incentive of some form based on week-to-week variations in budgeted turnover. Thus head office and warehouse staff received a company-wide incentive; store managers and their administrative and checkout staff received a company bonus plus a store-based incentive; shopfloor teams received company, store and departmental incentives; and front-line salesmen received all of these plus an individual commission. Hence, salesmen's basic salary as a proportion of earnings was the lowest of any group (between one third and one half).

Most companies in the subsector operated a less extreme form of this system – in all cases the systems were operated according to centrally defined criteria and there was no element of local performance assessment in pay (performance assessment tended rather to affect promotion between jobs rather than pay within them). As in the food retailers, functional flexibility between jobs was secured with an 'earnings guarantee' when working at a differently graded task. Interestingly, in Cosyfit, for example, the individual incentive schemes made payment for functional flexibility across grades harder to operate. Thus, although there was no constraint, for example, on putting a salesman on the checkout for a week, it would be necessary to calculate what his likely commission would have been for that week in order to guarantee his earnings.

5.30 Finally, in large department stores, with a tendency towards departmental specialisation, departmental bonuses and individual commission payments were common, and in some cases there was merit pay for individual sales staff based on performance assessment by departmental line management.

5.31 Before leaving retailing, we should repeat that little of the above represents a break with traditional practice, and although individual stores and chains had made recent changes to payment and reward systems, there was no discernible trend towards greater 'pay flexibility' in the sense with which we were

concerned in manufacturing. However, as noted in Chapter 2 (on numerical flexibility), there was a trend towards keeping the total wage bill down, in the face of increasing competition, by shifting the composition of the workforce towards part-time 'peripheral' workers, and for most respondents this could be achieved without recourse to pay flexibility.

Pay flexibility in financial services

5.32 As in retailing, we found little evidence of major shifts in the direction of pay flexibility among our financial services respondents. In banking this partly reflects the existence of common grading structures and scales across all federated banks, which encompass all clerical and administrative jobs up to assistant manager level, based on common job-evaluated benchmarks. While some have made minor changes within this system – notably to accommodate specialist recruitment from outside – none have broken with it or made substantial revisions. Indeed, while there is little evidence of a substantial increase in banks' needs for functional flexibility, then we would not expect such a break with the traditional structure. Most banks reported that they could achieve what flexibility they sought within the existing pay structure. We should add to this strong pressure to maintain an agreed and evaluated grade structure.

5.33 There were changes observed among our respondents in insurance and building societies, and in the other fringe financial institutions like credit card and other consumer credit businesses. Although these latter are owned by the banks, they are separate corporate structures and have quite distinct grading and pay structures, which tend to place greater emphasis on merit pay, performance-related rather than service-related increments and individual discretion in pay levels. What this adds up to is not a change in pay structures but the creation of new and different structures in new employing organisations, as below:

A bank subsidiary, Readifunds, had found itself increasingly constrained by the rigid traditional grading structures of the bank.

Unlike the bank, which 'grew all its own' skilled staff, the subsidiary had to buy in senior staff from the external labour market, and the only way this could be achieved was via massive 'grade drift' (typically, a middle-level professional or administrative employee in Readifunds would have been three grades up on his/her bank equivalent). The company has therefore set in motion some initial tentative steps towards breaking away from the bank's pay and grading structure, to enable it to pay the external 'rate for the job' where required by the labour market without letting the rates for all its employees shift up. At the same time it has shifted the balance of pay determination towards individual merit pay and away from an incremental structure.

What changes we observed in banking pay systems, then, were not so much changes within the existing structure of pay as development around its edges.

5.34 In building societies we observed a shift towards individual merit pay among most of our respondents, but here there was no basic incremental system common to all to break away from and the use of individual discretionary payments appeared to be more common than in banking, as below:

In one building society, Homefunds, the pay system is now entirely merit-based with no automatic increments. The company had recently attempted to abolish the across-the-board annual cost-of-living increase, to make all pay increases discretionary. Facing strong resistance from its staff union, a compromise was agreed which involved part of what was previously a cost-of-living increase being distributed at management's discretion and the remaining proportion distributed as before.

5.35 In insurance the main shift observed was to higher commission-based components of pay among salesmen, even where they remained employed rather than self-employed. In parallel with this we observed a shift towards fewer, broader grades for clerical workers to encourage the introduction of new technology and deployment across what had previously been separate business areas.

PART 3

In Part 2 of this report we discussed in some detail the kind of changes which we observed among companies participating in this study in their attempts to achieve greater flexibility. This demonstrated the diversity of approach between sectors, between individual firms and between different occupational groups. In this third and final part of the report we consider some of the implications and wider issues arising from these changes, for employers, for employees and for the economy as a whole.

Part 3 consists of three chapters. In Chapter 6 we consider the process of implementation of change and ask, how far do our respondents have a consistent strategy towards securing greater flexibility, and where is it taking them in the long term? In Chapter 7 we consider how these changes are affecting the structure of the internal and external labour markets, and in particular the implications of such changes for workers. In the final chapter we consider under what conditions conflict arising from employers' strategies and employees' needs and aspirations might be resolved.

6 FLEXIBILITY AND CORPORATE STRATEGIES

INTRODUCTION

6.1 This chapter is concerned with the process of change from the point of view of the employer. It is about the ways in which the needs of business strategies, and general statements about the need for flexibility in the face of change, get translated into real changes in the deployment of manpower – real changes which in some cases mark major breaks with past practice and convention. We begin by considering the link between emerging business objectives and manning practices, and in particular the permissive and constraining factors which condition that link. We then go on to consider firms' choices between the different forms of flexibility discussed in Part 2. We then look at the ways in which change had been implemented among our respondents and conclude by examining the permanence of the changes we have observed.

BUSINESS OBJECTIVES AND MANNING PRACTICES

6.2 We did not have the opportunity to interview corporate planning managers in the companies participating in this study, but all our interviews began with a discussion of the business pressures on firms and their responses to them. The picture which emerged from this was one of enormous diversity – obviously between sectors but also within them, often between different sites within the one group. Nevertheless, certain common features did emerge, particularly: responsiveness to uncertainty; decentralisation; and headcount reduction. We now consider these more closely.

Responsiveness to uncertainty

6.3 Almost all of our respondents believed that business strategies in the future would need to respond more immediately to as yet unknown changes in markets, competition, price movements, technological change, etc. In other words, in a more competitive environment the penalties attached to delay were widely believed to have increased. As a result, there were strong pressures observed to make *all* factors of production more capable of response to change. For example, one of the

attractions for our engineering respondents of flexible manufacturing systems was that they permitted a much smoother, cheaper and quicker shift between models of a particular product line, and indeed between product lines themselves. In food and drink, much of the most recently installed plant was capable of significant variation to product lines without recourse to expensive retooling and resetting. In retailing, one of the attractions of concessions and 'store-within-store' trading was the possibility of fairly rapid response to the composition of customer demand. Finally, in financial services there was a general recognition of the need to exploit the main physical capital resources of firms (their branch networks and their electronic data transmission systems) to underpin a broader range of services, consequent upon deregulation.

6.4 As with capital, so with labour; in so far as our respondents anticipated faster and possibly more frequent changes to business strategies, then they also required a permanent increase in the capacity of the workforces to respond to it. There is no need here to quote examples as we have described them at length in Part Two. But the point should be made that a majority of our respondents believed, not only that they required greater flexibility from their workforces to deal with this or that particular change but also that they required a generic increase in flexibility to cope with future, unknown change.

Decentralisation

6.5 One common way in which many of our respondents had sought to follow through this business strategy was corporate reorganisation into separate and more or less autonomous business streams within the company, or indeed into separate trading companies. The business advantages of this most frequently mentioned were those of specialisation, of locating responsibility and control within such autonomous groupings close to the action and of greater corporate choice at the centre in establishing new ones to cope with the changes identified in 6.3. We did not pursue these business rationales at length except to draw out some of the implications for manning. These were largely perceived by firms as advantages of

appropriate practices for different circumstances – the most clear-cut case of this being the satellite businesses the banks were developing outside the remit of the conventional manning practices and conditions in the mainstream banking businesses. This trend was also observed in engineering, where one respondent characterised the 1960s and early 1970s as a time when ‘we looked for common jobs, rewards, ranking and conditions through all our factories and offices’. But, for this company, a shift from high-volume, standard products towards low-volume, high-variety production, brought about by market changes, meant that the 1980s was ‘a time of decentralisation in which a common structure is a constraint not an advantage’. The implications for manning practices are therefore diversity and decomposition within and between firms.

Headcount reduction

6.6 The third common theme was one of a widespread desire to minimise not only unit labour costs but also permanent headcount in the pursuit of new business strategies. Clearly this is nothing new of itself; employers have never sought to employ people simply for the sake of it. What is new is the growth of a management culture which is at best strongly committed to restricting employment growth to a level which, first, is believed to be permanently sustainable and, secondly, permanently embodies the productivity gains made since 1980. We encountered this culture among almost all our respondents, particularly in manufacturing firms. At its most extreme, this culture apparently values and rewards demanning more highly than headcount growth. As one of our engineering respondents put it, ‘the brownie points are now for those shedding jobs most quickly, not empire builders’; and another, in food and drink, ‘we’ve got a new generation of younger managers... they’re looking to make their mark... cutting numbers has become the way to make it in this company’. Comments like these were encountered among only a minority of respondents in manufacturing, however. When the scale of the recent shakeout of labour, and the increase in productivity which

has accompanied it, are considered, then such comments are hardly surprising. Nor, in the face of output reductions and foreign competition, is the need for reductions in headcount at issue. The key point is that most of our respondents have become less inclined to sanction permanent employment growth for any given increase in output. Instead they have sought to find alternatives which might involve the use of peripheral labour, or might involve capital expenditure or labour productivity growth, or some form of distancing.

6.7 These then are the three common themes linking business strategies to manning practices which we observed: a perceived need to improve the responsiveness of all factors of production to changes in business requirements; a shift towards decentralisation as a means of doing so; and a reluctance to incur headcount growth in the process. We now go on to consider common permissive and constraining factors in this process of change.

PERMISSIVE AND CONSTRAINING FACTORS

6.8 We have already identified many of the permissive and constraining factors during our discussion of individual forms of flexibility in Part 2. It is clear that there are two dominant sets of factors here – those arising out of recession and those arising out of technological change. We deal with them in turn before looking at the lesser factors.

Impact of recession

6.9 ‘*Looking over the edge*’. The recession-based factors are principally permissive, but in some minor ways also constraining. The most important permissive role here has been the self-evident demonstration to both managers and workforces that greater responsiveness in the face of change, particularly the intensification of competitive pressure, was needed in many cases simply to stay in business. This factor varied directly in line with the impact of recession and accordingly was mentioned most by our engineering respondents and least by those in financial

services. It is important to note that this galvanising effect operated on managers as well as on other employees and that it operated most strongly when accurate and reliable information outlining the situation of particular firms was made available to employees.

6.10 Industrial relations. Another permissive role of recession, according to our management respondents, has been the weakening union opposition to changes in working practices. This was observed in three forms. For a minority of respondents, it was suggested that employee and union attitudes had been changed by an appreciation of conflict between their customary working practices and the requirements of survival in recession. For a different (and smaller) minority, the unions' organisational hold had been weakened either by 'direct appeals to the workforce over the stewards' heads', or by withdrawal of recognition and bargaining rights, or by elimination from the workforce of union activists (this last in two firms only). For the majority, however, the change was seen as a pragmatic and possibly temporary acceptance of changes to existing practices in the face of the threat of unemployment and closure, rather than a change of underlying attitude on the part of bargainers. Our discussions with the unions themselves confirmed this effect, but also served to emphasise their view that in most cases all three elements could be found in some degree underpinning their acceptance of change.

6.11 Labour supply. Another permissive aspect of recession concerns labour supply. Many firms mentioned to us that in the past, with tighter labour markets, they had not been able to attract workers on a peripheral basis – for example on temporary contracts – but that now, with higher levels of unemployment, they could do so more readily.

6.12 Constraints. At the same time there have been some constraints on achieving greater flexibility associated with recession. Declining wastage rates had significantly affected firms' ability to achieve numerical flexibility through natural wastage. Training activities, and in some cases physical resources, had been curtailed for cost reasons and this was

frequently mentioned as a constraint on achieving functional flexibility, although most of our respondents had readily overcome this in practice. Cost pressure had significantly reduced firms' ability to buy in changes in working practices and had obliged them to rely more heavily on the implicit threat of job loss to secure acceptance. However, on balance, our respondents found these constraints relatively unimportant.

Impact of technological change

6.13 Job content. The most important role played by technological change had been to require an increase in flexibility from the workforce as a result of its impact on job content and skill levels. However, it also acted as a permissive factor in two senses. First, through systemisation of jobs which had previously required the exercise of discretion and insight, it had either made less skilled jobs more amenable to the introduction of peripheral employees (for example part-time counter staff in financial services) without undue training costs or it had so reduced job content that such activities could be more readily incorporated into another job box; for example, a machine tool with numerical controls is generally more easily adjusted by the operator than one without.

6.14 'Time for a change'. Secondly, technological change had very frequently acted as the occasion for a revision of working practices. The greenfield site syndrome is the most clear expression of 'wiping the slate clean and starting again with new practices' – as, for example, with Nissan in Washington. In general, we found that the more extensive was technological change, the more likely were managers to perceive a need for, and workers to supply, changes in manning practices. For example, in one of the food and drink respondents, the introduction of an automated bottling plant had led to the development of a new 'craftician' grade with operator/maintainer/ setter/quality control responsibilities which, once established, had been introduced in other departments where technological change had not been so extensive and where older single-task jobs had until then predominated.

Other constraining factors

6.15 Other factors which had constrained moves towards greater flexibility fell into three categories: those concerned with skill levels and the provision of such skills; those concerned with status difference within the workforce; and those concerned with legislative and other regulations in the labour market as a whole. We examine them in turn.

6.16 *Skills.* By far the most important constraint reported by our respondents was that of skill levels. There are two aspects to this. First, where the achievement of functional flexibility necessitated an increase in skill levels, firms were constrained by the training implications of acquiring such skills. We should not make too much of this, for we found very few examples of it operating as an absolute constraint. Rather, the training requirements tended to limit the pace and the extent of functional flexibility. As we have already discussed for maintenance craftsmen, the training burden of full interchangeability of craft skills is substantial, although in the long term our engineering and food and drink respondents hoped to reduce this by conducting more extensive dual-skill training among their apprentices. The second aspect is the converse of this: that firms had been constrained in achieving numerical flexibility from their more skilled employees because they could neither recruit nor afford to train people with such skills on other than a full-time and permanent basis. Thus there exists a skill barrier above which the use of supplementary peripheral workers may be constrained. Again this is not an absolute barrier; it was crossed, for example, by some firms in areas of very high unemployment for craftsmen, and through the use of agency draughtsmen in others. Furthermore, it would appear that one role of new technology has been to lower this barrier for operators (through job systemisation and deskilling) and to raise it for maintenance and other indirect workers, such as production engineering staff.

6.17 *Status.* Status differences were another commonly encountered constraint to functional flexibility. These were also of two types: those produced by the shift of job blocks across the manual/staff divide and those produced by similar shifts between groups represented by

different trade unions. While we did encounter several one-union (or no-union) single-status plants, these constraints were evident in all the other manufacturing respondents who had sought increased functional flexibility. Again, the cases which we have outlined in Part 2 where such barriers had been successfully crossed show that these, too, are not absolute constraints. They had been resolved in two ways. In cases where one status or bargaining group substantially outweighed the other, then the conditions of the majority group would usually become the new norm. For example, in one engineering company which had introduced a computer controlled manufacturing system, the inspectors' jobs were virtually swallowed up by the operators using automatic test equipment. The operators remained hourly (though better) paid and continued within the manual unions' sphere of influence. Similarly, relatively junior clerical staff in production, component supply and stockroom jobs were displaced by technicians who retained their different union membership. Where there was more even balance between the groups, the picture was much more diffuse, with no apparent overall trend—in some cases recognition of a single union, in others joint recognition and retained membership.

6.18 *Legislative and other institutional factors.* To a surprising degree, our respondents saw external constraints such as legislative, health and safety and Wages Council provisions as relatively unimportant. There are two reasons for this. First, we were wholly concerned with large firms, who mainly set themselves higher standards than those prescribed in legal and administrative minima. For these firms internal inflexibilities are generally considered to be far greater than for small firms, and as a result internal considerations appeared to loom far larger than external ones for them. Secondly, being practical people, managers are by disposition more concerned with what they can alter than with what they cannot—ie with internal constraints rather than external ones. Our retailing respondents' attitude to Wages Council minimum rates and conditions is a clear example of these rationales. On the one hand, almost all of them paid above the minimum rates, and for reasons of quality, customer service and choice in recruitment maintained that they would not generally seek

to lower pay levels even if the minima were abolished. However, recognising that their non-union, smaller competitors would be more likely to reduce rates if permitted, they did not see minimum rates as a constraint on flexibility but rather supported them while addressing most of their attention to the deployment of their workforces over time. It was only where Wages Council provisions clashed with this (the question of premia for weekend working discussed in Chapter 2) that such provisions were regarded as constraints.

6.19 Thus we concluded that the various external factors did not operate as constraints upon the achievement of the desired level of flexibility in the same way as did internal constraints. Either they were of a wholly different order of magnitude or they were perceived as fixed 'rules of the game', which often (as is the case with health and safety regulations) were seen as entirely reasonable. For whatever reasons, none of our respondents claimed that they were significantly constrained by legislative or administrative requirements in achieving the flexibility they sought.

STRATEGIC CHOICES BETWEEN DIFFERENT FLEXIBILITIES

6.20 We have suggested in Chapter 5 that pay flexibility was largely seen as supportive of flexibility in the use of labour (mainly functional flexibility). Therefore, so far as most of our respondents were concerned, they were faced with (and in most cases had resolved) two strategic issues:

▲ How far is flexibility to be achieved within the firm itself and how far by various distancing strategies, like those examined in Chapter 4?

▲ To the extent that in-company flexibility is sought, what combination of numerical and functional flexibility is appropriate?

Internal flexibility or distancing?

6.21 Looking at the first of these questions, the issue really facing firms was whether

flexibility could best be achieved using their own employees or other workers who may or may not be somebody else's employees. With the exception of our retailing respondents, the firms in this study took a rather conservative stance on this issue, and although many of them demonstrated initiatives with different types of distancing, these were strongly limited by activity and therefore in extent. We found that such distancing was largely restricted to:

▲ Ancillary and non-critical activities.

Contracting out tended to be restricted to areas in which non-compliance would not have an immediate or significant impact on output;

▲ Stable and definable activities. Only those activities where the requirements of a subcontractor could be precisely predetermined and embodied in a contract were found to be suited to this form of flexibility;

▲ Competing contractors. Not wishing to replace an internal monopoly with an external one, our respondents restricted their distancing strategies to areas in which contractors could fairly readily be found.

6.22 These criteria were commonly quoted to us, with two exceptions. The first concerned essential overhaul maintenance in manufacturing (also such areas as shopfitting in services), which is both considerable in extent and limited in time (to a shutdown period, or opening day). This work is commonly subcontracted, but in fact always has been. Here subcontracting is not so much an alternative as the only way to get the job done, and as a result our three criteria do not apply to it. The second exception was found only in retailing and concerns the growth of various forms of franchising and store-in-store arrangements which, in effect, can bring subcontracting to the very centre of a firm's activities. Among our respondents these changes tended to be restricted to specialist areas, but developments such as the rapid growth of franchising in food retailing and proposals such as the 'Galleria' concept for Debenhams' department stores clearly indicate a trend on a much broader front than we found elsewhere, and which may be worthy of further study.

6.23 A further criterion which our respondents applied to this decision on

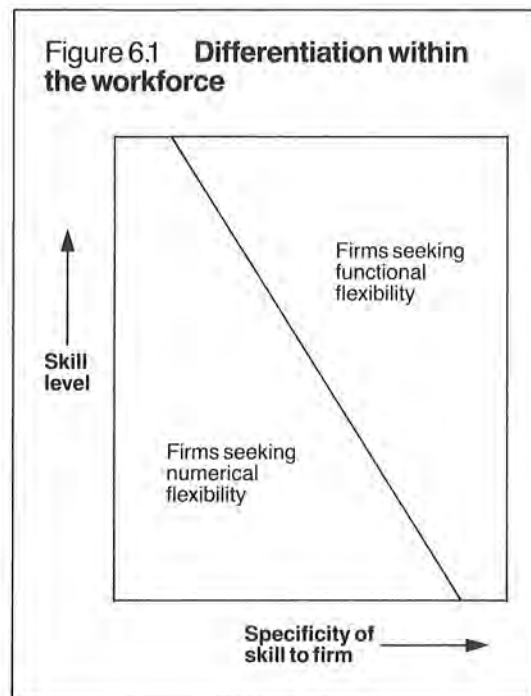
distancing was that of cost. In general, we found that decisions to move to contract were strongly conditioned by cost, and that if such a mode could not be justified on short-term cost grounds (irrespective of any intrinsic flexibility considerations) then it was most unlikely to be implemented. This would seem to confirm our view that, apart from retailing, insurance sales jobs and obviously ancillary areas such as canteens and cleaning, direct employment is widely seen as the continuing norm, from which significant departures require strong immediate, as well as long-term, justification.

Functional or numerical flexibility?

6.24 This brings us on to the second strategic issue of choice – what combination of numerical and functional flexibility is appropriate? Our respondents confirmed the findings of previous studies that firms clearly sought these different forms of flexibility from different groups of employees. This can be represented diagrammatically, as in Figure 6.1. This indicates the internal labour markets of our respondents. On the vertical axis is represented increasing levels of skill (in terms of simple technical competence, and thus at least a partial proxy for training costs). On the horizontal axis is represented the specificity of skill to the particular company, from general, widely transferable skills to those which are specific to particular, and possibly unique, company requirements.

6.25 What the figure shows is that at any given level of skill our firms were likely to require both functional and numerical flexibility, but that as skill content and specificity increased so did the demand for functional flexibility. At the lowest level of skill, and for skills which were general and hence readily transferable, numerical flexibility was dominant. It is this differentiation which lay behind the emerging segmentation of the internal labour market among our respondent firms. As we have demonstrated in Chapters 4 and 5, most of the forms in which numerical flexibility had been sought and achieved produced quite different contractual, working time, pay and job content regimes for peripheral workers than for core

Figure 6.1 Differentiation within the workforce



workers, from whom functional flexibility was increasingly sought.

6.26 The figure shows that the dichotomy is not an absolute one; some numerical flexibility is sought from higher skilled workers and some functional flexibility from lower skilled ones. Examples of the former which we encountered included contract draughtsmen, itinerant managers who had specialist skills like marketing which could be easily transferred between firms, self-employed systems analysts, legal and accounting professionals, etc. Examples of the latter include mobility between operator jobs in food and drink and engineering, and stockroom/sales floor/checkout mobility in retailing. However, this highlights a very important consideration: that the more a firm opts for a numerically flexible workforce, the skill levels at which it operates will preclude, or at least constrain, its ability to secure functional flexibility. This point was continually made to us by our trade union respondents and by a small minority of managers interviewed. When it was raised by the interviewers with management respondents, the frequently encountered response was that, while this was theoretically true, in reality either they did not actually require much functional flexibility from

lower-skilled staff anyway (retailing) or (in financial services) that job systematisation through new technology had so deskilled some jobs as increasingly to permit the job mobility they required at a lower level of operator skill.

IMPLEMENTING CHANGE

6.27 Only a very small minority of our respondents could be said to have developed long-term strategies to increase the flexibility of their workforces. Without exception these were firms who had been most affected by technological change, which had obliged them to develop more coherent long-term plans. This should not be taken to imply that the remainder did not think ahead, but rather that the former group could articulate long-term aims, could show how the various initiatives they had taken fitted together and were more likely to have introduced supportive changes in pay systems, training policies, etc. For the majority of manufacturing respondents, the changes which they had made were more likely to be on a plant-by-plant basis, with the initiatives being thrown up locally rather than imposed from the centre. Decentralisation of responsibility for manpower policies is one obvious reason for this, but probably more important is the degree of diversity in the exact needs of different operating units leading to different emphases and approaches. The more homogeneous the conditions between sites the greater similarity there was between the forms of flexibility and the more important central policies were found to be. In the service sector, these central policies were more important. The banking and building society branch structure was the best example of this, with general policy changes towards the greater use of part-time labour emanating from the centre and applied fairly uniformly in the branches. In retailing, greater diversity within the branch structure was observed, reflecting the bigger variations between branches, but this was far less than in manufacturing, where, in both sectors, quite substantial variations in manning practices were observed from site to site in individual companies.

6.28 Again, among the manufacturing companies the influence of recession on the process of implementation had been

considerable, with severe market shock acting as both the precipitator of, and the justification for, changes to working practices. In many cases reduction in headcount required a change in working practices of remaining employees simply to maintain cover and output. Equally, the possibility of further job loss unless more flexible working practices were introduced often lay behind the negotiations which introduced them. Although we did come across cases where new working practices had been imposed under the explicit threat of closure, these were a small minority and were not found at all in the service sector. At the same time, in manufacturing the implicit threat of job loss was widely reported, by both managers and trade unionists to whom we spoke, to have greatly influenced the outcome of negotiations. Thus, while for a small minority of respondents the observed changes to working practices could truly be represented as enforced, for the most part they were not. Rather, we might characterise management actions as taking advantage of the coincidence of a reduction in union bargaining power at plant level and a qualified acceptance by workers and their representatives of the need to change practices as a result of acute recession. It is important to note that neither management nor union respondents generally regarded this situation as a permanent one.

6.29 We found a number of ways in which our respondents had sought to maintain both the changes they had already introduced and their capacity to introduce further changes. The role of communications and access to information for employees has already been referred to in Chapter 3. The adjustments to pay systems to support new working practices has also been addressed. Concession bargaining was fairly common, particularly over working time (eg a reduction in basic hours in exchange for a redistribution of those basic hours). We also found a number of cases in which it was suggested to us that the initiatives themselves would extend this opportunity—most often this involved the use of part-time and temporary workers, who it was believed would be less inclined to oppose or curtail management initiatives. We found relatively little evidence of substantial moves towards single status, however, and no example of a guarantee of continuity of employment for workers accepting new conditions. Probably the most successful of

all in maintaining and implementing further change, however, were those firms who had introduced new plant and equipment as part of, or subsequent to, an agreement on functional flexibility, for this was often presented to the workforce in return for their compliance and as a guarantor of continuity of employment for the remaining workers.

6.30 As a result, not only had those firms who had invested heavily in new plant been obliged to take a longer-term approach to securing new manning practices, they had been assisted by the very fact of the investment in making them into

a new custom and practice. Although all our respondents had, of course, been investing to some extent over the period since 1980, it was only a minority who had enjoyed this double benefit. The remainder were faced with the prospect that the shift to greater flexibility relied strongly on a permanent imbalance of collective bargaining power, which very few thought likely, and on the maintenance of a high level of unemployment acting, in effect, as a stick to maintain compliance. Although rather more thought this likely, few saw it as a sufficient condition in the long term.

7 FLEXIBILITY AND WORKERS

INTRODUCTION

71 In the last chapter we looked more generally at management approaches to the issue of flexibility. Now we turn to consider flexibility from the point of view of the workforce, both in the sense of a company's workers and in the sense of the supply side of the labour market as a whole. In many ways the entire flexibility debate has generally and uncritically been conducted in terms of managerial imperatives; indeed, one of the managers whom we interviewed seriously maintained that 'flexibility means them doing what we say, and doing it more efficiently than our competitors' workers'. That workers might have another view about the nature of flexibility and its effects is obvious. This chapter is largely based on our interviews with union representatives within the participating firms, and in national and regional union organisations with substantial membership in the four sectors under discussion.

TWO-TIER EMPLOYMENT – THE VIEW FROM INSIDE

72 The companies participating in this study demonstrated unambiguously a proportionate growth in peripheral or secondary employment. This varied in form from sector to sector and firm to firm; it varied in extent from firm to firm; and it varied in novelty. With some significant exceptions, the growth of such secondary employment was not generally the centrepiece of firms' manning practices, neither was it a conscious, strategic long-term drive for a 'low pay–low tech–low productivity' subclass of peripheral worker. But it was growing and its growth entailed several important consequences for workers, which were drawn to our attention primarily by our union respondents but also by some managers. These consequences fall into two types – those which are intrinsic to the existence of peripheral status and those which are extrinsic, ie are often associated with peripheral status but are not a necessary aspect of it. We consider them in turn.

PERIPHERAL STATUS – INTRINSIC SHORTCOMINGS

Insecurity

73 Looking first at the intrinsic consequences of peripheral status, the most important appeared to be lack of employment continuity and security and a consequent threat to annual earnings. It should not be thought that this characterised all peripheral jobs – for example, one of our banking respondents could demonstrate retention rates for its part-time clerical staff which were not substantially lower than for full-time professionals. Nor was it the case that insecurity always resulted in job loss – for example, we saw several cases where temporary workers were transferred to permanent contracts after a period of time. Similarly, such volatility of employment was not always a function of employers' actions in laying off peripheral workers – for example, the high wastage rates among part-time sales assistants in many of our retailing respondents were more a matter of employee choice than any other factor. But leaving aside these provisos, our union respondents were clear that the expansion of peripheral working among our respondent firms had generally involved a reduction in the security of employment of workers in such jobs. This was so both theoretically, in terms of collective agreements and legal provision – for example, longer periods of service were often required of such workers to come within the ambit of legal or collectively bargained protection – and in terms of practice – relatively few temporary workers survived to be made permanent.

Low skill

74 The second intrinsic consequence of peripheral employment was the general correlation between peripheral status and low skill. As we have already shown, this correlation is not absolute – we have reported examples of professional-level peripherals and some of low-skilled core status workers. But once again the correlation was generally found to underpin the emerging segmentation in almost all the firms interviewed and we have already discussed some of the reasons for this,

such as training costs. Our union respondents generally made two separate points about this. First, from the point of view of the economy as a whole, they argued that competitive advantage would best be secured through raising skill levels rather than through adopting manning practices which effectively constrained them. Secondly, from the point of view of individuals, it was feared that they could be caught in a vicious circle in which their lack of skill restricted them to peripheral jobs in which they would receive little training, thus effectively debarring them from core status. Almost without exception, our management respondents rejected the first of these arguments; as one of them argued, 'we haven't created low-skilled jobs just so that we can fill them with cheap part-timers... but where we do have unskilled work we are trying to fill jobs with such workers'. This line of argument was generally borne out by our discussions with firms, save in some areas of food retailing, mainly large supermarkets, where there was some evidence of a deliberate orientation to low-skilled jobs, primarily as a means of reducing costs. Our discussions did confirm the second argument, however – among our respondents, the fact of peripheral status generally restricted access to training and thereby access to higher-level skills. One of our banking respondents exemplified this most clearly: while shifting to part-time working among clerical and secretarial grades it had effectively limited access to training for areas not based on part-time work (this is not uncommon in the industry); however, this policy had been accentuated by the proposal to 'stream' full-time clerical staff into a career stream (with time off for training, examination fees paid, etc) and a non-career stream without such assisted access. This had not yet been implemented, but it is a graphic demonstration of the way in which peripheral workers, even if full-time, might be restricted to low-skill jobs.

PERIPHERAL STATUS – EXTRINSIC SHORTCOMINGS

75 The remaining consequences of peripheral status for workers in such jobs were not intrinsic to their status but rather extrinsic. They may be no less damaging to the

aspirations of such workers; it is simply that they were not necessary aspects of peripheral status. Or, to be more precise, our respondents could generally have secured the numerical flexibility which they sought without producing such consequences for their peripheral workers.

Non-wage benefits

76 The most widespread finding was of substantially worse conditions (non-pay benefits) of employment for most peripheral workers than those enjoyed by core workers. The principal difference here related to the provision of occupational pensions; peripheral workers in the firms interviewed were generally excluded from membership of such schemes, whether contributory or non-contributory. While there may be some force in the argument made by some firms that 'our part-timers don't want to be in the scheme', this is only likely to be the case for contributory schemes. Similarly, temporary workers who expect to move on fairly quickly may not wish to join contributory schemes, and in the absence of free transferability could hardly be expected to gain from them or from non-contributory schemes. However, this is not the point. The point is that they generally did not have the option to join, and the reason for this appears to be solely a matter of cost-saving for employers. In one of the sectors, retail distribution, this argument was extended to include National Insurance contributions. While we found some cases of part-time shifts being arranged so as to keep earnings below the NI threshold, we did not collect sufficient evidence to be conclusive on this point. We understand that it is the subject of a separate study.

77 As far as other non-pay benefits are concerned, among the larger companies interviewed and among the unionised ones the general finding was of *pro rata* treatment on such issues as holiday pay, sick pay and other leave-related benefits. Staff discounts tended to be open to all, unless they were of a substantial nature (for example, cheap loans and mortgages in financial services), in which case they would inevitably be *pro rata* to earnings and often service-related.

Pay

7.8 Turning to pay, we found that the conventional approach was similarly based on the *pro rata* principle for the bigger unionised firms, although we did find some cases in retailing (25 per cent of firms) where peripheral earnings were at a lower rate than for comparable core workers. However, this is not quite the same as saying that earnings per hour were at comparable rates. Temporary workers often found themselves on a 'starter rate' for a substantial part of their contract, and while in theory this represented equal treatment for temporaries, in fact it tended to depress their earnings compared with those of permanent staff; paid meal breaks were less common among part-timers and had the effect of reducing their hourly rate for worked hours; overtime premia were not generally paid to part-timers until they reached the hours of full-time workers, as we have already discussed; in some cases peripheral workers were excluded from group bonuses, though practice here was very variable; temporary workers tended to benefit less well under piecework regimes and those with seniority systems covering movements between lower and higher yielding jobs; finally, among self-employed salesmen, the commission-only rewards system was generally reckoned to give a lower average level of income than that enjoyed by equivalent in-house salesmen (though it also permitted higher peaks for the top earners). Nevertheless, it is important to point out that, outside retailing, we came across little evidence of overt and clear-cut pay discrimination affecting hourly rates. Peripheral workers were disadvantaged in terms of pay but the disadvantage was subtle, and we encountered a strong distaste for overtly discriminatory pay rates among our management respondents. Both management and union respondents claimed, however, that such disadvantage was more prevalent among small firms.

7.9 We encountered only one exception to this general finding. This is the case of contracting out. Where canteen and cleaning activities in particular had been subcontracted, then the pay and conditions of the workers in such posts were affected. In the case of canteens, these were frequently the same workers who, having simply switched

employers' time, generally experienced cuts in their hourly rates (as well as the non-pay benefits). Indeed, in all cases of low-skill, labour-intensive contracting out, the wage rates of the peripheralised workers had suffered compared with their in-house equivalents. This convention had led at least one respondent to reject the idea of a subcontracted canteen as 'not the sort of practice we would want to be associated with', but most of our respondents did not share this view. It would seem that the strong ideological commitment to parity of pay rates noted in the preceding paragraph usually only extended to workers who remained employees, and that it was overridden in practice by contractual changes like subcontracting.

7.10 It seems that the disadvantages of peripheral status are substantial, both in terms of intrinsic shortcomings and those conferred by the manner in which peripheral groups of worker are used in UK firms. But before leaving this issue of two-tier segmentation it is worth asking two questions – is there anything positive to say about peripheral status from the point of view of employees, and, how far might the disadvantages of peripheral status act to confer benefits on the core workforce?

PERIPHERAL STATUS – ADVANTAGES

7.11 We found that the benefits of peripheral status observed in the firms involved in this study were of two kinds. The first was extremely restricted in scale, and represents the advantages of professional freelancing. These have been well documented by Handy (1984). We restrict ourselves to the example of a single insurance company which demonstrates the combination of restricted scale/substantial advantage.

Lifeguard Insurance employs two kinds of peripheral worker – self-employed insurance salesmen and fee-based functional specialists. The former group comprise 1000 salesmen, rising to 1500 over the next two years (19 per cent of the employed workforce, rising to 30 per cent). These peripherals did receive training (three months off-the-job and three months on the road selling with an

experienced salesman) but subsequently their earnings were entirely commission-based, replacing an employee pay system which was 80 per cent basic rate, 20 per cent commission. 'They run harder, we turn our fixed costs into variable ones and no one is committed to a long-term relationship' is how this practice was justified. The second group of peripherals consists of just 11 self-employed non-insurance professional business managers, brought in as specialists and 'to leaven an inbred internal labour market'. They were on two-year contracts with six-month extension clauses and were paid fees rather than a salary, with a £30,000 pa minimum payment.

The last group of workers are surely Handy's up-market peripherals *par excellence*. They comprised about 1 per cent of the peripheral workforce and less than 0.2 per cent of the whole workforce.

712 The second advantage was more frequently cited by our management respondents, particularly in retailing. It suggests that some of the working time arrangements which they had introduced, particularly the 10.30–14.30 weekday shift, had opened employment opportunities for 'people who would otherwise not be able to take jobs because of other commitments' – eg females with young children in school. In financial services it was part-time clerical jobs for 'employees who left us to have a family and couldn't come back full time anyway'. In engineering and food and drink it was 'redundant employees who are still out of work, but who we take on as temporaries at busy times'. Although this line of argument was obviously attractive to many of our respondents it may be specious, for it bypasses the question of displacement, it does not justify extrinsic shortcomings in these jobs and clearly such jobs were not introduced with this benevolent outcome in mind. Our union respondents tended to view this as a recruitment orientation for peripheral jobs to people whose relatively weak position in the labour market was likely to have depressed their expectations coinciding with the characteristics of the jobs being offered.

713 If there are significant advantages for employees within a two-tier labour market, our

union respondents were unanimous in concluding that they are enjoyed almost solely by core employees.

CORE GROUP STATUS – ADVANTAGES

714 As most of this ground has already been covered in the discussion of functional flexibility in Chapter 3, we restrict ourselves to listing the main points. The claimed advantages of core status are:

▲ *Employment security.* While this study confirmed the use of peripheral labour to accommodate fluctuations in output, in practice it conveyed at best a *de facto* employment security rather than the *de jure* security enjoyed by core workers at IBM for example. Further, in the majority of manufacturing firms such employment security boiled down in practice to a reduction in the threat of job loss rather than anything more positive.

▲ *Access to a career.* Although, as we have seen, much of the functional flexibility observed involved horizontal job enlargement at the existing skill level, there remain a large number of cases in which access to skill acquisition and promotion had been opened up for manual workers. In most cases the extent of movement was not substantial (in terms of numbers and distance travelled) but nevertheless it marks a distinct break with past practice, which effectively sealed manual workers off from most promotion opportunities, save the inspection/supervision/foreman path.

▲ *Staff status.* In its full-blown form this remained quite rare among our respondents in manufacturing, where staff/manual, hourly paid/salaried distinctions assume more prominence than in the service sector. What we observed were piecemeal movements towards harmonisation for core group workers but with some major obstacles (hours of work and pensions) often still in place. As with access to careers, the dominance of horizontal functional flexibility, means that in many cases shifts to core status could be achieved without harmonisation with white collar groups. This, plus the cost of introducing staff status

wholesale, has clearly placed considerable restrictions on movement.

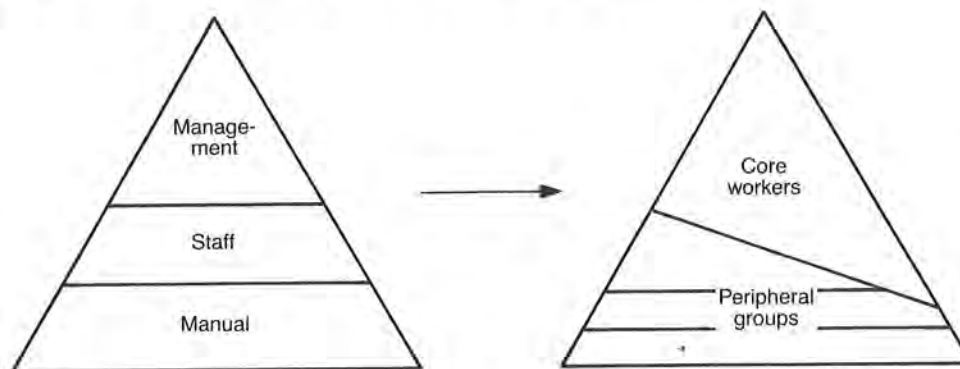
7.15 Despite these qualifications, the potential advantages for core group employees were substantial. The shifts toward core status which we observed generally entailed some improvement in one or more of these three areas. Again, in general terms, the security, career and staff status advantages were in accord with union collective bargaining priorities and recognised by our union respondents as positive gains.

7.16 Without wishing to overemphasise the extent of movement in these areas, what many of our union respondents believed they added up to was a change in the way in which the internal labour markets of UK firms were structured. This is shown in Figure 7.1 and involves a move from a traditional hierarchy towards a structure which is segmented in such a way as to reduce differences of status between core group workers, reinforce differences between core and periphery and permit different forms of peripheral arrangements. What we have in effect been discussing is the internal implications for terms and conditions of employment between these groups, but it is clear that such realignments may also have implications for the external labour market and it is to these that we now turn.

TWO-TIER EMPLOYMENT – THE VIEW FROM OUTSIDE

7.17 This research has been principally workplace-based, and it is not surprising that the bulk of our findings reflect the view from the inside – whether that of management or trade union. At the same time, our interviews have been restricted to a relatively small number of respondents, whose initiatives and practices, if not duplicated by many other firms, are unlikely to have a major effect on the external labour market in general. However, we know from the available literature and from discussions with organisations with wide sectoral perspectives that our respondents are not unique and that the changes in working practices and work organisation which we have described can be found in many other large firms in the four sectors. Further, managers and union representatives do not think or act in isolation from the external labour market; they incorporate judgements on the market into their initiatives and they generally take into account the effects of their actions on the market. Thus it is reasonable for us to discuss here the implications of the observed shift to two-tier employment structures on the external labour market, and to do so we draw more heavily on our discussions with managers than in the preceding paragraphs.

Figure 7.1 Shifts in internal labour market structure



UNEMPLOYMENT AND LABOUR SURPLUS

718 We have already noted that management confidence about labour supply was generally a precondition for shifts towards the use of peripheral forms of labour and that this entailed either the existence of a substantial pool of unemployed workers who would be prepared to accept (say) temporary jobs or a recruitment orientation towards new sources of labour supply (mostly females for part-time work but also students, schoolchildren, etc). However, it seems equally clear that the growth of peripheral forms of employment of the types described will themselves influence the scale and composition of employment and unemployment in four main ways – volatility of employment, reduced access to core status, recruitment orientation and sectoral shift – considered below.

Volatility of employment

719 The more successful employers are in introducing numerically flexible forms of employment, the sharper will the relationship between output and employment become. This seems likely to accentuate movements in the level of employment and unemployment, leading to an increase in the prevalence of short-term unemployment and interrupted spells of employment. This increased volatility is, however, likely to be concentrated on peripheral workers. Thus the possibility arises of permanent relegation to such unstable conditions for individual workers.

Reduced access to core status

720 At the same time, this precariousness of peripheral employment is likely to be increased by the restriction of access to core status. Since one of the main aims of creating a core group is to increase the stability of employment in exchange for versatility, then firms may be increasingly unwilling to respond to changes in output by increasing the size of their core workforce. Thus barriers within the core may be reduced, but between it and the periphery they seem most likely to be increased.

Recruitment orientation

721 An alternative to reliance on the slackness of the labour market in forcing workers into non-preferred modes is to shift recruitment and selection policies towards new groups. Among our service sector respondents particularly, the scope for attracting, and the preference for taking on, groups of workers whose situation precluded, or at least reduced, their aspirations for core status seemed to be considerable. As a result, the continuation of their recruitment orientation towards domestically committed females in particular, and other groups such as students, seems certain. It is also likely to grow in strength if peripheral groups expand, again particularly in the service sector.

Sectoral shift

722 Our discussions confirmed that in the service sector there appears to be more scope for peripheral workers and a generally greater need for numerical flexibility through the use of supplementary workers because there is little possibility of stockbuilding. Further, as the sector is generally less strongly unionised, one of the main constraints on the use of peripheral labour is reduced. For these reasons, we would expect to see a growth in the prevalence of peripheral work simply as a consequence of the growth of service sector employment, in addition to a shift to such forms within both service and manufacturing sectors.

WASTAGE AND THE CORE WORKER

723 Securing long service and commitment from key employees has always been the rationale lying behind career development and white collar internal labour markets. Orientation towards a core group which may now contain manual workers (in manufacturing) had presented our engineering and food and drink respondents with a difficulty – ‘poaching’. While our respondents tended to train and build up skills which were specific to their own needs, this by no means implies that they had eradicated any element of transferability. For example, a number of our engineering and food and drink respondents

had trained maintenance craftsmen with some elements of a dual skill (as detailed in Chapter 3). Such workers were often poached by other employers who could utilise most of their competences; one apparently common loss was to equipment suppliers who look to recruit electrical/mechanical maintenance craftsmen to use as installation and maintenance engineers to service their customers. The craftsman generally receives a pay increase, staff status and a car. Our respondents clearly saw such wastage as a potential problem and cited this as one of the reasons for introducing greater pay flexibility for such workers.

Training and transitional costs

724 It was clear from our discussions that one result of the growing segmentation of the internal labour market has been to distinguish one group of workers, for whom respondents were increasingly ready to bear the dynamic costs of adjustment to change (the core group), from another, for whom they were less willing to do this. These costs include training and retraining, relocation, pay maintenance, pensions, career development costs, etc. In general, our respondents regarded these costs as a necessary expenditure to secure what functional flexibility they sought. But where it was not sought, ie from peripheral workers, there was evidence not only of a reluctance to meet them, but of a readiness to avoid them if possible – by transferring them to the workers themselves, to the state or to other employers. In practice, few peripheral workers have the capacity to oblige employers to meet these costs, and indeed it is generally agreed that in the UK the readiness of workers to invest in their own training is less than in other economies (notably the USA – see *Competence and Competition*, NEDO, 1984).

725 Training costs are the most important of these transitional costs, if we exclude consideration of the social consequences of this diversion of costs. We have already noted the cost of training as a constraint on the extent of functional flexibility and the important role played by training in achieving it. What our respondents were generally engaged in was

non-systematic job-centred training as their needs emerged for greater functional flexibility. Their practice was in many cases somewhat at odds with their aspirations, which were based on the selection and development of general and broader competencies. We found few firms moving towards systematic non-job-centred training. Nevertheless, most had recognised and had gone some way to meet their growing training needs for core workers. Beyond restricted familiarisation and on-the-job training, respondents did not generally see the need to engage in training and retraining for peripheral employees.

PROTECTIVE LEGISLATION

726 We found a considerable measure of agreement among managers and trade union respondents that these firms had been little constrained by protective legislation, and while we came across no case of evasion of statutory provisions, firms were clearly able to arrange their affairs in such a way as largely to minimise such constraints. For example, temporary contracts were almost always drawn up to limit their duration to under 12 months, which, for most of the period we were considering, was the minimum length of service for inclusion under the Employment Protection Act and also appeared to be the trigger for many collectively bargained rights at work. Similarly, in retailing, shift lengths were often designed to minimise requirements for breaks under Wages Council provisions. Thus most of these firms saw protective legislation as ground rules which they would apply but which generally left them with sufficient room for manoeuvre to achieve such flexibility as they required. Of course, we cannot go on from this to conclude that protective legislation is irrelevant; it may for example act more as a constraint for smaller firms. Nor can we detail particular aspects of legislation which may be more (or less) inhibiting than others, for our interview schedule did not permit time for such detailed questioning. What we can say is that in these firms, engaged in particular changes to their manning practices, protective legislation was widely regarded as a minor constraint.

8 FLEXIBILITY RECONSIDERED

INTRODUCTION

8.1 At the beginning of this report we outlined a number of issues which seemed to us to emerge out of the 'flexibility debate'. Since then we have outlined at length the changes to working practices which we have observed and which have been introduced to promote flexibility of one sort or another. We have also discussed these changes from the point of view of corporate priorities and strategies and from the point of view of workers, both in these firms and in the labour market as a whole. In this final chapter of the report we briefly return to those issues in the light of what has gone before.

WHY FLEXIBILITY?

8.2 In Chapter 1 we showed that the general thrust of initiatives to increase flexibility were, first, to consolidate productivity gains made during the recession and/or to increase the competitiveness of employing organisations; secondly, to enable those organisations to adjust to market changes more quickly, smoothly and cheaply; and, thirdly, to accommodate technological change more readily. In Chapter 6 we concluded that broadly this is what our company respondents had been trying to achieve, through (a) pursuing a business strategy requiring greater responsiveness of *all* factors of production to product and process change; (b) decentralising decision-making to bring it closer to where such changes would be implemented, and at once increasing the level of local discretion and responsibility for results; and (c) endeavouring to achieve such change while minimising commitment to increases in either unit labour costs or headcount (or both). The issue at stake here is, how far are the manning initiatives which we have reported likely to promote these ends?

8.3 This study has outlined changes to manning practices which are quite extensive when looking across a number of companies. When the perspective is changed and we consider how thoroughgoing such changes are within particular companies – ie how deep are they? – then the picture is much more varied. Although we came across firms who could demonstrate very radical changes to their

pre-1979 manning practices, these were in a minority. For the most part the changes which we have reported were quantitative not qualitative; they were patchy from site to site and group to group; they represented changes (sometimes substantial, but often marginal) to existing practices rather than the emergence of new forms of work organisation. The exceptions to this were of two sorts: those experiencing major capital investment incorporating new technology and those experiencing 'survival deals' in the face of imminent closure. It is interesting to note that inevitably these are the two cases detailed in much of the press and other commentary on the flexibility debate. It is also worth noting that one in every 10 of our respondents (excluding the question of functional flexibility in the service sector) reported no significant change in the flexibility of their workforce.

8.4 Although in the more labour-intensive sectors like retailing it would be reasonable to suppose that a major part of any orientation towards greater flexibility of all factors of production would devolve onto employment issues, this is not necessarily the case for the remaining sectors. Several manufacturing respondents claimed, for example, that the gains they had made to labour productivity through functional flexibility were relatively modest compared with the need to respond to, say, exchange rate fluctuations, shifts in the buying practices of major customers, shifts in the technology of competitors or shifts in the resourcing policies of their multinational parent companies. The most that can be said is that for many of our respondents securing greater flexibility of labour was a necessary part of their business strategies, but for few was it absolutely central and for none was it a sufficient part alone.

8.5 We have documented changes to working practices. In very few cases did these appear to add up to a change in the company culture, still less to evolve out of such a change. Certainly, increasing integration and functional flexibility imply a shift away from vertical hierarchies in the workplace towards a more cellular form of organisation and towards more consultative and participative modes of management. We observed little evidence of such a shift. If anything, the shift was the

other way, towards increased management unilateralism.

8.6 Clearly, the forms of flexibility sought varied from sector to sector. In the service sector, the emphasis for change was on numerical flexibility, secured mainly through the use of supplementary part-time workforces to man up relatively low-skill jobs to meet customer flows. In manufacturing, although some increases in numerical flexibility was observed, it was mostly achieved through traditional means, overtime, and the more important shift was to functional flexibility. This suggests that sectoral differences in perceived needs for flexibility are reflected in the types of flexibility being sought. So, although firms generally lack well-articulated manpower strategies, they nevertheless had a quite acute view of what their own, often unique, needs were and were shifting some way towards meeting them.

HOW PERMANENT ARE THE CHANGES?

8.7 The issue at stake here is how far can the changes observed persist if the permissive factors identified earlier (union power and slack external labour markets) recede? As we have shown, the dominant means of implementation of the changes we have observed was a short-term change in the balance of internal industrial relations power based largely on (actual or threatened or implicit) job loss. As we observed very few cases of overt 'union-busting', it is logical to assume that as demanning ceases so the balance will return. Certainly this was universally expected by our union respondents and most of the managers also. We have already pointed to the general lack of cultural changes which we observed. The point therefore is, how far can managers evolve employee relations strategies based less on sticks and more on carrots in order to sustain and further improve workforce flexibility?

8.8 As we have noted, we observed little sign of such strategies developing much beyond an embryonic stage, but their main elements are clear:

- ▲ Greater commitment to employment security;
- ▲ Trade-off between the level of worked time and more flexibility in its distribution;
- ▲ Job descriptions based less on tasks and more on competence, with an attendant agreement to deploy such competences as required;
- ▲ Pay systems which encourage the acquisition of new competences and do not inhibit their deployment;
- ▲ Harmonisation of conditions of employment for all core group workers;
- ▲ Deployment of peripheral workers where appropriate in order to cushion core group workers, not undermine them;
- ▲ Peripheral workers to be employed on *pro rata* terms and conditions;
- ▲ Greater investment in training and retraining to maintain competences;
- ▲ Joint bargaining for multi-union areas; and
- ▲ Systematic management attention to communications.

MUTUALLY EXCLUSIVE FLEXIBILITIES

8.9 The issue here is that the more firms commit themselves to achieving numerical flexibility through the use of supplementary workers on peripheral status, the less are they able to secure functional flexibility from those workers; they themselves are less willing to train for it, while the workers have little motive in supplying it. As we have seen, deskilling through new technology can fill this gap sufficiently to promote some low-level job mobility, but as the experience of some of the retailing respondents demonstrated, this horizontal job mobility at the very bottom of the internal labour market can be insufficient to promote sufficiently high standards of customer service, etc. Conversely, the reliance on overtime in manufacturing as a means of responding to short-term increases in demand, the banks' reluctance to go to six-day rosters and the retailers' use of weekend staff suggest that there are shortcomings in the numerical

flexibility of core employees, viz the relative stagnation on flexible working time.

8.10 This is at the centre of some criticisms of two-tier labour markets – that they create a pool of low-productivity, peripheral workers unresponsive to major changes in the nature of demand. In broad terms, we only found the existence of very large and growing pools of such deskilled workers in part of the retailing sector. Elsewhere such pools tended to be relatively shallow, though getting deeper. Nevertheless, where they exist, they appear to confer one-way flexibility only, and inhibit versatility in response to change.

SEGMENTATION

8.11 It is precisely to avoid such problems that our firms had been distinguishing between groups of workers in the type of flexibility they sought. The key issue here is, does segmentation necessarily imply permanent relegation to peripheral jobs for some workers? This study shows that in general terms that is the case, particularly for part-time workers. Our respondents had a very clear view of the kind of jobs which could and could not be manned by part-time labour. The reorientation of recruitment towards workers who sought part-time employment effectively locked such workers into peripheral jobs, even if their aspirations changed.

8.12 This is less true of temporary workers who, if they survived, could expect to be transferred into the permanent workforce. Indeed, the process of selection and screening implicit in such a transfer was often seen by firms as worthwhile. It may be less true of employees of subcontractors, who might

belong to the core workforce of the contractor. Finally, it may be less true of YTS trainees, for some of whom clear bridges from peripheral to core status are evident, particularly in retailing.

MUTUALITY OF INTEREST

8.13 The issue here is, how far must employers' needs for flexibility conflict with the interests of workers? As we have shown, peripheral status necessarily entails disadvantage, but this is intensified by the treatment of such workers in terms of less attractive non-pay benefits. While such treatment no doubt reduces employers' costs, it does not serve to increase the flexibility of the workforce, and as far as flexibility is concerned we conclude that it is unnecessary. The extent to which ways of redistributing the worked time of core workers can be agreed is the extent to which the use of supplementary peripherals can be reduced. This involves conflict between groups of workers, as well as the different interests of employers and workers, however.

8.14 It is in the area of enhanced functional flexibility that there exists greater mutuality of interest. Even where employers have made no significant moves towards increasing employment security and single status, etc, there remain substantial attractions for workers in acquiring new skills. Where interests conflict, they tend to be institutional ones (inter-union, staff/manual, etc) rather than between worker and employer, or pay-related (how will flexibility be rewarded?). A longer-term problem might lie in the coincidence of functional flexibility and demanning, particularly if unemployment remains high and the immediacy of competitive pressures recedes.

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APPENDIX II RESEARCH AIMS, METHODOLOGY AND SAMPLE CHARACTERISTICS

RESEARCH AIMS

1 The study is intended to take forward our understanding of the extent and nature of emerging working practices aimed at securing greater flexibility. The main parameters with which the research is concerned are change since 1980 in:

▲ Contractual relationships – involving the displacement of direct employment by commercial subcontracting and/or self-employment and the displacement of implicitly permanent employment contracts by explicitly temporary ones;

▲ Working time regimes – involving the use of supplementary part-time labour to build up manning profiles and the redistribution of worked time to fit demand more exactly;

▲ Job content – involving the systematisation of job content for peripheral jobs and the expansion and integration of core jobs;

▲ Pay systems – involving the extension of pay systems to encourage individual acquisition and deployment of skills and the displacement of wages by fees;

▲ Spatial patterns – involving the use of distanced labour.

2 The study is a comparative cross-sectoral one designed to explore the extent of innovation within these five parameters and to identify under what conditions different forms of innovation have occurred. A further aim is to evaluate the effects of these changes and to identify the prospects for further related changes. Specifically:

▲ To assess the extent to which more flexible working practices have been introduced by a sample of UK employers and on what policies these are based;

▲ To indicate under what circumstances (sectoral, labour market, locational, technological and organisational) particular forms of innovation may be found;

▲ To identify management aims in introducing such changes and to assess how far these have been achieved in practice;

▲ To identify the implications of such changes for the composition of the workforce and for employees and job-seekers;

▲ To assess the implications of such changes for the structure of the internal labour market, for resourcing practices, particularly training and retraining;

▲ To identify constraints on achieving effective changes in working practices – for example labour supply, skill shortages, industrial relations considerations, employee expectations, health and safety considerations, etc;

▲ To identify, on the basis of these findings, the main factors facilitating such changes and thus to assess how far further changes in employment strategies can be expected.

METHODOLOGY

3 The study has been conducted in four sectors: engineering, food and drink, retail distribution and financial services. It has sought information from three main sources:

▲ Published and non-published secondary sources;

▲ Interviews with the major representative organisations in each sector (eg employers' associations, trade union officials, including workplace representatives where possible, trade and training associations, etc);

▲ Interviews with 15–20 employing organisations in each sector, chosen to demonstrate a variety of market, organisational and locational characteristics.

4 *Secondary sources.* We have conducted an extensive review of the published literature relevant to these matters and background information on the four sectors. We have also conducted interviews with academics, researchers and other interested individuals who have worked in this field and/or in these sectors. We have not produced this material as a formal literature review but rather have, for the most part, interwoven it in the substantive text. The text always makes clear, however, whether secondary or primary sources are being discussed.

5 *Representative organisations.* We have conducted 14 interviews with the main representative organisations of the sectors with which we are concerned. These include the major trade unions, the main employers'

associations (particularly where they have a bargaining role) and various other trade associations, etc.

6 *In-company interviews.* We have conducted interviews in 74 organisations but have withdrawn two for reasons of unreliability, so the bulk of the study is derived from interviews with 72 firms whose characteristics are discussed below. Such interviews were conducted at establishment level, divisional level or centrally, whichever was the most appropriate in each case; for example, in banking no purpose would be served by conducting interviews at branch or regional level, while among some of our larger manufacturing conglomerates no purpose would be served by conducting interviews at any other than establishment level. All interviews were conducted using a semi-structured discussion guide. The bulk of the interviews were with personnel managers/directors; in many cases we also spoke to production, training and technical managers/directors; it was possible in only a few cases to interview local trade union representatives and it would be unwise to view their responses as necessarily representative of all the trade unions in the sectors studied.

SAMPLE CHARACTERISTICS

7 The main criteria which we applied to the selection of company respondents were:

▲ That they were relatively large. None of our respondents employed fewer than 500 workers. This was agreed with the sponsors of the study on the simple grounds that small firms are by their very nature more 'flexible' than large, more formal, more bureaucratic organisations. As we were concerned with firms' attempts to increase their flexibility, it seemed logical to concentrate on those who did not already display such characteristics;

▲ That they had been required to adjust to substantial change in product market, competitive conditions and/or technology since 1980. Clearly, 'substantial' means something different for each sector; nevertheless, we selected firms whom we expected to have been obliged to make adjustments which to them seemed relatively substantial. Thus their flexibility in the face of such a need could be assessed and discussed.

8 Tables II. 1-4 show the composition of the sample of respondents, sector by sector.

Table II. 1 Composition of food and drink sector respondents

No of firms participating		Employment at summer 1985				
16		f/t	62,397			
		p/t	19,360			
		Total	81,757			
LOCATION						
Multisite	Midlands	East Anglia	Southeast	Northwest	Southwest	
8	4	1	1	1	1	
(50%)	(25%)	(6%)	(6%)	(6%)	(6%)	
EMPLOYMENT CHANGE SINCE 1980						
Increased		Static			Decreased	
1		1			14	
(6%)		(6%)			(88%)	

Table II. 2 Composition of engineering sector respondents

No of firms participating		Employment at summer 1985	
Mechanical Eng.	11	f/t	77,571
Electrical/Electronic Eng.	6	p/t	9,840
Office Machinery, etc	1	Total	87,411
Instrument Eng.	1		
Total	19		

LOCATION					
Multisite	South	Midlands	North	Scotland	Wales
6	3	6	1	2	1
(31%)	(16%)	(31%)	(5%)	(10%)	(5%)

EMPLOYMENT CHANGE SINCE 1980		
Increased	Static	Decreased
1	1	17
(5%)	(5%)	(90%)

Table II. 3 Composition of retail distribution sector respondents

No of firms participating		Employment at summer 1985	
Food retailing	5	f/t	100,355
Non-food retailing	11	p/t	125,206
Department & chainstores	4	Total	225,561
Total	20		

LOCATION	
Multisite	Southeast only
18	2
(90%)	(10%)

EMPLOYMENT CHANGE SINCE 1980		
Increased	Static	Decreased
12	4	4
(60%)	(20%)	(20%)

Table II. 4 Composition of financial services sector respondents

No of firms participating		Employment at summer 1985	
Banking	4	f/t	232,784
Insurance	5	p/t	32,349
Building societies	4	Total	265,133
Other	4		
Total	17		

LOCATION			
Multisite	Southeast	North	East Anglia
11	4	1	1
(65%)	(24%)	(6%)	(6%)

EMPLOYMENT CHANGE SINCE 1980		
Increased	Static	Decreased
6	6	5
(35%)	(35%)	(30%)

APPENDIX III SECTORAL TRENDS IN BUSINESS AND EMPLOYMENT

INTRODUCTION

1 Here we summarise key business and employment trends in the four sectors from which our case studies are drawn. The summary draws primarily on published data and research, and for more detailed information the reader is referred to the sectoral bibliographies. An up-to-date account of trends in the four sectors (as well as the economy as a whole) is provided in the latest *Review of the Economy and Employment* (1985 – Volume 1) from the Institute of Employment Research at the University of Warwick. This includes sectoral forecasts to 1990.

FOOD AND DRINK: INTRODUCTION

2 We define the sector as order III of the 1968 Standard Industrial Classification (but excluding MLH 240: Tobacco), or as classes 41 and 42 of the 1980 SIC (excluding Group 429: Tobacco).^{*} Further, we follow Clark, (1984) and divide the sector into three broad subsectors:

- ▲ Cereals processing (MLHs 211–213, 219, including animal and poultry foods)
- ▲ Other food and soft drink processing (MLHs 214–218, 221, 229, 232)
- ▲ Drink production (MLH 231, 239)

FOOD AND DRINK: BUSINESS TRENDS

Output

3 The sector as a whole (including tobacco) accounts for about 15 per cent of manufacturing output. There is some inherent stability in the sector due to the 'essential' nature of its products, and although this generates a tendency towards chronic overcapacity it has also meant that it has weathered the recent recession rather better than much of the rest of manufacturing (see Figure III. 1). Nevertheless, there was a decline in the value and volume of food and drink consumption (and some 'trading down')

during the recession as net disposable income fell, especially in the low-income groups, whose proportionate expenditure on food and drink is relatively high (NEDO 1983a). Alcoholic drink was particularly badly hit.

4 In the longer term, inherent limits to the growth of the domestic market are set by low population growth rates and the tendency for the proportion of expenditure spent on food to fall as *per capita* incomes rise. (The percentage of household incomes spent on food fell from about 20 per cent in 1970 to 15 per cent in 1983.) Much past growth can be attributed to the substitution of processed for fresh food (facilitated by the development of food preservation techniques) and the accompanying demand for new products. This process of substitution may be reaching its limits, with a current shift towards fresh and chilled convenience foods (at the expense, particularly, of canned products) and concern with health and the nutritional properties of processed foods. A large-scale return to unprocessed or home processed foods is unlikely given demographic and social trends (working mothers, single parents, decline in traditional family meals, etc), but it seems that any future substitution must be between different types of processed foods. Given these demand constraints, there is an increasing emphasis in the industry on product innovation and developing the consumption of foods with a higher value-added component.

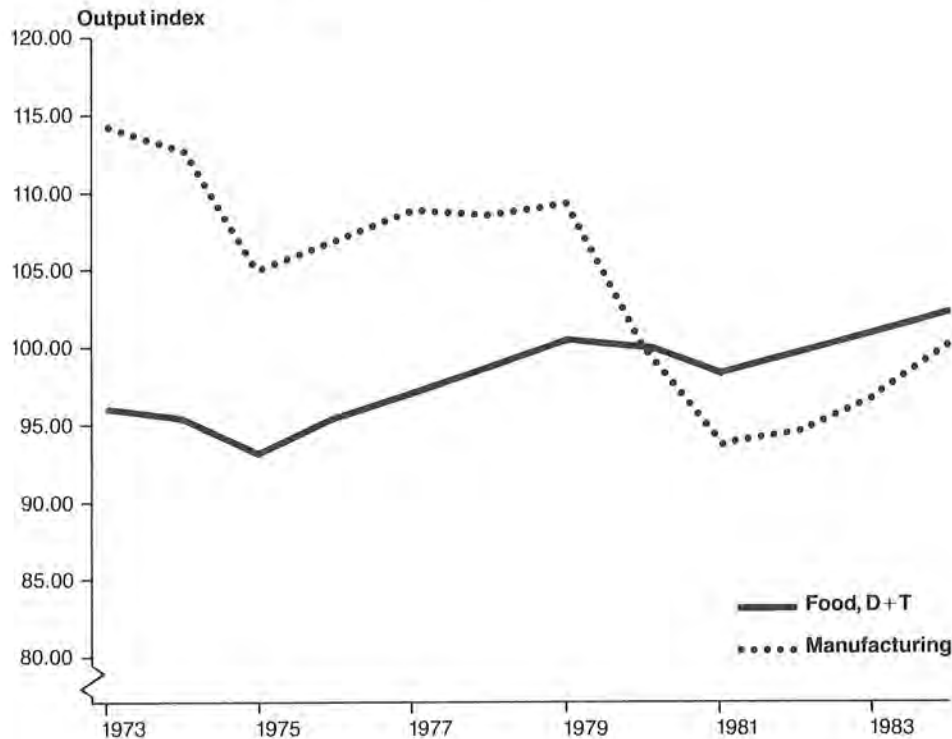
5 Looking at the three subsectors:

▲ Cereals processing has shown slow but steady growth in output, although the mix of output has changed (a decline in the importance of bread and flour confectionery and grain milling and a growth in the importance of animal and poultry foods);

▲ Other food processing has shown faster

^{*} Most official data are now in the 1980 SIC form and definitional differences prevent strict comparison with the 1968 SIC (in particular the SIC 1980 does not allow us to divide the sector into three subsectors above). The main differences arise from the inclusion in the 1980 SIC of parts of what was 'retail distribution' (notably small bakeries) and 'wholesale distribution' (notably slaughterhouses) in the 1968 SIC. Further difficulties arise because some data series are presented for food, drink and tobacco as a whole and do not allow us to separate out tobacco.

Figure III.1 Food, drink and tobacco: output trends (1980=100)



Source: CSO

growth in output, partly due to a substitution of demand from cereals in the form of increased consumption of meat and fish products. This subsector also includes a significant postwar growth in the market for soft drinks (partly substituting for milk);

▲ In the drinks subsector, the 1960s and 1970s saw rapid output growth concentrated in spirit distilling (associated with duty changes and export growth), with a relative decline in brewing and malting (although brewing experienced an output growth in absolute terms until the peak in 1979). Recessionary decline in demand and foreign competition (in spirits) has severely hit output since 1979.

Investment and technological change

6 Postwar trends in investment in plant and

machinery show: fairly constant levels of investment in cereals processing throughout the period; steady growth in investment in other food processing followed by decline in the late 1970s; rapid growth in investment in drinks production during the 1960s and early 1970s followed by severe recent cutbacks.

7 Although, taking the sector as a whole, investment in new plant and machinery has held up reasonably well in recent years compared with the rest of UK manufacturing, NEDO (1983a) showed that the sector in the UK has had much lower levels of investment and value added per head than its major overseas competitors and that it is less capital-intensive than its counterparts abroad. Clark (1984), however, quotes recent research showing that investment in the industry as a percentage of value added is higher than in the US or Germany, so that the observed low growth of total factor productivity in the UK

cannot be attributed to a general shortage of investment. Recent cutbacks in investment have been particularly marked in brewing, as a result of declining consumption and overcapacity.

8 Turning to technological trends, there have been three broad areas of change, of which only the third has major employment implications. The first two trends are:

▲ Product developments. A massive increase in the number of new products since the 1950s, mainly minor variations on old themes (major changes in the past have been in frozen foods, 'instant products', 'fillers', new protein sources). Many new 'products' are in fact packaging changes, with a recent trend towards a larger number of pack sizes and combinations.

▲ Preservation techniques. Major recent developments have been in: drying, notably accelerated freeze drying (still to reach its full application potential); freezing; pasteurisation and canning, especially the development of aseptic canning and UHT sterilisation of milk; antibiotics and irradiation – this is the biggest area of likely future development. Development to date has been slowed by legislation and safety considerations as well as lack of investment funds – initial capital costs are high.

9 The third technological development, of greater relevance to employment, is process development. This has been 'incremental' rather than revolutionary – ie involving the same products but with more automated processes. The area with the biggest implications is that of computerised process control. By 1982 food and drink manufacturing had a higher proportion of establishments using microelectronics than any other sector save electrical and instrument engineering. The main applications have been in the control of raw material input specifications and in mixing, sterilising and freezing operations. The main results have been savings in labour requirements, better control of production processes and improved product consistency. Microcontrols have been particularly prevalent in the brewing industry with large plants and a few standardised products. As noted in NEDO (1983a), however, recent developments have enabled significant steps

forward in production flexibility in subsectors which do not share these characteristics of brewing. In particular, the growing fragmentation and diversity of consumer tastes have led to a move away from 'standard' products and rendered unobtainable the economies of scale from the long runs for which much of the traditional capital-intensive plant and equipment was designed. The latest developments, however, permit batch production as efficient as traditional continuous production – the matching of new developments in vision sensors with computer control allows for robotic systems which can be programmed for rapid, frequent line changeovers.

10 A recent area of process development is biotechnology. The technology exists but widespread application will be slow – unlike microelectronics it does not generate major short-run cost savings, and initial R&D costs and capital outlays are very high. Its overall effects on employment are likely to be small (although there will be extra requirements for some high-level scientific skills).

Market structure, concentration, etc

11 There has been in recent decades a gradual erosion of the 'free market' throughout the food chain, with tightening contractual relationships:

▲ Between food processing and farming, as efficient utilisation of capital-intensive processing plant requires guaranteed uniform supplies of high-quality inputs from mechanised agriculture; and

▲ Between food processing and distribution, as the growing oligopoly power of the multiple retail chains and the development of differential discounting, own label products, etc have shifted power (and margins) from producer to distributor (see Burns *et al* 1983).

These trends have intensified competition in the industry and contributed to the increasing concentration of food and drink production in the hands of a small number of large firms (see NEDO 1983a), and the industry is now the most concentrated in Europe (Clark 1984).

This trend towards greater concentration is not universal; there are exceptions (eg frozen food) and, despite the trend, there is still a proliferation of small companies (over 5000 with fewer than 200 employees).

Foreign trade

12 International trade in manufactured food and drink is relatively small, but increasing. In food processing, the UK has had a long-term negative trade balance. Imports have been close to 20 per cent of domestic output since the mid 1950s (Clark 1984). Import penetration was on a downward trend until entry into the EEC in 1973 led to a once-for-all increase in the level of imports, after which it resumed its downward trend (the entry to the EEC itself gave rise to major changes in Britain's traditional trading patterns and an encouragement to greater self-sufficiency in food production).

13 Recent (post-1978) figures, shown in Table

III. 1, calculated at IMS show a roughly constant 'competitiveness ratio' of about -0.4 and constant import penetration (as a proportion of final demand).

14 In drinks, the trade balance has been positive over the same period, due to the good export performance of spirits. The position has, however, worsened since the onset of the recent recession and the IMS figures, given at Table III. 2, show a steadily worsening competitiveness ratio since 1978 and increasing import penetration.

FOOD AND DRINK: EMPLOYMENT TRENDS

Total employment

15. Food, drink and tobacco account for 11 per cent of manufacturing employment. Postwar employment has varied proportionately less than output, and in the drinks subsector in

Table III. 1 Competitiveness and import penetration: manufactured food

	1978	1979	1980	1981	1982	1983
Competitiveness ratio (1)	-0.40	-0.48	-0.41	-0.44	-0.46	-0.41
Import penetration (%) (2)	16.4	16.9	15.5	15.9	16.1	16.1

Notes:

(1) This is defined as (exports - imports)/(exports + imports), with movement towards +1 indicating an improvement, and movement towards -1 a deterioration, in the overseas trade position of the industry

(2) This is imports expressed as a proportion of total demand (including intermediate input demand)

Source: IMS calculations from CSO *Commodity Flow Accounts* 1984

Table III. 2 Competitiveness and import penetration: alcoholic and soft drinks

	1978	1979	1980	1981	1982	1983
Competitiveness ratio (1)	0.35	0.24	0.26	0.19	0.21	0.13
Import penetration (%) (2)	12.2	14.8	13.9	16.4	16.9	17.7

Notes:

As Table III. 1

Source: IMS calculations from CSO *Commodity Flow Accounts* 1984

particular employment might have been expected to have been higher given the large output increases recorded. In the sector as a whole, the onset of major employment decline has occurred later and to a lesser extent than in the rest of manufacturing.

16 Figure III. 2 shows recent employment trends (SIC 1980). It can be seen that the major employment decline occurred in the early 1980s, with 1985 employment down 17 per cent on the 1979 level (and 23 per cent down on the 1971 level). Recent employment decline is, however, rather less dramatic when tobacco is excluded (employment in tobacco manufacture fell by 30 per cent over 1981-85).

17 Looking at detailed subsectoral employment trends, we can break the recent past into two periods: 1971-81 (using 1968 SIC data) and 1981-85 (using 1980 SIC data).

1971-81: The largest employment declines

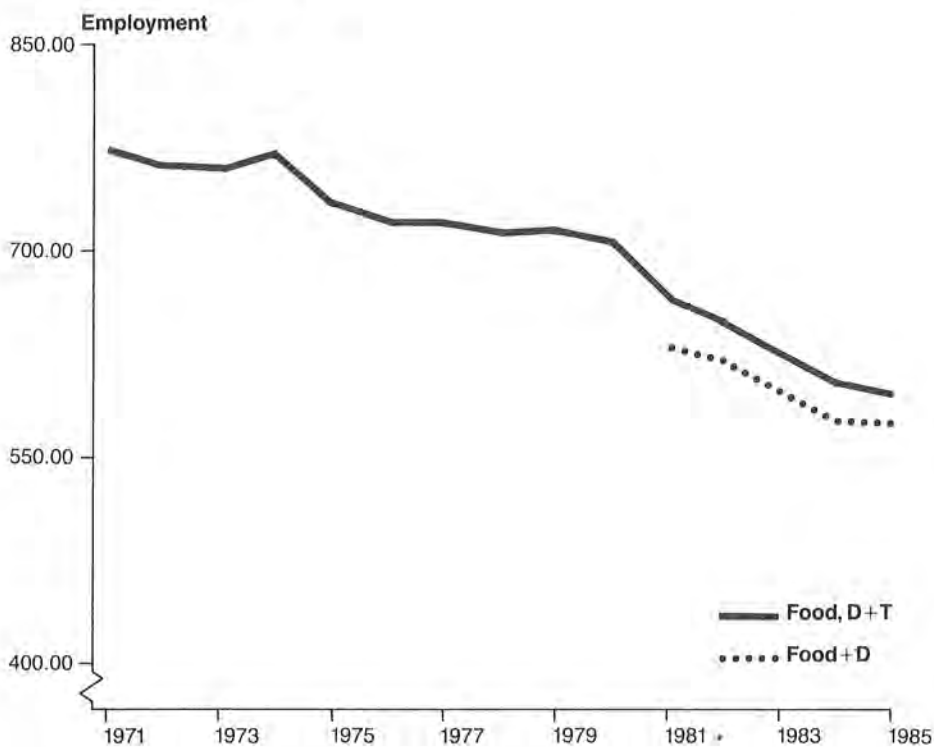
were in cereals processing (26 per cent decline), with grain milling and bread and flour confectionery performing rather worse than biscuits and animal and poultry foods.

In other food processing, employment fell by 12 per cent, with sugar, milk and milk processing and soft drinks recording the largest fall, while bacon, meat and fish experienced only a 7 per cent decline and 'foods not elsewhere specified' (including coffee, margarine and various snack foods) increased in employment.

In drink production, employment fell by only 6 per cent (with brewing and malting recording a decline of 10 per cent and spirits a growth of 3 per cent).

1981-85: Over this period the subsectors with the largest proportional employment declines were: sugar and sugar by-products (-26 per cent); spirits (-20 per cent);

Figure III.2 Food, drink and tobacco: employment trends (thousands)



Source: *Employment Gazette* (various issues)

brewing (-15 per cent); and fish processing (-14 per cent). Subsectors experiencing better than average employment performances were meat and meat products (-4 per cent) and milk and milk products (-5 per cent).

Productivity

18 While most of the employment trends documented above can be explained in terms of the output trends in the relevant subsectors, productivity growth rates have varied somewhat between the subsectors (see Clark 1984) and particularly notable was the rapid growth of productivity in the drinks subsector in the 1960s and 1970s. Growth rates in labour productivity in the sector as a whole have paralleled those in the rest of manufacturing (albeit running at a rather lower level until the early 1970s), but food processing, in particular, was unusual in not experiencing a fall-off in the rate of growth of productivity in the mid 70s. As argued earlier, it is at least debatable whether the lower levels and rates of growth of labour productivity, compared with those experienced in the food and drink industry abroad, can be attributed to a relative lack of investment. It is notable that employment in the sector has been particularly unresponsive to short-run demand fluctuations, suggesting that the international productivity performance might have been better were it not for a persistent tendency to overmanning.

Composition of employment

Female and part-time employment

19 A distinctive feature of recent trends has been the fact that the industry has not shared in the general shift towards female and part-time employment observed for industry and commerce as a whole, although compared with other manufacturing industries it remains a relatively large user of female and part-time workers.

20 Thus, whereas the proportion of women employed in all industries and services rose over the period June 1974–March 1985 from

40.1 per cent to 44.4 per cent, in food, drink and tobacco the proportion has remained roughly constant (41.6 per cent in 1974, 41.0 per cent in 1985). Similarly, the proportion of employed females who are part-time rose in the economy as a whole from 38.3 per cent to 46.3 per cent over the same period, whereas in food, drink and tobacco the proportion was lower and again remained roughly constant (37.9 per cent in 1974, 37.3 per cent in 1985).

21 These differences are associated with the increased tendency towards automated process control and packing, with biggest impacts on employment in the areas where most women are traditionally employed. Further, the move towards continuous operating and increasingly capital-intensive processing may have led to the elimination of some of the part-time shifts ('twilight' shifts, etc) previously found in the sector. It is interesting to note that the density of females and part-timers varies considerably between the various subsectors, with the lowest proportion of women being found in the highly capital-intensive brewing (19.7 per cent) and sugar (23.1 per cent) subsectors and the highest proportions in fish processing (61.3 per cent), cocoa, chocolate, sugar confectionery (52.0 per cent) and fruit and vegetable processing (50.6 per cent).

22 Similarly, the lowest proportions of women employed who are part-time are to be found in spirits (9.1 per cent), brewing (16.5 per cent) and sugar (16.7 per cent), and the highest proportions in bread, biscuits and flour confectionery (55.8 per cent), cocoa, chocolate, sugar confectionery, etc (55.8 per cent) and fish processing (54.8 per cent).

Occupational structure of employment

23 The main trends here are centred around technology: as the industry has become more highly automated the occupational structure is shifting towards technical and scientific workers, with higher-level skills required from much smaller numbers of process operatives. At least this is the picture which emerges from the companies studied, and from discussions with industry experts and representatives. The only statistical data readily available break

Table III. 3 Food, drink and tobacco: trends in occupational structure

Percentage of work-force in admin, technical and clerical categories	1977	1978	1979	1980	1981	1982	1983	1984
Food, drink and tobacco								
1968 SIC	24.2	23.5	23.1	—	23.5	24.1	22.2	
1980 SIC							21.9	23.2
All manufacturing								
1968 SIC	27.6	28.4	28.6	—	29.6	30.6	28.8	
1980 SIC							28.7	28.4

Source: *Employment Gazette* (various issues)

employment in the industry down into two broad categories:

- (a) Administrative, technical and clerical
- (b) Operatives.

And Table III. 3 shows no evidence of any clear recent shift in the balance of employment between these two groups in food, drink and tobacco.

ENGINEERING: INTRODUCTION

24 'Engineering' is defined as the following four classes of the 1980 SIC:

- (1) Class 32: Mechanical engineering
- (2) Class 33: Manufacture of office machinery and data processing equipment
- (3) Class 34: Electrical and electronic engineering
- (4) Class 37: Instrument engineering

All the 'engineering' employers studied fell wholly or partly into one or more of the above four classes, although a minority had part of their activity classified under one of the other metals and engineering-related sectors not included in this brief review (viz: class 22: Metal manufacturing; class 31: Metal goods not elsewhere specified; class 35: Manufacture of motor vehicles and parts thereof; Manufacture of other transport equipment).

25 'Engineering' is the most heterogeneous of the four sectors studied and fewer general statements can be made about business and

employment trends there than for the other three sectors. Accordingly we confine ourselves to brief descriptive outlines of the relevant data series and for more detailed analysis and explanation the reader is referred to the sectoral bibliography.

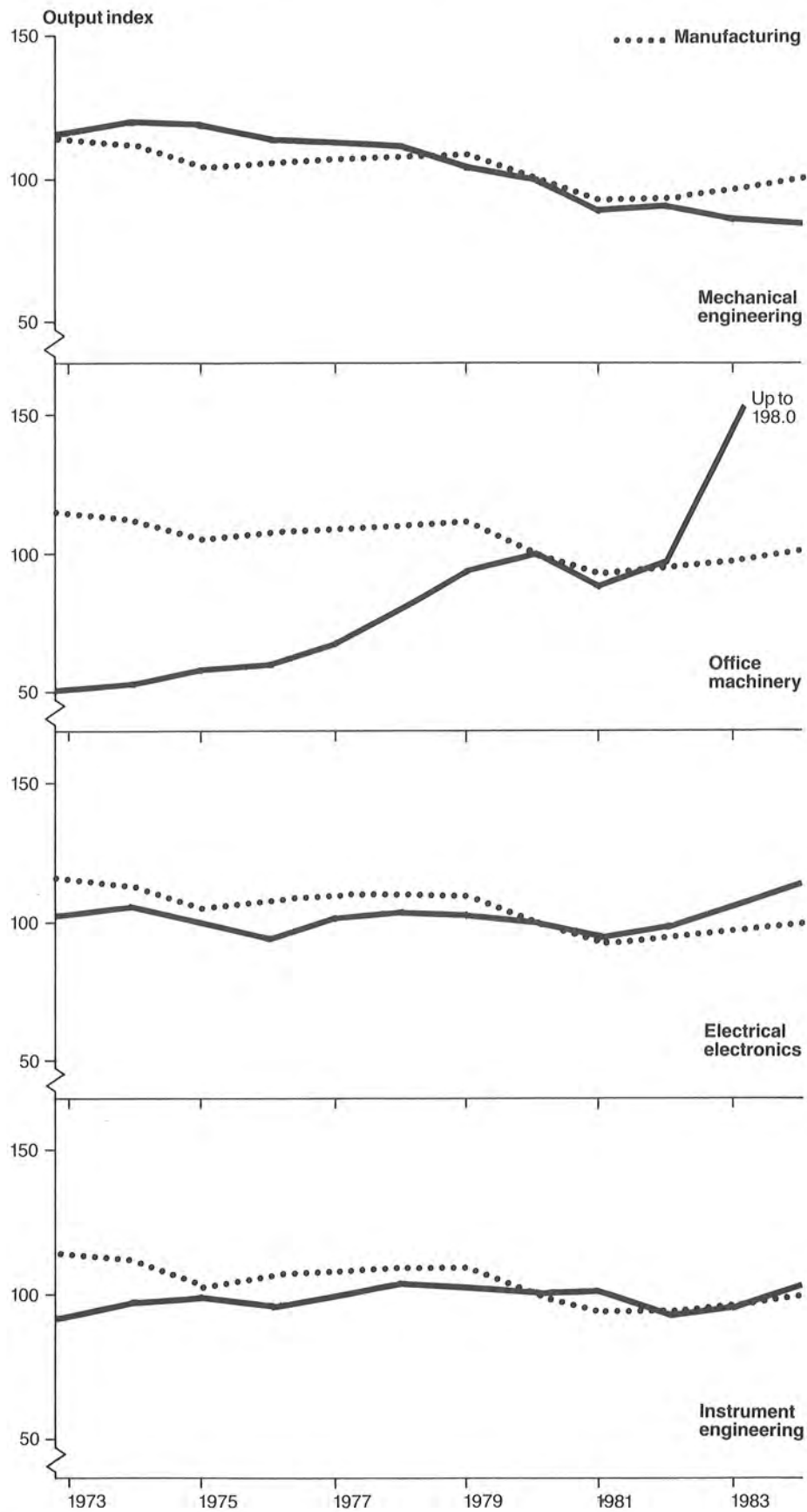
ENGINEERING: BUSINESS TRENDS

Output

26 The four subsectors account for about 27 per cent of manufacturing output (1982, gross value added).

27 Figure III. 3 shows a marked difference between the performance of the four subsectors. In particular, mechanical engineering was worse hit than the other three subsectors during the 1979–1981 recession and has failed to recover since. Indeed, as shown in the EEF 1985, in electrical and instrument engineering (our subsectors 2–4 combined) output has grown since 1981 by 33 per cent in volume terms and 20 per cent in value terms (up to the fourth quarter of 1984), whereas output in mechanical engineering has continued to decline. Further, the electrical and instrument subsectors combined are now larger than mechanical engineering in output (and employment) terms, which reverses the position of the 1970s. Most forecasts predict continued stagnation for mechanical engineering, or at best slow growth, dependent on successful export performance.

Figure III.3 Engineering: output trends
(1980=100)



Source: CSO

28 In the remaining subsectors, the best output performance has been in office machinery and data processing equipment (together with the electronics parts of the electrical and electronic engineering subsector), which has had sustained and rapid growth of output for over a decade interrupted only by a slight recessionary 'dip' in 1980. All the individual activities within this subsector have shared in this growth, although the scale of the post-1981 increase is particularly attributable to the exceptionally rapid output growth experienced by producers of electronic data processing equipment. Most forecasts imply continued healthy growth perhaps at a slower rate than in the past few years, although recent poor results from major British electronics companies throw up some questions on this score.

29 As can be seen from Figure III. 3, the rest of the electrical subsector, together with instrument engineering, has experienced output trends rather similar to those of manufacturing as a whole and output has now recovered to the point where it is equal to, or slightly above, its prerecessionary level. Again, however, the experience has been patchy between different activities in the subsector.

30 These data bring out the difficulty of making general statements with regard to the pressures exerted by business trends on manning practices in such a diverse sector. Again, then, the reader is referred to the detailed studies listed in the bibliography for greater insight into these pressures. As a general point, however, it is clear that compared with the food and drink sector, which is a producer of 'essential' consumer goods, engineering is much more vulnerable to fluctuations both in the domestic economy

(much of the sector's output is an intermediate input to other sectors and highly sensitive to investment spending) and internationally (a much higher proportion of the sector's output is traded than is the case for food and drink).

Investment and technological change

31 Unfortunately, real trends in capital investment for the detailed engineering sectors examined here cannot be obtained from the published official statistics. Some trends in current price terms are, however, available and Table III. 4 shows recent trends in gross domestic fixed capital formation for two broad engineering sectors, mechanical engineering and metal goods (SIC 32 and 31) and electrical and instrument engineering (SIC 33,34,37).

32 Thus over the decade 1973-83, when real fixed capital formation (at 1980 prices) in manufacturing as a whole fell by 32 per cent, metal goods and mechanical engineering reduced their share of that total from 14.3 per cent to 12.5 per cent (at current prices), while electrical and instrument engineering increased their share from 8.2 per cent to 12.1 per cent. Broadly, then, the divergence of experience between the heavy 'metal-bashing' end of the sector and the electronics and 'high-technology' end reflected in the output trends is also found, as might be expected, in the investment trends.

33 In looking at technological developments in the sector and their impact on employment, we are again handicapped in making general summary statements by the heterogeneity of the sector. Further, as Freeman (1985) shows, the rate of diffusion of new technologies in the

Table III. 4 Gross domestic fixed capital formation (current prices) as percentage of total manufacturing

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Mechanical engineering and metal goods (%)	14.3	14.3	14.5	14.5	14.8	15.5	15.3	14.6	14.2	13.3	12.5
Electrical and instrument engineering (%)	8.2	8.4	7.8	7.1	7.9	8.5	8.3	8.7	10.4	10.7	12.1

Source: CSO

sector is by no means uniform. 'Whilst the evidence on technical change points to enormous improvements in "best practice" productivity, there is still a wide gap between "best practice" and "average" productivity, throughout the industries discussed in this volume' (Freeman 1985, p xii). Freeman looks in detail at recent technological developments which have taken place in mechanical engineering – in machining (NC and CNC machines), in design (CAD and CAD/CAM applications), in assembly (robotics) and in the integration and 'systemation' of such changes into 'machining centres' and 'flexible manufacturing systems'. All these changes have important implications for the size and occupational composition of the workforce in engineering (as well as for the 'flexibility' issues considered in this report) and, as shown below, despite the relatively slow and patchy diffusion of these changes in the engineering industry, their effects on the composition of employment are already clearly discernible in the aggregate statistics.

34 Soete (1985) conducts a similar exercise for the technological changes in products and processes in the electronics subsector. The Freeman and Soete studies show clearly the difference between the mechanical and related subsectors, and the electronics and related subsectors in this report. In particular, it would seem that the gap noted above between 'best' and 'average' practice is much less marked in the electronics industries.

'This points to a basic weakness in the British post-war economic performance: the failure to keep pace in the "mechatronic" technologies with the world leaders in export markets... British industry has on the whole kept fairly close to the leaders in some of the electronic technologies, and has even led the field in some limited areas, especially in military electronic systems. But Britain has lagged in the widespread and efficient application of electronics to the mechanical engineering and vehicle industries... This applies both to products and to processes... It is in this area of "mechatronics" that countries such as Japan and Sweden have excelled with beneficial effects on overall economic performance and employment,' (Freeman 1985, p xiii).

We have already seen how these differences between the subsectors of engineering are reflected in the investment and output trends. We will see below how they are also reflected in the employment and productivity trends.

Foreign trade

35 Foreign trade plays a dominant role in the engineering industry. Both exports as a proportion of British engineering companies' sales and imports as a proportion of domestic demand have shown a tendency to rise over time. By the late 1970s, export's share of sales was nearly 40 per cent in electrical engineering, over 40 per cent in mechanical engineering and nearly 60 per cent in instrument engineering (sectors defined according to SIC 1968). Similarly, import penetration had risen to over a third in mechanical engineering, nearly 40 per cent in electrical engineering and over 50 per cent in instrument engineering. All of these percentages are well above the average for manufacturing as a whole (see Freeman 1985).

36 Recent (post-1978) trends are shown in Table III. 5 for the four subsectors in our study (1980 SIC definitions and a different method of calculation cause our figures to differ from Freeman's). In mechanical engineering the table shows a sharp deterioration in the competitiveness ratio over 1978–1983 (attributable both to a growth in imports of 16 per cent in real terms and to an even more drastic decline in exports of 21 per cent) and a further sharp increase in import penetration. In office machinery and data processing equipment the same trends are even more marked (although in this case the deterioration in the competitiveness ratio can be attributed to a reasonable export performance – 37 per cent real growth over the period – being outstripped by a real growth in imports of 114 per cent). In electrical and electronic engineering the story is similar (decrease in competitiveness, growth in import penetration), but in this case the growth in exports over the 1978–83 period was small (1.4 per cent) while imports doubled. In instrument engineering trade performance (according to both measures) also deteriorated – the pattern was similar to that in electrical and electronic engineering (negligible growth in exports while imports almost doubled).

Table III. 5 Competitiveness and import penetration

	MECHANICAL ENGINEERING					
	1978	1979	1980	1981	1982	1983
Competitiveness ratio	0.37	0.30	0.34	0.32	0.29	0.20
Import penetration (%)	21.2	24.4	25.8	29.7	30.1	29.6
	OFFICE MACHINERY AND DATA PROCESSING EQUIPMENT					
	1978	1979	1980	1981	1982	1983
Competitiveness ratio	-0.08	-0.07	-0.09	-0.19	-0.17	-0.23
Import penetration (%)	79.5	77.2	78.5	85.4	76.4	69.7
	ELECTRICAL AND ELECTRONIC ENGINEERING					
	1978	1979	1980	1981	1982	1983
Competitiveness ratio	0.17	0.05	0.04	-0.05	-0.07	-0.16
Import penetration (%)	23.1	26.3	28.3	33.9	37.7	38.0
	INSTRUMENT ENGINEERING					
	1978	1979	1980	1981	1982	1983
Competitiveness ratio	0.08	0.06	0.07	-0.01	0.0	-0.12
Import penetration (%)	27.0	28.7	29.5	32.2	33.9	40.7

Sources and definitions: See Table III. 1

37 Similar trends are revealed in the EEF's analysis (EEF 1985), and the EEF figures show that the deterioration in engineering's trade performance continued during 1984 (with an improvement in the fourth quarter due to the low value of the pound). It is clear that the worsening trade performance in recent years has been due particularly to the electrical and instrument engineering subsectors. Mechanical engineering still retains a shrinking but positive net trade balance but the rest of the sector has been in deficit since 1980, due largely to trade with North America and Japan.

ENGINEERING: EMPLOYMENT TRENDS

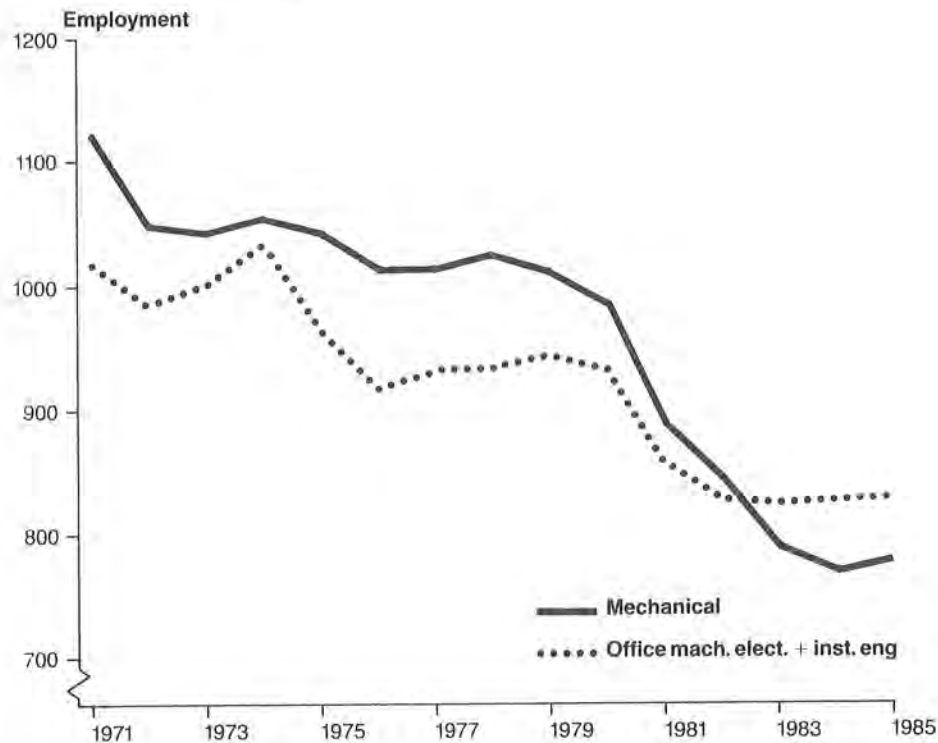
Total employment

38 The engineering sector accounts for 30 per cent of total manufacturing employment. Although the absolute trend has been downwards, engineering as a whole has slightly increased its share of total manufacturing employment (that share was

27 per cent in 1971), though the share of mechanical engineering was around 14 per cent in both 1971 and 1985 while the share of the other three subsectors combined grew from 13 per cent to 16 per cent over the period. Figure III. 4 shows the absolute trends in mechanical engineering, and office machinery, electrical and instrument engineering combined over 1971-85.

39 The data reflect clearly the trends observed earlier for output - ie the declining relative importance of employment in mechanical engineering, to the extent that the electrical, instrument and office machinery sectors now account for greater numbers of employees than mechanical engineering. The figures for these three subsectors are available individually back to 1974 only, but they show that the three non-mechanical subsectors have fared rather differently over the period. The smallest of the three (office machinery and data processing equipment) has had the best employment performance, with 1985 employment 1 per cent up on the 1974 level (after experiencing a fall during the late 1970s/early 1980s) although, as we saw earlier, this was a period during which the subsector's output level rose

Figure III.4 Engineering: employment trends (thousands)



Source: *Employment Gazette* (various issues)

threefold. Instrument engineering, although experiencing a slight recovery in employment in the last year or two, still records an employment level in early 1985 which is 16 per cent down on that of 1974. The largest of the three subsectors, electrical and electronic equipment, has fared only marginally better than mechanical engineering, with an employment fall of 22 per cent over 1974–1985 (compared with a 26 per cent fall in mechanical engineering).

Productivity

40 We will not present here a detailed account of productivity trends in the various engineering subsectors. Recent trends are given in EEF 1985 and EITB (Economic and

Industry Monitor), and for a more in-depth, historical treatment the reader is referred to Freeman (1985) and Soete (1985). Generally, and as shown in EEF 1985 (who give recent figures of gross value added per person), productivity in engineering follows the usual pro-cyclical pattern and is currently on an upward trend in all the main subsectors. Differences in rates of productivity growth between the subsectors are broadly correlated with differences in rates of growth of output – thus labour productivity has grown most rapidly in the electronics subsector and least rapidly in the mechanical subsector, and it can be seen that had mechanical engineering achieved the rates of productivity growth manifested by the electronics subsector, the shake-out of jobs reported in the previous sectors would have been even larger. As

suggested by Freeman (1985), the 'average' engineering firm in each sector is operating well below 'best practice' productivity levels, which suggests significant further scope for job loss, even with increased output.

operation, while many of the traditionally 'female' jobs in the industry – packing, assembly, catering, cleaning, etc have been those most subject to automation or most affected by the contracting out of support and ancillary services.

Composition of employment

Female and part-time employment

41 Like food and drink, neither engineering as a whole nor most of its main subsectors have experienced the recent growth in female and part-time employment. Indeed, as shown in Table III. 6, in all four subsectors except mechanical engineering (where it remained constant), the proportion of women employed declined over the period since 1974. The decline was particularly notable in electrical and instrument engineering, traditionally large users of female labour. Further, in instrument, electrical and electronic engineering the proportion of female part-timers declined, in office machinery and data processing equipment it remained constant and only in mechanical engineering was there a growth in part-time female work.

42 As with food and drink, a number of factors may have been responsible, but it seems likely that some role will have been played by the increasing capital intensity of production processes and moves towards continuous

Occupational structure of employment

43 For a detailed account of trends in the occupational structure of employment in the various engineering subsectors, readers are referred to the EITB sector profiles listed in the bibliography. For the industry as a whole, the major recent changes in the occupational structure are primarily associated with technological change, both as individual firms and subsectors become more automated and skill-intensive and as the more automated and skill-intensive firms and subsectors become more important in terms of their weighting within the industry (Freeman 1985).

44 As Fidgett (1984) has shown, employment in all but one of the eight broad occupational categories recognised by the EITB declined over the period since 1978, the exception being professional engineers, scientists and technologists (which grew by over 40 per cent over the 1978-84 period), and this is the occupational category in which engineering

Table III. 6 Engineering: trends in female and part-time employment

	PERCENTAGE OF EMPLOYEES FEMALE		PERCENTAGE OF FEMALE EMPLOYEES PART-TIME	
	June 1974	March 1985	June 1974	March 1985
Mechanical engineering	15.6	15.8	21.8	28.6
Office machinery and data processing equipment	28.7	25.0	14.4	14.6
Electrical and electronic engineering	40.8	32.5	26.9	17.5
Instrument engineering	38.6	32.1	25.7	24.9
All industries	40.1	44.4	38.3	46.3

companies have been particularly prone to report shortages in recent years. All the other categories have fallen in employment terms since 1978, and the less skilled an occupation is, the more quickly employment in that occupation has declined—thus the occupations declining slowest are managers and professional and administrative staff and those declining the fastest are operators and clerical and office workers. Table III. 7 shows the 1984 occupational breakdown of the industries in scope to the EITB (this includes rather more than the four subsectors studied here—notably aerospace, vehicles and metal goods).

45 The EITB data (see Fidgett 1984) show clearly the differences in occupational structure between the 'high-technology' end of the sector (electronics, office machinery and data processing equipment) and the rest. In particular, the former is characterised by a very high proportion of scientists, technologists and technicians and a relatively low proportion of craftsmen and operators and these characteristics are becoming more marked. Mechanical engineering, by contrast, has a much higher proportion of scientific and technical workers, and this is likely to continue 'in view of the general inertia in occupational

and skill composition of the workforce, and the higher proportion of electro-mechanical products and equipment' (Freeman 1985).

46 Summarising the main trends in the industry as a whole, and paraphrasing Freeman (1985), the recent period has seen:

- (a) A major increase in the high-level scientific and technological skills required in many functions (including management, design, systems engineering, R&D, marketing and technical services);
- (b) Some increase in other managerial and professional skills, but a decline in middle management, supervisory and clerical occupations;
- (c) An increased requirement for 'technicians', but with signs that the spread of CAD will reduce the need for draughting skills;
- (d) A slow decline in the need for traditional engineering craftsmen, partly offset in the short run at least by an increasing requirement for multiskilled (electronics) maintenance craftsmen;
- (e) A falling demand for semi- and unskilled operatives.

Table III. 7 Occupational structure of engineering 1984

Occupation	Employment (thousands)	(%)
Managers	122.5	6.0
Professional engineers, scientists and technologists	81.5	4.0
Technicians	181.4	8.9
Professional and admin staff	132.0	6.5
Clerical and office workers	209.7	10.3
Foremen and supervisors	99.9	4.9
Craftsmen	366.8	18.0
Operators	839.3	41.3
Total	2033.1	100.0

Source: EITB

RETAIL DISTRIBUTION: INTRODUCTION

47 We define retail distribution as classes 64 and 65 of the 1980 Standard Industrial Classification. Our discussion is hampered by the fact that many of the requisite data were not available at this level of disaggregation, but were often combined with one or more of: Wholesale distribution (classes 61–63); Hotels and catering (class 66); Repair (class 67). Fortunately, however, the available data have been analysed in some detail in recent NEDO studies (see Moir 1983 and NEDO, Distributive Trades EDC, 1985a). We draw heavily on these studies, to which the reader is referred for a more in-depth treatment.

RETAIL DISTRIBUTION: BUSINESS TRENDS

Output/sales

48 An output index for retail distribution comparable with those used in the sections on food and drink and engineering above is available only back to 1978. The more usual measure than 'output', however, is the volume (or value) of sales in retailing. As shown in the NEDO (1985a) study, the volume of retail sales at constant prices has been on a fairly steady upward trend since 1961, with a slight 'hiccup' during the 1979–82 period.

49 Figure III. 5 shows trends in retail sales for the last decade. Although the general trend is upwards, two important qualifications should be made:

▲ As pointed out by Moir (1983), there appear to be some severe constraints on the prospects for long-term retail sales growth associated with the declining proportion of personal disposable income spent in shops and the growth in the savings ratio over time;

▲ individual subsectors have performed rather differently—in particular, we may note the increasing proportion of sales by volume accounted for by household goods retailers and mixed retail businesses and the declining proportion accounted for by food retailers and other non-food retailers. Despite the overall macroeconomic constraints on the sector's growth, therefore, there appears to be considerable scope for growth in individual subsectors.

Investment and technological change

50 Retailing is highly labour-intensive, with relatively low levels of capital investment. As shown in Table III. 8, retailing (and distribution as a whole) exhibits, relative to its share of GDP, a relatively high proportion of total employment but a relatively low proportion of total investment (gross domestic fixed capital formation). There has been no noticeable recent trend in the proportion of total investment undertaken in retailing (retailing and repair accounted for 3.9 per cent of total gross domestic fixed capital formation in 1973, compared with 4.1 per cent in 1983).

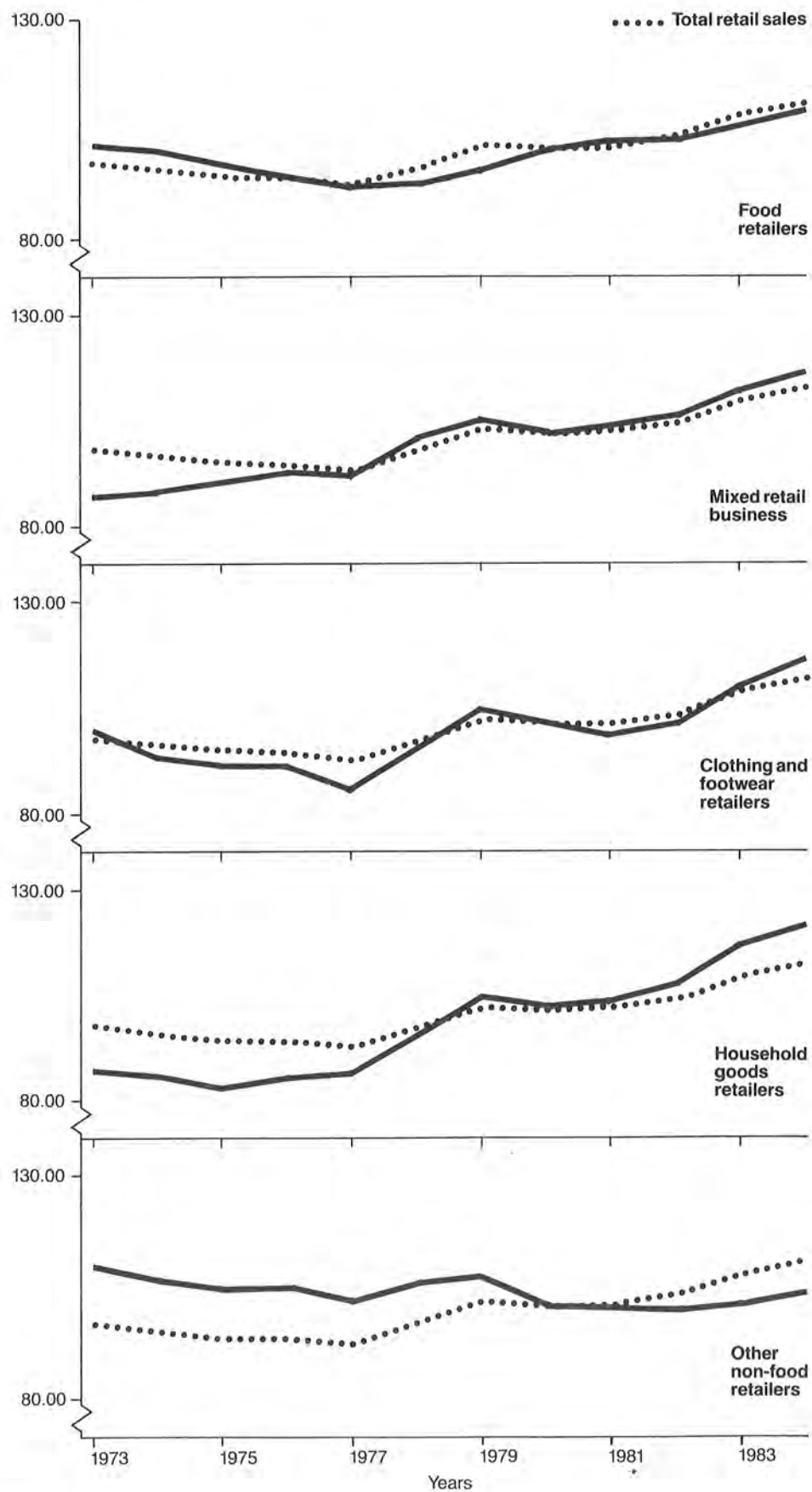
51 Nevertheless, as pointed out in the NEDO (1985b) report on retailing (and described in more detail in the NEDO (1982) report on

Table III. 8 Retail employment: output and investment

Percentage of all industries 1983	Distribution, hotels and catering, repairs	Retail and repairing
GDP	13.5	n/a
Employment	19.9	10.8
Gross domestic fixed capital formation	8.0	4.1

Source: CSO

Figure III.5 Volume of retail sales (weekly average)
(1980=100)



Source: CSO

technology in the distributive trades), there is considerable scope within the sector for investment in new technologies, with potentially significant effects on the nature and number of jobs in the sector (see also Brady 1984). Further, the NEDO figures show that, although the sector's share of total investment has not increased, there has nevertheless been a significant real growth in capital investment in it since the mid 1970s, resulting in a growth in the 'capital intensity' of the sector (measured as net capital expenditure as a percentage of gross margin) from 8.0 per cent to 10.6 per cent over the period 1976–1982. Investment has predominantly taken the form of larger, more capital-intensive, lower unit cost stores and warehouses and refurbishment of existing stores, with recent developments including a greater rate of installation of electronic-based systems.

52 Most of the technologies likely to affect retailing employment in the next five years or so already exist and the main question concerns their rate of introduction in the sector. The kind of computerisation common to all industries, and mainly affecting office functions, has begun to have an impact in retailing, but the largest effects, which have yet to be felt in a big way, are likely to involve electronic point of sales (EPOS) systems, with their major impacts on the efficiency of stock control and ordering systems and their potential for monitoring product, store and staff performance. As pointed out in NEDO (1985b), the biggest effect will be on repetitive manual and clerical tasks – at checkout tills, pricing and self-filling and in the office jobs related to stock control and ordering. Some effects, although less clear in detail, can also be expected in skilled and managerial areas.

53 The limited penetration of EPOS systems to date is indicated by the fact that in mid-1985 the three leading food retailers – Tesco, Sainsbury and Asda – had only 30 stores out of 750 installed with new laser-scanning checkouts. A recent report from the Economist Intelligence Unit suggests that the pace of installation of such systems will accelerate rapidly by the late 1980s and begin to filter down to the smaller outlets, and ICL (quoted in the *Financial Times* of 23 July 1985) expects an 'explosive growth' of electronics in retailing,

with value of new equipment expanding from a 1984 level of £63m to £800m by 1990.

Further developments, notably electronic funds transfer (EFTPOS), involving a direct link between the retailing and banking system, are sufficiently far off in terms of their widespread implementation as to have no clear, predicted impacts on employment.

54 In general, the picture is of a labour-intensive sector, with relatively low levels of capital investment but significant scope for future development to a more capital-intensive, electronic technology-based industry. Trends in this direction are already apparent, with a shift towards larger, capital-intensive units, embodying the latest technology.

Market structure, concentration, etc

55 Particularly notable in retailing, and associated with the trend towards larger, more capital-intensive units noted above, has been an increasing concentration of the sector in the hands of large multiples. Thus, as shown in the NEDO (1985a) study, in 1961 retail businesses with 100 or more outlets accounted for 21 per cent of employment in the sector and 25 per cent of turnover. By 1982 they accounted for 31 per cent of employment and 36 per cent of turnover. During the same period the shares of employment and turnover held by businesses with only one outlet (the 'corner shops') fell from 46 per cent and 41 per cent respectively to 37 per cent and 30 per cent. The increased competition and greater concentration was particularly marked in the grocery market, and the share of this taken by the top six multiples expanded from 33.7 per cent to 52.3 per cent between 1976 and 1982.

56 An associated feature of the changing structure of the retail market has been the rapid development of superstores, shopping centres and out-of-town hypermarkets. Recent Euromonitor data indicate 372 'superstores' in the UK (defined as self-service grocery stores with at least 25,000 square feet of selling area) in 1984, up from 318 in 1982, with growth forecast to continue.

57 Although this increasing market

concentration has had serious effects for smaller retailers, it is the food sector where their erosion of market share has been greatest and they have held their own rather better in the non-food sector. Even in foods the decline of the small retailer has not been universal across the specialist trades (dairymen have, for example, retained their market share). More detailed information on retail turnover by kind of business (see Table III. 9) suggests that the broad commodity composition of retail sales has remained relatively constant in recent years (albeit with some changes within the broad categories of Table III. 9 – thus, for example, do-it-yourself stores accounted for 9.6 per cent of turnover in the household goods sector in 1976 and this had risen to 13.8 per cent in 1982).

The main changes have been the growth of large stores and businesses (noted above) and/or the diversification of retail businesses, with a corresponding impact on small and/or specialised businesses. Thus, the diversification can be seen, for example, in Table III. 9 in the growth of 'mixed retailing'. Within the food sector (whose share has declined overall) the size and diversification effects are both marked – thus 'large grocery retailers' increased their share of food retailing turnover from 45.2 per cent in 1971 to 61.4 per cent in 1982, while some, but not all, of the specialised outlets lost

market share (butchers from 11.8 to 8.8 per cent, fishmongers and poulterers from 1.2 to 0.7 per cent, greengrocers and fruiterers from 5.2 to 3.7 per cent).

RETAIL DISTRIBUTION: EMPLOYMENT TRENDS

Total employment

58 The picture of what has happened to employment in retailing is confused, to say the least. There are two major sources of data – the Censuses of Employment and of Distribution. As noted in NEDO (1985a), the former suggests an increase in retailing employment of 70,000 over 1971–82 while the latter suggests a decline of 370,000 (over 1976–82 the former shows a decline of 6000 and the latter a decline of 168,000).

59 Here we base our discussion on the Employment Census (Department of Employment) data for consistency with our accounts of employment in the other three sectors in the study. We recognise the deficiencies in the data, pointed out in the NEDO report, however, and that if the Census of Distribution were used the picture of employment in the sector would appear more pessimistic. Further, the Department of

Table III. 9 Share of retail turnover accounted for by different kinds of business

Kind of business	% OF RETAIL TURNOVER	
	1971	1982
Food	43.5	39.0
Drink, confectionery and tobacco	10.0	10.9
Clothing, footwear and leather goods	10.7	8.5
Household goods	12.9	13.4
Other non-food	7.0	8.3
Mixed retail	14.0	18.3
Hire and repair	1.8	1.6

Source: NEDO (1985a)

Employment data exclude working proprietors and the self-employed, who account for a significant (but declining) proportion of retailing employment (about 14 per cent). Figure III. 6 shows a fairly steady employment level in the mid 1970s, followed by a sharp increase in the late 1970s interrupted by the recession and resumed since 1982/3. In March 1985 retailing employment was estimated at 2,129,500, representing 10.3 per cent of employment (compared with 9.0 per cent in 1971).

Productivity

60 NEDO 1985 estimates an increase in retailing 'productivity' (sales per person employed) of 23 per cent over 1976-82. Recalculation using *Employment Gazette* data reduces this productivity gain to 10.4 per cent. The most that can be said for certain, then, is that productivity in the sector has been increasing over recent years, and the NEDO work shows that the productivity growth has been uneven between subsectors of retailing and that growth in productivity was strongly linked to growth in market share, particularly among the larger grocery multiples. In general, it seems clear that the productivity growth is associated with the trends observed above towards greater capital intensity and larger units, yielding economies of scale.

Composition of employment

Female and part-time employment

61 Retailing is a proportionately large user of female and part-time labour, and it is clear at least that part-time employment is increasing in the sector (the two main data sources give different pictures of the trend in the proportion of females - one showing relative constancy, the other a significant increase).

62 According to Department of Employment figures, 62.6 per cent of retailing employees were female in 1974 and this had grown slightly to 63.1 per cent in 1985. The corresponding figures for all industries were 40.1 per cent and 44.4 per cent respectively. Over the same period, the proportion of female employees who were part-time grew from 51.9

per cent to 60.7 per cent in retailing compared with a growth from 38.3 per cent to 46.3 per cent in all industries.

63 The growth in part-time (mainly female) employment in the sector is discussed in some detail in the main body of the report. The reasons for the growth are fairly clear, however, and are twofold:

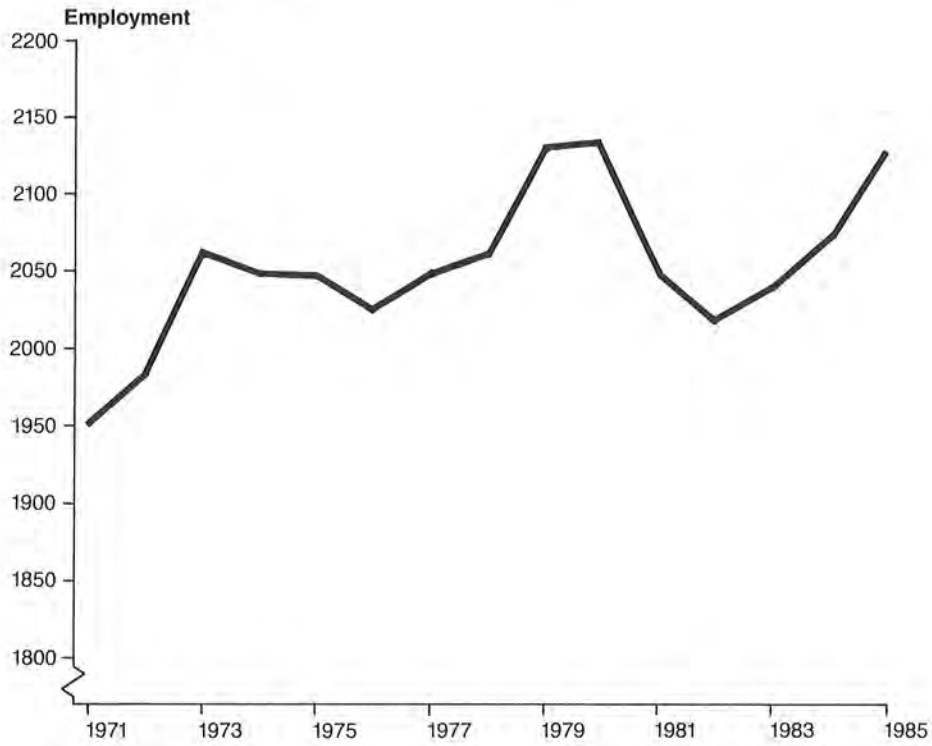
- ▲ In the face of increased competitive pressures and a wish to keep down labour costs, employers have increased the proportionate use of part-timers to match manning levels more closely to customer demand fluctuations during the day and week, rather than employ underutilised full-timers during slack periods;
- ▲ Extended and more varied opening hours have necessitated a greater use of supplementary part-time labour.

There is some evidence that the growth of part-time (and female) labour has been at the expense of the employment of young people in retailing, with many of the new part-time jobs going to middle-aged married women - in 1961 and 1981 respectively, the proportions of the country's under-18 workforce employed in retailing were 17 per cent and 18 per cent (24 per cent and 25 per cent for females), and it can be seen that retailing employs a disproportionate share of young people. Over the same period, however, under-18s fell from 10 per cent to 5 per cent of the retailing workforce, although part of this reduction may have resulted from the raising of the school-leaving age.

Occupational structure of employment

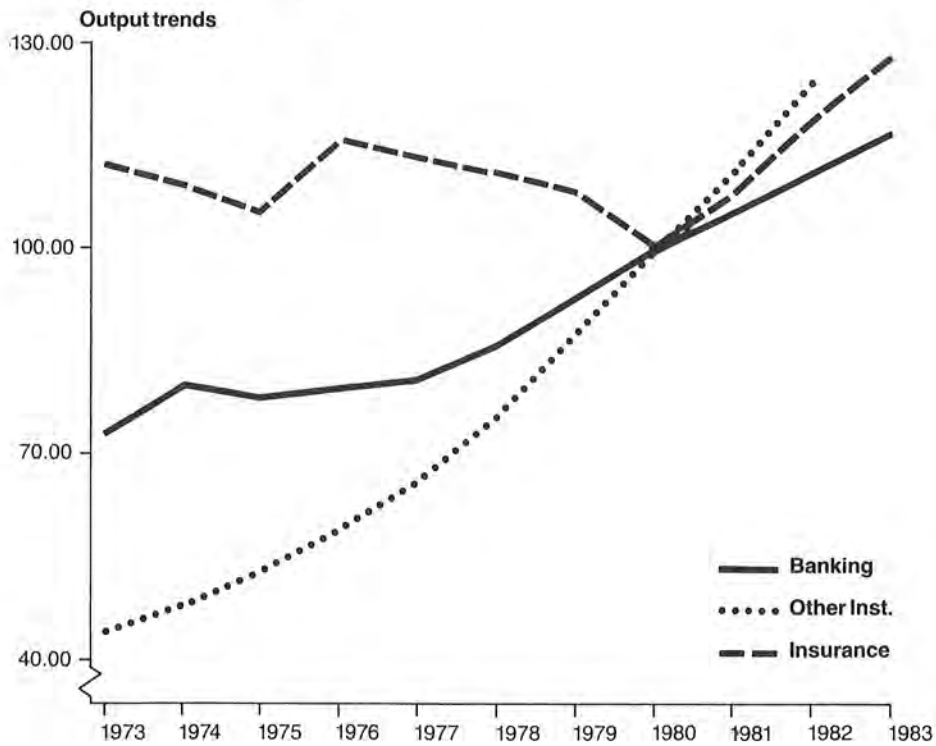
64 No comprehensive data sources exist on recent trends in the occupational composition of retailing employment. Changes in the occupational definitions in the main single source (the Census of Population) render meaningful comparisons over time impossible. Further, the 1981 census classifies 60 per cent of retailing employees under two broad headings, managers and sales assistants, which are too broad to reveal any major changes in skill composition over time. The data do, however, reveal clearly the occupational segregation of the labour force by sex: 39 per cent of males in

Figure III.6 Employment trend in retailing (thousands)



Source: *Employment Gazette* (various issues)

Figure III.7 Financial services: output trends (1980=100)



Source: CSO

the sector are 'store or shop managers' compared with 14 per cent of females, while 13 per cent of men and 49 per cent of women are shop assistants.

FINANCIAL SERVICES: INTRODUCTION

65 We divide this sector into four subsectors:

- ▲ Banks
- ▲ Building societies
- ▲ Insurance
- ▲ Others (eg credit and leasing companies, finance houses)

In terms of the 1980 SIC, we are concerned with classes 81 and 82.

66 Information sources on the sector are fragmentary, and we draw heavily on a recent IMS study of employment and technology in financial services (Rajan 1984), to which the reader is referred for a more detailed account.

FINANCIAL SERVICES: BUSINESS TRENDS

Output

67 Banks. Rajan (1984) shows that very impressive 'output' growth has been achieved (see Rajan for a definition of 'output' in this sector), ie average annual rates of 5 per cent over 1960-70 and 11 per cent over 1971-1982. Figure III. 7 shows post-1973 output trends (1980 SIC definition); as can be seen, the output growth has been steady and continuous with very little obvious impact of the 1979-82 recession, at least compared with the other sectors included in this study.

68 Building societies/others. Comparable CSO data on building societies' 'output' or business volume are not available, but Rajan estimates an annual average growth rate of between 8 and 15 per cent over 1969-82, again impressive compared with the rest of the economy and associated with growth in home ownership and increased penetration of the savings market. The post-1973 performance of 'other financial institutions' shown in Figure 7 indicates the most rapid and sustained increase

of all our subsectors. It is not clear how much of this is attributable to building societies and how much to 'others'. Some of the activities included in 'others' have, however, experienced similar high rates of business growth - notably the credit card sector (the volume of turnover in terms of millions of transactions per annum of Access, Visa and Trustcard combined grew from 58.9m to 343.4m over the 1975-84 period).

69 Insurance. This has performed much less well in output terms. As Rajan shows, 'output' growth rates fell from 6.0 per cent per annum over 1960-70 to 3.5 per cent over 1971-76, and during the 1977-83 period output has actually declined at 2.0 per cent per annum. The watershed occurred at the time of the 1974/75 recession induced by the 'oil crises' and the insurance market has been characterised by overcapacity since that time. As Rajan points out, however, the recent experience differs somewhat between subsectors of the industry, with poor performance in general insurance offset by growth and high profits in life assurance. At the time of writing, this position persists, and further rationalisation in the industry is forecast.

Investment and technological change

70 Investment and capital stock data are not available in detail, but CSO figures for SIC Division 8 (which includes business services and leasing in addition to financial services as defined here) show that gross domestic fixed capital formation grew in real terms by 86 per cent over 1973-1983. The equivalent figures for manufacturing and for the economy as a whole were -32 per cent (decline) and -3 per cent (decline) respectively. Over the same period (at constant prices) the gross capital stock in Division 8 expanded by 109 per cent, while that in manufacturing grew by only 17 per cent and that in the economy as a whole by 30 per cent. We thus have a picture of an industry which is expanding in output terms and rapidly investing and increasing its capital stock.

71 Banks. These have seen the greatest impact of technological change, and new technology has now permeated most 'back office'

functions. The first phase of automation occurred in the 1960s, as customer accounts were centralised through mainframes and an electronic funds transfer system introduced for inter-bank/inter-branch transactions. The second phase since 1970 has involved the introduction of computer terminals in branches (initially in 'back office' areas but now at 'front office' or counter level) and automatic teller machines (ATMs). Further developments on the electronic clearing side (both domestically and internationally) have also occurred. Future developments are likely to involve extensions of the ATM system (both in function and location), electronic funds transfer at point of sale (EFTPOS) with a direct link to retailers and eventually 'home banking'.

72 Building societies. Here the rate of innovation varies greatly according to society size. The process of development, however, as in banking, begins with centralisation of accounts through a mainframe computer, with eventual on-line access in branches. Further developments in larger societies since 1978 have included 'front office' counter terminals and more recently ATMs, while computerisation of all routine head office functions continues. Application of microelectronic technologies to date has lagged somewhat behind that of the banks, and apart from new innovations there remains considerable scope for the implementation of existing systems.

73 Insurance. Rajan has identified a seven-stage process of technological development, common throughout the sector, with the majority of companies currently between the third and fifth stage. The stages are:

- (1) Head office using batch system
- (2) Head office using on-line system
- (3) Branches with terminals on-line to head office computer
- (4) Branches with own minicomputer(s) in addition to 3
- (5) Word processing
- (6) 'Advanced functions' – agents have terminals with direct access to computer systems; computer systems and terminals used for job training; word processing integrated with data processing, allowing combined use of text and numeric data bases

(7) 'Paperless office' – complete transformation of work into electronic form via electronic filing, electronic mail, etc.

Future development is likely to consist of further moves by the 'average' company along this route, with rate of progress depending on business developments, the company's ability to absorb organisational change, the availability of suitably compatible products and software and the rate of fall in their prices.

Market structure, concentration, etc

74 A key recent feature of the whole sector has been increasing competitive pressure, coupled with extensive product diversification, such that the boundaries between the various subsectors have become increasingly blurred. Further influences here have been (and will be) the dismantling of certain legislative controls over financial companies' activities and the impact of increasing foreign penetration of the home market. 'For example, some of the clearing banks now conduct insurance, brokering, leasing, factoring and HP business alongside their mainstream banking activities. Some long established insurance companies, too, have diversified into management of pension funds, investment trusts and corporate finance' (Rajan 1984, p 18).

75 Banks. Considerable scope exists for continuing growth in demand for financial services. How this affects the banks depends on:

- ▲ Their competitiveness relative to the non-banking institutions (notably building societies and retailers) who are diversifying into traditional banking business;
- ▲ Their success in diversifying into ancillary financial services and some non-related activities (estate agencies, travel, leisure, for example).

It is likely that the rationalisation of the branch banking network via branch closures and the development of different tiers of branches will continue, under the cost pressures associated with intensified competition. (The number of branches operated by the six London clearing banks fell from 11,838 in 1972 to 10,993 in

1984, and the number of branches in the three Scottish clearers fell from 1547 to 1478 over 1974-84.)

76 Building societies. Contrary to the trend in banks, the number of building society branches has expanded greatly in recent years (from 4130 in 1977 to 6644 in 1983) with the expansion of business, although the rate of expansion has begun to level off. This expansion in the branch network has taken place against the background of: an increasingly competitive environment (following the abandonment of the societies' interest rate cartel); the increasing complexity of building society administration (notably the introduction of MIRAS); and a diversification of activities into banking and related areas (subject to the constraints of the Building Societies Act 1962). These forces have encouraged an accelerated rate of mergers in the subsector. The number of societies fell from 481 in 1970 to 206 in 1983, and over the same period the proportion of the industry's total assets accounted for by the 20 largest societies rose from 77.4 per cent to 87.0 per cent.

77 Insurance. The insurance industry has also been operating in an increasingly competitive environment, and also experiencing a 'poaching' of its traditional activities from other financial institutions. This has, however, occurred against a background of general overcapacity and a much less buoyant market than in the other two subsectors. Thus the corporate merger phase of the late 60s was followed in the 1970s and 80s by large-scale rationalisation of both staff and branch networks. The longer-term prospects for the size and structure of the industry are examined in detail by Rajan (1984).

FINANCIAL SERVICES: EMPLOYMENT TRENDS

Total employment

78 In March 1985, the sector as we have defined it employed 758,600 people, 3.7 per cent of total employment, compared with 2.7 per cent in 1974. Figure III. 8 shows the trends in total employment between 1974 and 1985 for two broad subsectors – banking and

finance (including building societies) and insurance. As might be expected from our previous discussion of business trends, employment in banking and finance has grown consistently and steadily throughout the decade (recording a 32 per cent increase overall) while insurance employment has been relatively sluggish, although still recording an overall growth of 19.1 per cent (Great Britain's employment declined by 6.3 per cent over the same period). Official published employment data are not available at a more detailed level, but detailed trends for banks and building societies can be obtained elsewhere.

79 In banks, Rajan has shown (using SIC 1968 data) that employment doubled between 1960 and 1982 – with average annual growth rates of 4 per cent over 1960-70 and 3 per cent over 1971-82 (with minor recessionary interruptions in 1976 and 1982). The banks' own statistics show that employment in the London clearing banks increased by 16.0 per cent over 1974-84 (from 206,300 to 239,300) and that in the Scottish clearing banks by 25.7 per cent over the same period (from 20,195 to 25,383).

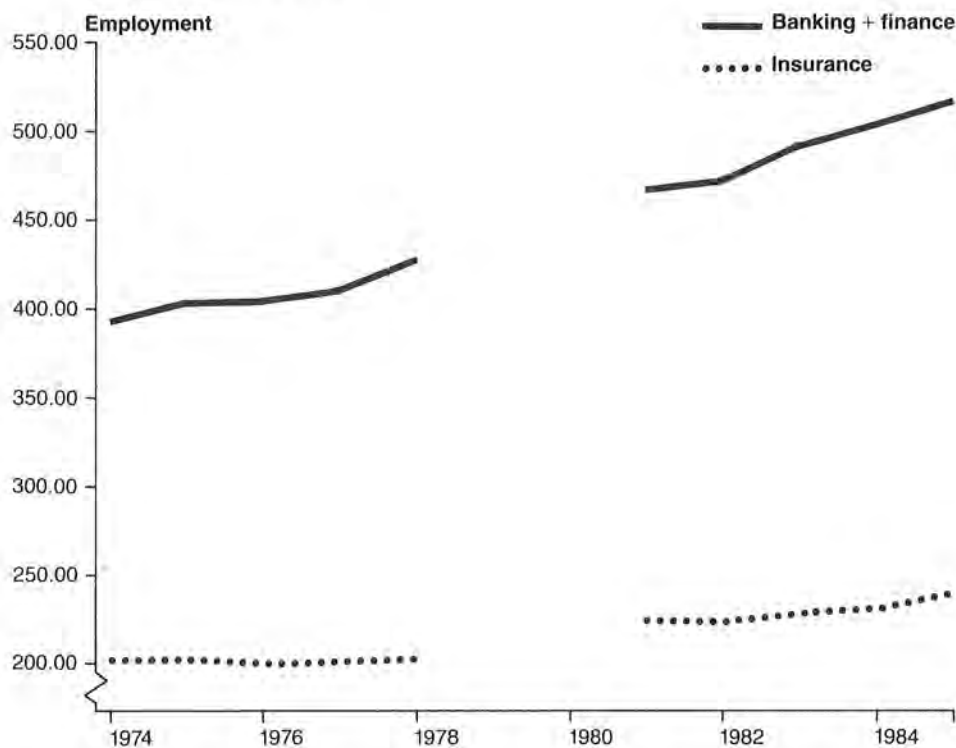
80 Building societies have shown an even more spectacular growth and Rajan records a more than doubling of employment over 1969-82, with some deceleration in the rate of growth after 1977. Updating Rajan's figures (using estimates from the Building Societies Association) shows a level of employment of just over 63,000 in 1984, representing a growth of over 90 per cent since 1974.

81 It should be noted that in the case of both banks and building societies the growth in employment is rather less dramatic when expressed in terms of full-time equivalents and much of the expansion has been concentrated among part-time employees – a subject which we consider below.

Productivity

82 Banks. Rajan derives estimates of the labour productivity increases associated with the rapid technological changes discussed above. He found that during the first (1960-70) phase of technological innovation productivity grew at an annual rate of 1 per cent, but during the

Figure III.8 Financial services: employment trends (thousands)



Source: *Employment Gazette* (various issues)

second (1971-82) phase it accelerated by an average 8 per cent per annum (compared with 1.5 per cent achieved in the national economy as a whole). He observes in the sector as a whole 'a distinct labour saving tendency... dictated by relative cost considerations and technological requirements'. Thus, initially employment increased rapidly due to business growth assisted by rising market penetration of traditional services and the availability of new services through diversification. Over time, however, as business growth has accelerated, new technology and the associated productivity improvements have featured increasingly prominently in the industry growth strategy and the rate of increase in employment has begun to decelerate.

83 Building societies also experienced rapid productivity growth (between 3 and 8 per cent

per annum over 1969-82) but, given the rapidity of business growth, this has yet to feed through to adverse effects on employment. Under growing competition, and likely slower overall business growth in the next few years, cost pressures will encourage continued productivity improvements, coupled with a 'catching up' throughout the industry in terms of introducing new technology. This will eventually lead to a slowing down of the rate of growth of employment in the industry.

84 In insurance, sluggish business conditions and rapid technological change have paradoxically been associated with a decline in productivity since 1977 (and a growth in employment, albeit at a slower rate than in the rest of the sector). Rajan explains this in terms of the net effect of offsetting changes in three occupational groups. Thus, growth in the life

business generated a need for many new sales staff, while the new technology itself gave rise to an increased demand for computer-related staff. Finally, one effect of the technological developments was a displacement of routine clerical staff. During the 1977-82 period the first two effects outweighed the third. In the near future it seems likely that the balance between these forces will shift and the productivity gains through new technology will begin to outweigh the increasing demands for sales and computer staff. Most projections expect total insurance employment to fall during the 1980s.

Composition of employment

Female and part-time employment

85 Insurance. We will consider insurance first as the subsector has shown very little recent change in terms of the proportions of females and part-timers employed. At 42.9 per cent, the proportion of females in insurance is very close to the 'all industries' figure, but unlike that figure, it has shown no recent tendency to increase (in 1974 it was 42.5 per cent). The proportion of females who are part-time is, by contrast, at 18.4 per cent, less than half the all industries average, and in this respect insurance is more like a manufacturing industry in its employment profile. Further, the proportion of part-time females has shown little or no tendency to growth over the past decade (it was 17.8 per cent in 1974).

86 Banking and other financial institutions. In the rest of the sector, the proportion of female employees is both relatively high and growing (from 54.4 per cent to 58.1 per cent over 1974-85), while the proportion of female part-timers is relatively low, but growing rapidly (from 15.9 per cent to 21.5 per cent over 1974-85). Again, the Department of Employment data do not permit a further breakdown, but some figures are available from industry sources. Thus, the six London clearing banks had 56.1 per cent of their staff female and 12.2 per cent of their female staff part-time in 1974. By 1984 the figures were 58.9 per cent and 14.3 per cent respectively.

87 In Scottish banks the proportion of women employed grew from 54.5 per cent to

60.4 per cent over 1974-84. The part-time figures are available for Scotland only from 1977, but they reveal a trend even more marked than in England (11.8 per cent of female employees were part-time in 1977; in 1984 the proportion had doubled at 23.1 per cent).

88 Building societies. These have experienced a similar trend towards part-time work – in 1974, 6 per cent of building society staff (men and women) were part-timers; by 1984 the proportion was 18 per cent.

89 A number of reasons are apparent for this phenomenal growth in the use of part-time workers in building societies and banks, including:

- ▲ Competitive pressures on manning budgets leading to a greater desire to match staffing levels to fluctuations in customer demand during the working week;

- ▲ The systematisation of certain functions through new technology, enabling jobs previously requiring well-trained full-timers to be undertaken by relatively unskilled part-timers;

- ▲ A conscious strategy to break up the traditional internal labour market into 'career' and 'non career' streams.

We will not discuss here these and other potential rationales for the observed changes, as they are the subject of detailed examination in the main report.

Occupational structure of employment

90 Unfortunately, no data series exist for changes in the occupational composition of financial sector employment. Again, however, we may note the finding of Rajan's study. He observed that in banks, largely associated with the introduction of new technologies discussed earlier, expanding occupations have been 'managerial, professional and administrative', 'computer-related' and 'advertising, marketing and sales', while clerical occupations have been in recent decline. In building societies Rajan reported a broadly similar picture, but with a much less marked degree of change than in banking, with the main occupations affected being computer-related (expanding) and clerical

(declining). In insurance, again the same general pattern was found, but if anything the changes here were more marked than in banking. Rajan also discusses in some detail associated changes in the content of jobs as well as their relative numbers.

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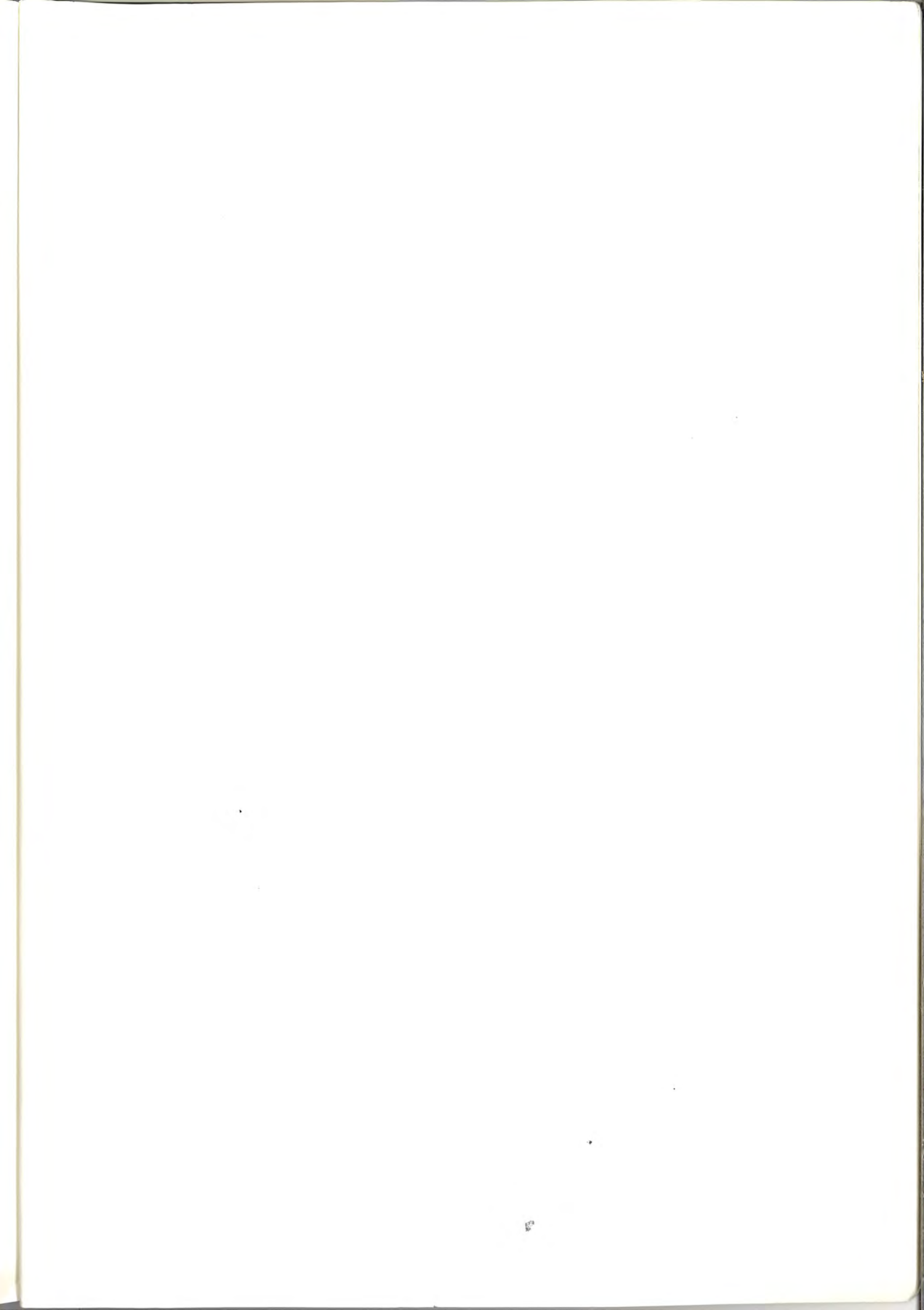
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