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Submitted for the degree of PhD., 1990.

Timothy Keith Peppin

'Restructuring of the demand for labour: a study of labour market adjustment mechanisms in Stockton-on-Tees'

ABSTRACT

This thesis investigates the inter-relationships between industrial restructuring, labour demand and unemployment through detailed case studies in the Travel to Work Area (TTWA) of Stockton-on-Tees in the North-East of England. After examining the legacy of previous rounds of investment in the TTWA the changing labour demands of six local employers are monitored and analysed over a one year period to July 1987. Focus of attention is on how employers adjust their labour inputs to meet changes in labour demand, as derived from the requirements of the production process.

By selecting employers known (or thought) to be establishing new working patterns and practices it was possible to study the 'dynamics of employment' in a variety of settings. These include a 'branch plant' employing mainly female labour, investing in new technology and changing from full-time to part-time workers; a joinery company which has suffered from the decline in public sector housebuilding and has been the subject of a series of takeovers; the District General Hospital attempting to cope with cash constraints in the public sector; a small engineering firm 'sandwiched' between large suppliers and customers; a recently arrived Japanese company producing electronic components and an historic engineering company that attempted (unsuccessfully) to diversify into the offshore supply industry.

In each case, an attempt is made to assess the net impact of 'flows' of labour to and from employment on the (official) unemployment count, drawing on data held on the National Online Manpower Information System (NOMIS).

RESTRUCTURING OF THE DEMAND FOR LABOUR:
A STUDY OF LABOUR MARKET ADJUSTMENT MECHANISMS
IN STOCKTON-ON-TEES

TIMOTHY KEITH PEPPIN

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CHAPTER ONE : INTRODUCTION

1.1 Background

In mid-1989 the official, seasonally adjusted count of unemployment in the United Kingdom recorded its third full year of uninterrupted decline. In July 1989 there were 1.79 million people officially unemployed - a fall of 1.34 million from the peak count in July 1986. Between Spring 1987 and Spring 1988, employment in Great Britain rose by 0.87 million according to the 1988 Labour Force Survey (Department of Employment, 1989a). However, it would be highly misleading to jump to the conclusion that the fall in unemployment is linked in any direct or simple sense with the rise in employment.

Robinson and Gillespie (1989) looked at the arithmetic of labour supply and demand in the Northern Region of G.B. which, according to official statistics, enjoyed similar trends of declining unemployment and rising employment between 1986 and 1988. They concluded that only about one fifth of the recorded decline in unemployment in the North could be attributed to an increase in the number of jobs during this period (see also MacInnes, 1989).

The key to understanding this apparent paradox is that employment and unemployment do not constitute the only two possible labour market 'states' in a closed, static system. Rather, the labour market is in a perpetual state of flux and is characterised by constant 'flows' of individuals between a host of socially-defined states. Affecting the supply side of the labour market, there are 'entrants', such as those leaving schools, institutes of further or higher education or training schemes, and in-migrants from other areas. There are

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'returners', such as unofficially unemployed (i.e. ineligible claimants) who previously have been discouraged from, or were uninterested in, job-searching but then are enticed back by improved employment prospects, and women returning to work after a period of child-birth/rearing. Finally, there are 'leavers', a term which covers retirement, long-term sickness, death, and out-migration.

Complicating any analysis of these various flows is the fact that definitions of the different labour market states are arbitrary and, they too, are continually changing. The definition of unemployment used in the Labour Force Survey, for example, is different to that used for the official monthly count (1) and eligibility criteria and methods of calculation of the latter have been subject to over 20 changes in the 1980s (Charter for Jobs, 1987; Unemployment Unit, 1988a; Cleveland County Council, 1990a).

On the demand side flows are created both within employing establishments ('internal labour markets') as a result of promotion or internal reorganisation, and on the 'external' labour market as a result of recruitment or because of redundancies and other job losses

As a consequence of emerging industrial and occupational trends in the U.K. economy (Warwick I.E.R., 1989), certain key flows were prominent in the minds of personnel managers across the country in the late 1980s. At the 'top' end of the labour market, as the demand for highly qualified labour has become ever-greater, there is concern about the projected shortage of graduates entering the labour market in the 1990s (Pearson and Pike, 1988). More generally, there is growing concern about the anticipated fall (by a third from its 1983 peak) in the number of young adults becoming available for work, due to a demographic downturn in the 16-19 age group (NEDO/TC, 1988). Indeed, 'manpower planning' which was fashionable amongst large employers in the 1960s and 1970s

(Bartholomew, 1976) is making a comeback as part of the current interest in 'Human Resource Development' (Department of Employment, 1989b).

At the same time, job-searchers, or agencies acting on their behalf, are striving to identify local labour market demands and training requirements. 'Skills audits', for example, often represent an attempt to bridge the gap between the two sides of the labour market. By assembling data on the skills of the local unemployed population, the aim is to match individuals with identified job (or training) opportunities (Haughton and Peck, 1989).

Most of these efforts to increase the level of knowledge about key flows in the labour market suffer from some weakness or another. They may be 'sectional' in nature, offering little insight into the workings of the wider labour market or they focus on the possibilities for short-term results with little attention paid to the underlying reasons for changes in the demand for labour. Indeed, understanding of adjustment mechanisms in 'the labour market' remains very patchy. Related to this point, there is a dangerous tendency to discuss change over time in quantitative terms without recognising the significant qualitative developments that have taken place in the labour market. For example, 'a job' today cannot realistically be equated with 'a job' ten years ago, even if in the same industry: it is likely to have changed out of all recognition in terms of the 'skills' and associated qualifications required, the technology used, the 'tenure' of the employment contract, the hours worked and the remuneration package offered.

Whilst these terms on which labour is demanded will be influenced by conditions of labour supply, they are - especially in the short-term (one to two years) - shaped primarily by employers' positions in (and expectations of) the 'markets' in which they operate. Thus, one of the keys to

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understanding the qualitative changes that have shaped today's labour markets is an in-depth knowledge of employers' changing labour demands.

1.2 The key research questions and subjects

The questions upon which the research for this thesis was based were formulated after a period working with the Department of Employment's National Online Manpower Information System (NOMIS). This system provides a rich source of quantitative information about localised changes in unemployment, including a series on 'flows' into and out of unemployment, introduced in June 1983 (Department of Employment, 1983). However, there is no equivalent information on employers' labour demands (2).

The primary objective of this thesis was to further understanding of the relationship between unemployment flows and employers' changing labour demands. The latter can be uncovered and interpreted only through close examination of particular employers and the pressures facing them. This is a time-consuming process, especially since detailed knowledge of employers' changing labour demands is not, by itself, sufficient for the purposes of explanation: the interaction of an employer's labour policies with the 'environment' in which it operates must also be explored. Thus, it was considered highly important to establish whether analysis of (regularly published) 'flows' data offers a 'shorthand' way of identifying changes in labour demand in a local labour market.

The conceptual framework for this thesis is developed in Chapter Two. Essentially though, the labour market is viewed as a dynamic entity with individuals moving through different labour market 'states' as their personal conditions and the conditions facing them in the employment market change. The

emphasis of the research was on how and why employers' labour demands evolve and, in turn, generate 'flows' in various labour markets including, crucially, the flows into and out of unemployment.

Whilst NOMIS data are available on a national basis, the labour demand/unemployment relationship was most appropriately investigated at the local level. This decision was taken primarily with practical considerations in mind, but conceptual considerations also played a role in the choice of a Travel to Work Area (TTWA) as the spatial basis for the study (see Chapter Two). Thus, the labour demand-unemployment relationship was examined both in terms of aggregate changes in the selected TTWA - Stockton-on-Tees in the North East of England - and at the level of individual establishments for six local employers. These employers were purposively chosen with the aim of viewing changes in labour demand in a variety of circumstances, open to different sets of pressure. The 'sample' of employers is explained fully in Chapter Two and in subsequent Chapters, but it is worth listing them at this stage as the reasons for their inclusion are fairly self-explanatory:

- (i) KP Foods - a 'branch plant' potato crisp factory belonging to the United Biscuits group, opened in the late 1960s and employing mainly female labour.
- (ii) Sarek Joinery - another established local company based near the town centre, tied closely to the fortunes of the construction industry.
- (iii) North Tees District General Hospital - serving the whole TTWA and subject to the Government's public expenditure controls and cost-cutting initiatives.
- (iv) Glamal Engineering - a small company involved in manufacturing and steel stock-holding.
- (v) Tabuchi Electric - an incoming Japanese electronics company.

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(vi) Head Wrightson/ITM - a formerly international engineering company with a long tradition in the town of Stockton and which diversified into work for the offshore oil and gas industry in the 1980s.

An intensive period of empirical research took place between July 1986 and July 1987 during which time changes in labour demand were monitored at each establishment. Changes were related to the pressures (common and specific) faced by the employers as indicated by themselves, by published industry specific studies and, where possible, by the employers' workers. In each case an attempt was made to relate the pattern of observed 'flows' with wider trends detected in the TTWA.

The remainder of this Chapter is set out as follows. Section 1.3 explains the choice and precise meaning of terms used in the thesis title. Section 1.4 then reviews recent attempts to describe and explain the changes experienced in labour markets in the mid- to late-1980s. Notions of 'the Flexible Firm' are discussed along with the labour market implications of the more theoretical work that has been written about entry into a 'Post-Fordist' age, with 'flexible specialisation' claimed to be an emergent trend in certain areas of production. Finally, Section 1.5 briefly assesses the aims and stated economic beliefs of the U.K. Government which have had a profound influence on attitudes and responses to economic change on both sides of the labour market.

In subsequent Chapters, Chapter Two outlines the conceptual and operational framework within which the research was conducted. Chapter Three contains an historical overview of labour market and industrial changes in Stockton TTWA, including both quantitative and qualitative measures of change in employment, redundancies, unemployment and

vacancies. Developments in Stockton and its parent county, Cleveland, are briefly compared and contrasted with those at the regional and national level. An understanding of the historical development of the TTWA and of the conditions of the local labour market relative to other parts of the Region and country is considered to be an essential 'tool' in the evaluation of the changing labour demands of individual employers (see Chapter Three for further comments).

Then, a Chapter is dedicated to each employer (Chapters Four to Nine) and in every case the analysis follows a similar pattern. First, a justification of the choice of employer is offered in terms of the overall objectives of the research. Next, the necessary context in which each employer functions is discussed from the perspective of its 'product' and labour market requirements. The pressures (economic, social and political) for change in the employer's organisation of the production and labour processes are examined in detail. Crucially, an attempt is made to relate changes in each employer's labour force to changes in local unemployment. Although it is not possible to reconcile employment and unemployment data in a direct sense, it is possible to identify the underlying causes of employment changes and to say whether flows of labour to and from an establishment are likely to have a net positive or negative impact on unemployment.

Finally, Chapter Ten draws together the key findings and recurrent themes of the historical and statistical review of the TTWA and of the six employer-based studies. It makes an overall assessment of the labour demand-unemployment relationship and, flowing from this, it highlights key areas of deficiency in labour market data. The Chapter then draws on the research to pass comment on key institutional changes since the study period for this thesis, including the introduction of Training and Enterprise Councils.

1.3 Restructuring, the demand for labour and adjustment mechanisms

A choice had to be made between the phrase 'labour flexibility' or 'restructuring of the demand for labour' in the title of this thesis. 'Restructuring' and 'flexibility' have become a sort of 'short-hand' for the changes sweeping through industry and commerce in the 1980s. Almost inevitably, then, both defy simple definition. However, 'restructuring' was preferred to 'flexibility' for two reasons. First, 'flexibility' is tainted by the "cultural disposition to value flexibility (in the abstract) over inflexibility" (Atkinson, 1986, p.5). In contrast, it is widely recognised that when 'restructuring' occurs there are winners and losers. Secondly, there is the controversy over whether employers' latest drive for flexibility - in so far as it represents a break with past strategies at all - is labour-market led or whether the recent pressure for flexibility is experienced primarily in the product market (MacInnes, 1988).

The term 'restructuring', in fact, generally refers to changes in production. In this context, Warde (1988) reserves the term for:

periods or instances of severe and concentrated change... [involving] new rounds of accumulation, and new strategies for the reorganisation of production which bear upon the control of labour and the search for spatial advantage
(p.77)

In this thesis, decisions as to whether changes in labour demand warrant the title of 'restructuring' are made in both specific (employer-related) and general (TTWA-wide) cases. Specific instances of labour restructuring are defined as follows: the introduction of changes in the pattern or process of work which necessitate a rewriting of the job description(s) that are (or would have to be) used when (if) the resultant jobs are advertised as vacancies and/or a

change in the level of the workforce involving 25 per cent or more of all existing employees.

The general case of restructuring of labour demand in this thesis is, strictly speaking, an ex-post assessment of the restructuring of employment. (Technically, labour demand and employment are synonymous only in conditions of excess labour supply or market equilibrium. When excess demand exists, labour demand exceeds employment. This is discussed in greater detail in Chapter Two, where a distinction is made between labour 'stocks' and 'flows'). This assessment concentrates on changes in the industrial, sexual and 'tenure' (e.g. full-time/part-time) structure of local employment. No attempt is made here to establish a fixed, quantitative measure of significance for such changes since the time periods vary according to data availability. Instead, the data are used to show how the overall character of local employment has been restructured over time.

The focus upon the demand side of the labour market also requires some justification. Many studies which claim to be about the 'labour market' really are concerned with a particular aspect of the market associated with one side of the market, demand or supply. The reason for this is rarely acknowledged but it is because, as Blandy and Richardson (1982) point out, the two sides of the market are specified in different terms. The demand side is specified in terms of 'job characteristics' and the supply side in terms of 'people characteristics'. Although the 'people characteristics' of most employees render them capable of performing an enormous variety of tasks, they use only a fraction of this ability in their jobs (Blackburn and Mann, 1979). Thus, only those characteristics for which employers are prepared to pay are effective in the labour market. This means that qualitative changes in labour demand actually can alter the definition of what 'counts' as labour supply. Of course, the reverse also

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holds but the pace of change tends to be faster on the demand side where conscious, centralised decisions help to shape the nature of developments. Recent efforts by some employers to use more fully the talents of their employees adds an interesting 'twist' to this overall picture.

Finally, the notion of 'adjustment mechanisms' can be traced back to the work of Holt and David (1966) and subsequently to Doeringer and Piore (1971) and Carmichael (1981). Essentially, they are the measures taken in order to correct for labour market imbalances. As such they may be initiated by employers or by other (usually State) agencies charged with the responsibility of ensuring labour market efficiency in an aggregate sense (e.g. Training Agency; Careers Service). Yet other bodies can have an influential role in re-shaping individuals' perceptions of labour market opportunities (e.g. media, employers' organisations).

The research in this thesis concentrates on adjustment mechanisms used by employers. (This is not to deny the importance of the other sources of adjustment, however, and these are acknowledged as appropriate in 'employer-based' Chapters and in Chapter Ten). In Chapter Two an extensive list of employer adjustment mechanisms is provided (Table 2.1) and this serves as a point of reference for subsequent chapters.

1.4 The nature of change in labour markets in the 1980s

As a framework for drawing together the categories of work that have featured prominently in overhauls of 'manpower' policies there can be little doubt about the usefulness of the model of the 'Flexible Firm' developed by the Institute of Manpower Studies (Atkinson, 1985; 1986). It also draws attention to internal labour markets as a source of labour market adjustment. As Atkinson (1985) notes: "[P]ublic policy

makers often take internal labour markets as beyond their capacity to influence, and employers tend not to publicise the changes they are introducing" (p.11). It might be added that, at least until recently, there has been a similar lack of attention to employers' 'manpower' strategies in academic studies of the wider labour market.

The distinction drawn by Atkinson between 'core' and 'peripheral' employees is very similar to that made between 'primary' and 'secondary' labour by Doeringer and Piore (1971). 'Core' and 'primary' workers tend to be male, full-time, well-paid, often unionised, permanent employees with firm-specific skills not easily obtainable in the external labour market. In contrast, 'peripheral' and 'secondary' labour tends to involve young and female workers, often on part-time or temporary contracts with low pay and little or no union representation. Atkinson makes a distinction, however, in that 'core' and 'periphery' are distinguished less by the division between white- and blue-collar workers and more by the level of firm-specific skills that an employee possesses. Thus, core and peripheral employees can be found at virtually any level of skill, status or earnings - what separates them is the extent to which their labour services can be obtained 'as and when required'.

Atkinson's main point is that, in response variously to the recession of the early 1980s, increased market competition and volatility, new micro-electronics based technology and long-run trends in working time:

Employers are increasingly looking for a workforce which can respond quickly, easily and cheaply to changes in product or process which are as yet unknown; such a workforce will be able to contract as readily as it expands to market requirements; such a workforce must not result in increased unit labour costs at a time when worked hours are falling; finally it must be capable of deployment over time to meet the needs of the job exactly through recourse to

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a range of working time options
(Atkinson, 1985, p.9)

To achieve these goals, Atkinson identifies three main forms of flexibility, as follows:

(i) Numerical flexibility - to match labour inputs to fluctuations in product demand and so to minimise labour costs and/or maximise capital utilisation. This could involve increased use of 'hire and fire' employment policies, changes in the number of hours worked daily, weekly or annually, a change in the type of employment (e.g use of part-timers or temporary workers) or a switch to the use of sub-contractors or agencies to meet peaks in demand.

(ii) Functional flexibility - this lies at the heart of the model with the objective of switching employees (especially core ones) between different tasks as production dictates, so that labour time is fully utilised. It is relevant both to day-to-day circumstances and to medium to long-term requirements for reskilling as production methods and technologies evolve.

(iii) Financial flexibility - it is from this source that, arguably, some of the greatest changes in the labour market could emerge. According to Boakes (1988):

The clear aim [of Government] is to link the terms and conditions of as large a proportion of the labour force as closely as possible to market forces, hence the Government's desire to eliminate such traditional ideas as the annual pay round, the going rate, pay comparability, job evaluation and national pay bargaining
(p.5)

Atkinson (1985) predicts a continued shift to plant-level bargaining and a widening in differentials between skilled and unskilled workers, possibly associated with an increase in individualised or team-based, performance-related pay for core workers.

Simply because there are so many possible variants on the theme of the 'Flexible Firm', attempts to 'prove' the model, or otherwise, are fraught with definitional difficulties. However, for the record, those claiming to have found evidence in support of the model include Manpower (1985), Clutterbuck (1985), Atkinson and Meager (1986), Hakim (1987a, 1987b), and ACAS (1988). Others have argued that examples of the 'Flexible Firm' are limited to a small number of firms (IDS, 1986a, 1986b, 1988; Pollert, 1988; Casey, 1988; MacInnes, 1988; and Cross, 1988).

Criticisms of the 'Flexible Firm' are now well known and there is no need to rehearse them at length here (see instead MacInnes, 1988; Pollert, 1988; Walby, 1987). Briefly, the critiques include claims that many labour force trends (e.g. the growth in part-time and self-employment and in the use of short term contracts) are the result of other factors (such as job segregation by sex and differential growth in 'men's' and 'women's' work; the impact on employment policies of legislation on unfair dismissals, redundancies and trade unions : cf. Daniel, 1985; Grayson, 1987). Other criticisms reflect the views that the internal logic of the model is flawed (e.g. sub-contracting may fall in a recession in order to protect the jobs of core employees; high unemployment may generate inflexibility as employees become afraid to move between jobs); that it is unrealistic to expect peripheral workers to be able to perform the tasks of core workers when called upon in a boom period; that 'flexibility agreements' are merely the latest variant of a policy that last surfaced in the 1960s and 1970s in the form of 'productivity bargaining' and that changes are primarily product market-led and not labour market-led as implied by the model.

In concentrating on the validity of the model, some empirical studies have lost sight of the wider issues involved. Clearly, achievement of the 'Flexible Firm' is not an end in

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itself, but a means to an end. Since the desire of an employer to meet certain goals in its product market (or to stay within financial targets in the public sector) is the ultimate driving force behind most decisions to vary labour demand, it is important to identify what these goals (and targets) are and how and why they might be changing.

Drawing on the notion of 'flexible specialisation' developed by Piore and Sabel (1984) in the United States, some believe that a new, flexible 'regime of accumulation' is emerging as Great Britain enters the 'post-Fordist' era (see for example Hall, 1988). Essentially the argument runs that, faced by increasing international competition and greater market volatility, producers need to abandon old ('Fordist') strategies based on the mass-production of standardised goods and services and develop new, consumer-oriented ones offering product ('designer') diversity and/or higher quality, based on the capabilities of modern technology.

Such theories are of relevance to this thesis because they mark a further step back from - if not a virtual reversal of - the pronouncements of Braverman (1974) regarding the de-skilling tendencies of the labour process under capitalism. Whilst earlier critiques had pointed to inaccuracies of the Braverman analysis (for example, Burawoy, 1979; Littler, 1982) the latest writings go further by claiming that under the new regime of accumulation, the new technologies have a potentially liberating effect for certain groups of workers - especially those with craft skills.

Unsurprisingly, these views have been challenged on a number of grounds. For example, Lane (1988) argues that, due to the history of labour-management relations in Britain any attempt at removing job demarcations to create a "polyvalent, flexible and more responsive labour force... often becomes an end in its own right and degenerates into a contest of strength between management and labour" (p.163). Mahon (1987)

suggests that Britain will be poorly placed to take advantage of flexible specialisation because its corporate, education and training institutions have tended to neglect craft skills in favour of white-collar and service sector careers.

Of most direct interest to the present study is the critique by Hudson (1989). He accepts that flexible production systems have had some limited impact, but stresses that these co-exist with Fordist and even pre-Fordist, 'traditional' systems of production - all unevenly distributed over space. For 'old industrial regions' in particular (such as the North East) he argues:

Rather than constituting the emergence of a new flexible regime of accumulation in these regions... changes in production and consumption are most appropriately interpreted as part of strategies by capital to preserve old modes of accumulation in a political climate very different from the welfare state Keynesianism of the 1960s, in two senses. Firstly, they involve changes in the 'traditional', pre-Fordist industries of these regions, characterised by a mode of extensive accumulation, seeking to increase labour productivity and competitiveness within big plants and production complexes by cutting employment and redefining conditions of employment for those remaining in work in them. Secondly, they involve corporate strategies to preserve Fordist mass production of standardised commodities by carefully locating new capacity in OIRs and raising labour productivity via selective recruitment and intensification of the pace of work (p.22).

The essential point is that the labour process should not be studied in a 'vacuum'. It forms part of a wider system of production and reproduction which should be considered when undertaking research of the kind carried out for this thesis.

The Government plays a key role in setting the parameters of this wider system within which the economy - and ultimately employers - must operate. Therefore, Chapter One concludes by considering this role of the State as enacted in the 1980s.

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1.5 The Government's policy towards and influence upon the labour market in the 1980s

The Budget of March 1980 introduced the Conservative Government's 'Medium Term Financial Strategy' and consolidated a shift towards a monetarist, supply-side economics which, arguably, started under the previous Labour administration (Hawkins, 1984). Attention at the macro-level switched from regulation of output and employment to the sole objective of controlling inflation, by reducing future rates of growth of the money supply and restraining public expenditure. The assumption of 'rational expectations' (and thus perfectly flexible wages and prices) encouraged policy makers in the belief that they should not try to affect 'real' economic variables (see Davies, 1985).

Consequently, high unemployment was claimed to be a necessary and inevitable price to pay in the battle against inflation. According to widely-accepted theory, there is a critical level of unemployment at which inflation is stable - neither rising nor falling. This has become known as the 'non-accelerating inflation rate of unemployment' or NAIRU (Layard, 1986). At any time there is a 'feasible' real wage that the economy is capable of sustaining. If wage-bargainers aim for more than this feasible wage, inflation will rise and reduce the 'real' gain to the 'sustainable' level. Any attempt to reduce unemployment below the NAIRU will be successful, therefore, only at the expense of higher inflation, because low and falling unemployment is said to encourage 'unrealistic wage behaviour' (ibid. p.36).

Guided by such thinking, the Government outlined its policy on employment creation in its 1985 White Paper - Employment: The Challenge for the Nation (H.M.Government, 1985). The three essential strands of this policy were the creation of a climate favourable to efficient and internationally competitive production, the liberalisation and deregulation

of labour markets and the use of special measures to assist specific groups in high-unemployment areas.

In the Government's view, changes in the tax system, new industrial relations legislation, imposition of public expenditure limits, abolition of exchange controls, deregulation of the financial markets and the 'demonstration effect' of the 'showdown' with the miners in 1984/5 have contributed to the first strand. The proposed abolition of the Wages Councils, tight control of public sector pay, removal of labour market monopolies (e.g. through privatisation) and the encouragement of de-unionisation and local pay bargaining are all measures designed to contribute to the second strand. The third strand introduces a spatial element to the policy and is clearly guided as much by social and political considerations as by economic theory. There is, though, an underlying belief in the ability of the young and long-term unemployed to 'price themselves back into the labour market' and the low pay levels on job creation schemes are set, arguably, with such ends in mind (Martin, 1986).

At a spatially-disaggregated level the NAIRU theory has further depressing implications for the regions of Great Britain:

The greater the regional variations in unemployment within a country, the higher will be the national rate of unemployment consistent with stable inflation. This is because, as national unemployment starts to fall, labour shortages will quickly emerge in some regions, putting upward pressure on inflation and so forcing the government to touch the brakes - despite high unemployment elsewhere (Economist, 29.7.89, p.73).

'Prescriptions' to overcome this situation include greater labour mobility and wider regional pay differentials. Anecdotal evidence of an increase in long-distance commuting ('Southern money lures the hopeful traveller' - Financial Times 11.4.89. p.10) and the mounting number of moves away

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from national pay bargaining (Labour Research, 1988a) suggest that such changes are already underway. Indeed, a major goal of Government policy has been to change peoples' attitudes towards the labour market, including the promotion of individualised, performance-related pay systems. In addition to undermining support for trade unions, such systems contribute to the notion that individuals (and no-one else) are responsible for their own fate in the labour market.

Finally, the Government has welcomed the demise of the old, mass-production systems:

Greater flexibility and the disintegration of production process are likely to encourage greater self-employment, more small firms, and more temporary and part-time work
(former Employment Minister, Kenneth Clarke, quoted in Boakes, 1988 p.5).

These 'new' forms of employment, by their very nature, tend to reduce the scope for union organisation. Significantly, the growth of small firms and self-employment has been encouraged by the Government through deregulation and financial incentives (Storey and Johnson, 1987).

According to the 'regional variant' of the NAIRU thesis, then, the unemployment situation in Stockton TTWA is inextricably linked, in a macro-economic sense, with the fortunes of the national economy. Whilst it was not possible in this thesis to investigate these relationships, the research reported in the following chapters does reveal much about the micro-economics of adjustments at the local labour market level which are a necessary part of such relationships.

Footnotes:

(1) The Labour Force Survey uses the International Labour Office/Organisation for Economic Cooperation and Development definition of unemployment. This includes people without paid jobs who said they were available to start work and had sought work at some time during the four weeks prior to the interview. The monthly claimant count by the Department of Employment relates to the number of people claiming unemployment-related benefits at Unemployment Benefit Offices (see Department of Employment, 1989a p.196 for full details).

(2) Another database developed by the Department of Employment's Training Agency looks specifically at employers' labour requirements. Known as CALLMI (Computer Assisted Local Labour Market Information), this database (see MSC, 1987) was in its infancy when the research for this thesis started. The quality of the data and level of qualitative information on employers' changing labour demands were considered inadequate for the purposes of this research.

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Many studies claiming to be about 'the labour market' draw on employment and unemployment data in an unquestioning manner. A conscious conceptualisation of the market and its operation is poorly developed or non-existent. Yet 'employment', 'unemployment' and 'labour demand' are all social constructs and can be understood only in relation to the wider and (changing) structures of which they are a part (Harvey, 1973). This suggests that when studying a local labour market, its purpose, history, functioning and its spatial basis should be investigated and made explicit. In short, descriptions of patterns of employment and unemployment should be supplemented by explanations of the processes involved in their generation.

Consequently, Section 2.1 of this Chapter outlines the conceptualisation of local labour market operations which shaped the methodological approach adopted for this thesis. Section 2.2 then provides details of the methods and sources used to follow up research questions 'on the ground'.

2.1 Conceptual framework

The labour market and its operation is conceptualised below under three broad headings as follows:

- (i) unique characteristics;
- (ii) 'stocks' and 'flows';
- (iii) wage and 'wage-like' adjustments;

(i) Unique characteristics of the labour market

It is now widely accepted that the market for labour is substantially different to that for other commodities and that straightforward application of the market principles of supply and demand is inappropriate (Creedy and Thomas, 1982; Storper and Walker, 1983). Labour market transactions are unique in a number of ways, summarised as follows:

(a) Labour is the original source of value for all other commodities in an economy - "the irreducible essence of production and social life" (Storper and Walker, 1983 p.22). This key point is developed below.

(b) It is not labour itself, but the services of labour that are purchased. This has a number of implications. First, workers retain some control over how their services are used. Consequently tasks can be carried out only after a process of negotiation - however limited - between employers and employees (or their representatives). Second, any 'skills' picked up in employment remain the property of the employees even if they decide to change employers. Third, the conditions of 'purchase' of labour power include not only the 'price' (wage), but also other conditions of employment, including (but not limited to) opportunities for advancement and health and safety issues. Fourth, labour remains responsible for its own 'reproduction' and a daily break from work is essential for this purpose.

(c) Labour market transactions involve an ongoing personal relationship between employers and employees in which the latter, to varying extents, agree to accept the authority of the former. This reflects the inequality inherent in an exchange where typically, for the purposes of reproduction, labour has few options but to sell its services but 'capital' has access to other sources of income.

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(d) Labour services are 'non-transferable' in the sense that they can be used only when the person selling them is present. This has an obvious implication in that individuals selling their services must live within reasonable commuting distance of their place of work.

(e) The outcomes of labour market transactions have implications beyond the economic sphere for those involved.

Points (a) and (c) above are related by the 'labour theory of value' (1). This theory was developed by Marx from the classical works of Adam Smith and David Ricardo. It posits that the value of any commodity (including labour) is related to the amount of socially necessary labour time required to produce (or reproduce) it, as follows:

For part of [the working day] the worker labours to create value equal to the wage that he is paid. This is necessary labour time required to pay for the bundle of goods and services necessary to ensure the worker's survival. The rest of the working day is surplus labour time, during which the worker creates value over and above that necessary to reproduce himself

(Bassett and Short, 1980 p.164)

Marx's main contribution was to point out the inherently exploitative nature of this arrangement. The surplus value, that labour itself generates is appropriated by the owners of the means of production and is realised as unearned income (profits). This permits further rounds of accumulation which, in turn, allow the perpetuation of the capitalist mode of production (see Harvey, 1973 pp.197-206). Competition between capitals, meanwhile, results in a never-ending quest to introduce new technologies which enable commodities to be produced with less embodied labour time.

In this way, such innovating capitals can steal a march on their rivals by undercutting them in the market and/or accumulating capital more rapidly, in turn providing a basis for further technological transformations of the labour process (Toft Jensen et al, 1983 p.97).

By debunking the myth of harmonious labour market interactions between equals, the labour theory of value highlights the importance of studying both the 'relations of production' (affecting the terms on which labour is demanded) and the 'relations in production' (affecting the ways in which labour services are used). These subjects were the focus of investigation in the 'labour process' literature which flourished in the 1970s and early 1980s (Braverman, 1974; Burawoy, 1979; Edwards, 1979; Cressy and MacInnes, 1980; Littler, 1982; Wilkinson, 1983; Toft Jensen et al, 1983).

The essential point, as far as this thesis is concerned, is that the 'imperatives' of production in a capitalist economy create continual pressures for change in both the quantities and the ways in which labour is brought together with various 'means of work' (such as tools) and various 'objects of work' (such as raw materials and components). Changes can be imposed unilaterally by employers (as in the introduction of new technology), but there remains an ultimate need to secure the co-operation and consent of the workforce. Indeed, a central premise of the labour process theorists is that whilst one of the factors encouraging technical change is the desire of managements to increase their control over labour, outcomes are influenced by the ability of organised labour to resist such change (Burawoy, 1979). Thus, in a quantitative and a qualitative sense, an employer's demand for labour is inextricably linked to the competitive pressures it faces in both the product and labour market, and these pressures arise primarily (but not exclusively) because the economy is organised on a capitalist basis.

Consequently, in studying the factors underlying the changing demand for labour at six employing establishments in Stockton-on-Tees TTWA, it was necessary to cover such issues as the establishments' roles in the wider scheme of

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production (2), the development of technology and working practices over time, the degree of competition in the product market as well as the labour market and the views of the workforce (and its representatives) regarding labour relations. These factors cannot (or should not) be reduced to a simple analysis of 'cause and effect'. Rather, their investigation demanded an intensive study of specific historical and current developments in order to be able, through a process of 'retroduction' (Sayer, 1984 p.97), to hypothesise how (invisible) underlying processes had generated the 'world of appearances' observed in the local labour market in the twelve months to July 1987.

One final unique aspect of the labour market, as a 'market for people', is the differentiation between males and females. Walby (1986) shows how, over time, there have been systematic efforts by men to protect their paid jobs from entry by women. These efforts include the activities of male-dominated trade unions which have led to the exclusion of women from certain occupations and their segregation into lower-paid grades. They have also included discriminatory recruitment practices of employers and the passage of certain State legislation. She stresses, however, that there is no 'neat fit' between the interests of patriarchy - "a system of interrelated structures through which men exploit women" (ibid. p.51) - and capitalism.

The most significant point as far as this thesis is concerned is that:

Changes in the organisation of capital often precipitate gender struggles over employment in particular occupations, since they both destabilise the old balance of gender forces and create and destroy particular forms of employment... The sexual division of labour today is then the result of the accumulation of round upon round of the restructuring of gender relations (ibid. p.88).

Clearly, to have taken the present-day sexual division of labour as 'given' would have seriously compromised (if not invalidated) the findings of a thesis claiming to look at the causes of observed labour market patterns and changes. Thus, historical research on previous 'rounds' of gender relations, associated with earlier rounds of capitalist accumulation, formed an essential part of the research for this thesis.

(ii) Stocks and flows in the labour market

Many analyses purporting to be about changes in employment (or unemployment) are misleading. By adopting a 'comparative-statics' approach, they compare 'stocks' (i.e. total counts of the number of bodies) between discrete points in time. This preoccupation with labour stocks has obscured the dynamics of labour market operations. (It has also lent a false sense of permanency to the notion of employment within establishments and provoked misguided comments about the unemployed as a 'stagnant pool' - cf. Hawkins, 1984). Yet as Clark (1980) has noted:

Stock characteristics are... only momentary 'states', i.e. samples of the ongoing non-stationary adjustment process. Flows are the dynamic aspects that integrate the demand and the supply side of labour (p.215, emphasis added).

Moreover, it is becoming increasingly inappropriate to discuss either stocks or flows of employment solely in terms of the number of bodies involved. Variations in the number of hours of labour required are becoming equally important in some businesses. Clearly, as 'the working day' is no longer characterised by regular, full-time employment, changes in labour demand cannot accurately be assessed simply by comparing stocks, or even flows, of the number of employees over time.

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The total number of employees is still, however, a vital concern of the employer partly because of certain 'quasi-fixed' costs for each employee (e.g. provision of workspace, national insurance contributions), but more importantly, because employers must take account of the prevailing situation regarding local labour supply. A desired number of hours must be capable of being 'translated' into a number of bodies due to the practical realities of labour supply.

In looking at the restructuring of labour demand, this thesis was concerned in particular with what causes employers to change the amount of labour services they require, and how they accomplish this. As will be seen, many of the 'adjustment mechanisms' used are a response to day-to-day or short-term occurrences (e.g. seasonal demand) and may be met by a change in hours (e.g. over-time) without recourse to a change in the number of bodies. Of greater interest in terms of 'restructuring' and 'labour flows' are those instances where, for example, an 'adjustment mechanism' results in a different 'translation' of hours into jobs through an introduction of new working arrangements. (Perhaps the clearest example of this is in Chapter Four - KP Foods - where a full-time day shift has been 'translated' into two part-time shifts over a number of years).

In taking cognizance of the labour supply situation, employers must decide how many people are likely to offer their services (and for how long), if they advertise a particular job vacancy. Many occupations require a lengthy process of education prior to entry, which may be followed by further training 'on-the-job'. Thus:

... the limited span of a 'working life' means that the time and costs involved in retraining considerably reduce the incentives to make such investments later in life. Mobility between occupations after entry into the labour force is generally limited to alternatives where a substantial transfer of skill is possible. Occupational choice tends to be an 'all or nothing' decision. It is

difficult to engage in several trades simultaneously.
(Creedy and Thomas, 1982 p.7).

The growing importance of specialised technology in production has exacerbated this situation. It has resulted in " a growing vertical division of labour, which partly takes place as a growing division between manual and intellectual labour, partly as a division among different parts of intellectual labour" (Toft Jensen et al, 1983 p.101). The spatial bases of labour markets for 'intellectual' labour are now national and increasingly international and employers' prime consideration is whether they can attract sufficient labour of the required calibre to live within commuting distance of their workplaces. Such labour tends to be in relatively limited supply and therefore employers will try to maximise the number of hours of work obtained per day. In contrast, the markets for manual labour remain largely local in nature. Educational and pre-training requirements are lower and consequently labour supplies are more readily available.

Despite the growing importance of intellectual labour markets, this thesis is concerned fundamentally with the local, manual labour markets, for a number of reasons. First, the fact that the chosen employers were recruiting primarily from within the Stockton TTWA made it possible to make inferences about the impact of their changing labour demands upon local unemployment (since data on the latter are residually-based). Second, all studies of unemployed have revealed that, nationally, almost half of the unemployed stock have no educational qualifications at all and only a quarter to a third have '0' levels or above (see for example, Department of Employment, 1988a; 1988b). For the majority of the unemployed, therefore, job openings in 'intellectual' labour markets are effectively barred (3). Third, because of the greater supply of manual labour it is in such labour markets that employers have had more freedom to 'experiment'

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with new working practices. Because of the cost of recruiting and training 'intellectual' labour, employers' demands for its services are less susceptible to temporary fluctuations in product demand, and competition in the labour market is a relatively more important concern over time. Fourth, and crucially, it would be wrong to assume that intellectual and manual labour markets are independent. Understanding the labour market implications of changes in 'material production' provides insights into why changes at other stages of the labour process - at different positions in the vertical division of labour - become necessary. (Chapter Nine, on the background to Head Wrightson/ITM, contains a particularly vivid example of this).

The impact on local unemployment of certain decisions regarding labour demand is transmitted via flows into and out of unemployment. Much work has been done on these flows and, although many studies conspicuously fail to consider inter-relations with the demand side of the labour market - the dynamics of employment - it is worth noting some of the most salient points.

Concern with flows into and out of unemployment leads inevitably to a consideration of the duration and frequency of unemployment spells. Information on the frequency of unemployment spells is restricted to a small number of surveys of the unemployed. These strongly suggest, though, that recurrent spells of unemployment amongst certain groups (especially the young and the unqualified) mean that the burden of unemployment is not evenly distributed throughout the labour force (Disney, 1979; Clark and Summers, 1979; Moylan et al, 1984).

Information on the duration of unemployment is now regularly published (See Section 2.2 below). Based on this and on 'flows' data, a widely-known fact about the recent recession is that increases in the unemployed stock post-1980 were

attributable more to increased durations of unemployment than to increases in the rate of inflow - indeed, the inflow has remained remarkably stable at the national level (Chiplin, 1982; Hawkins, 1984; Peck, 1984; Campbell et al, 1988). This is not to deny the enormous 'shake-out' of labour that did occur during the recession (Townsend, 1983). Rather, it emphasises the fact that many of those losing jobs flowed out of the labour market all together (e.g through early retirement) rather than into unemployment (see Lee, 1985, for clear evidence of this in South Wales).

Meanwhile, Cheshire (1981) offers another explanation of the stability of the inflow to unemployment. He argues that a high proportion of 'voluntary quits' from jobs involves movement directly to another job without an intervening spell of unemployment. 'Involuntary quits', however, do invariably result in a spell of unemployment. After demonstrating that the flow of 'voluntary quits' is far greater than 'non-voluntary quits' his reasoning runs as follows. A decline in the demand for labour results in a reduction in the number of 'voluntary quits' and an increase in 'involuntary quits'. Thus, there is a reduction in a large flow, out of which a relatively small proportion flows into a state of unemployment and an increase in a small flow out of which a high proportion passes into unemployment. Reverse reasoning holds for an increase in demand. Cheshire's work is of especial interest because it does explicitly recognise the importance of labour demand and the state of the national economy as factors influencing the dynamics of unemployment. All too often 'explanations' of unemployment do not move much beyond investigation of the personal characteristics of the unemployed (e.g. Daniel, 1981; White, 1983).

Similarly, the vast body of literature on 'search' theories of unemployment is restricted largely to supply-side, voluntaristic 'explanations' of unemployment which cannot

satisfactorily account for the rapid rise in unemployment in the early 1980s. Pissarides (1985), who provides an excellent overview of this work, concludes that:

... its treatment of the supply side , job acceptance and quitting is the most satisfactory part... but flows into and out of unemployment are also influenced by the demand side and in particular by the response of wages to fluctuations in the demand for output
(ibid. p.179).

It is to issues of wages and adjustment that attention now turns.

(iii) Wage and 'wage-like' adjustments in the labour market

Given that the 'field-work' for this thesis covered just one year (July 1986-July 1987), it was not possible to investigate wage flexibility (4) in response to long-run imbalances in labour demand and supply. Clearly, during the study period there was only one (nominal) wage readjustment for each job at the establishments that were studied. Moreover, although the nominal prices set by employers for their goods in the product market affect real wage outcomes in the economy to a limited extent (Layard and Nickell, 1985), it was clearly beyond the scope of the research to investigate such macro-level economic issues. Instead the focus of the field-work was on employers' use of 'non-wage' adjustments to deal with imbalances in their labour force situation over the year.

Blandy and Richardson (1982) claim that non-wage adjustments are more accurately described as 'wage-like' since, under a 'fixed wage regime', they achieve labour market results equivalent to those that would be expected with flexible wages. They define wage-like adjustments as:

... changes in the expected lifetime earnings of employees associated with an occupation while the current wage for the job remains unchanged...

[usually involving] changes in long run labour costs in the same direction
(Blandy and Richardson, 1982, p.266)

Central to their argument is the point that rigid wages are attached only to job slots along a career path, not to the people who pass through them over time. Although their work is couched in narrow economic terms and is clearly concerned primarily with 'career' jobs as opposed to 'dead-end' ones, it can be broadened by introducing a wider range of factors and adopting an all-encompassing view of careers.

Thus, in a dynamic context with wages temporarily fixed, a change in worker perceptions which makes a job appear more (less) attractive will have an effect similar to a wage increase (decrease). Consequently, the supply of labour for that job is likely to increase (decrease) over time. Workers' perceptions may change because of an action (or inaction) by an employer, because of events largely beyond the employers' control or because of a mis-reading of actions and events. Employers, therefore are not totally in control of the situation. They can, however, select those adjustment mechanisms that are under their control and invoke them in a pro-active or reactive way as necessary. Unilaterally, they can make jobs more or less attractive and by changing workers' perceptions and altering the basis of their 'long-term calculations', employers can achieve 'wage-like' results.

Finally, before concluding the conceptual framework by listing possible adjustment mechanisms, it is possible to integrate Blandy and Richardson's work with the labour theory of value, as outlined above. On a narrow reading of the latter theory, a decrease (increase) in the level of real wages is equivalent to an increase (decrease) in the 'rate of exploitation' (E), defined as $E=S/V$ where 'S' represents surplus value and 'V' represents variable capital (real wage costs of labour) (Carney et al, 1976). By extending this

basic model to incorporate non-wage factors, wage-like adjustments can be examined in a similar fashion.

For example, speeding up the rate of promotion, or the provision of creche facilities in an attempt to overcome a labour shortage, will add to variable capital and reduce the rate of exploitation. In the reverse situation, an employer may, say, raise recruitment standards and eliminate overtime. If the higher recruitment standards lead to higher productivity (though this is by no means guaranteed) then, with fixed wages, the amount of surplus value will increase, other things remaining equal. Meanwhile, the elimination of over-time will reduce variable capital (and surplus value). Together, the changes are likely to contribute to an increase in the rate of exploitation.

Table 2.1 (below) outlines the many adjustment mechanisms which are available to employers, differentiated according to whether they are likely to be used in response to short to medium term pressures, or pressures resulting from a restructuring of work and/or production.

Table 2.1 : Mechanisms of (non-wage) labour imbalance adjustment

Adjustment mechanism selected in response to:-		
A: SHORT TO MEDIUM TERM PRESSURES	B: RESTRUCTURING PRESSURES	C: EITHER
1. Change recruitment levels	1. Capital (dis) investment	1. Place/call back work with sub-contractors
2. Change recruitment standards	2. Relocation of production	2. Transfer tasks from (or to) another occupation
3. Widen/contract recruitment search area	3. Close/open plant or office	3. Transfer employees from (or to) another occupation
4. Alter career prospects	4. Reorganise labour process	
5. Recall former workers	5. Transfer employees from (or to) another location	
6. Employ retired personnel		

(Continued)

Table 2.1 (continued)

Adjustment mechanism selected in response to:-		
A: SHORT TO MEDIUM TERM PRESSURES	B: RESTRUCTURING PRESSURES	C: EITHER
7. Change level and standard of 'worker services' (e.g. canteen, creche)	6. Transfer production from (or to) another location	4. Recruit or release temps/part-timers
8. Participate in 'Compact' scheme or become otherwise involved with local schools	7. Change length of working week	5. Use of fixed term contracts
9. Make use of trainees on Govt. sponsored schemes	8. Change retirement/school leaving age	
10. Introduce flexible hours	9. Change peoples' expectations regarding acceptable jobs and income levels	
11. Reassess quantity/quality of training	10. Redundancies	
12. Change performance (quality) standards		
13. Change level of short-time work		
14. Introduce make-work schemes/intensify work effort		
15. Switch personnel between shifts		
16. Change hours of over-time		
17. Voluntary/involuntary turnover (excl. redundancies)		
18. Layoffs		
19. Change stock levels		
20. Change level of output		
21. Refuse orders/step up marketing effort		
(Source: Adapted from Carmichael, 1981)		

Using a classificatory system similar to that employed by Carmichael (1981) it is possible to group mechanisms according to the effect they are intended to have (Table 2.2).

Table 2.2 : Effects of adjustment mechanisms

Likely effect of mechanism:-	Adjustment mechanism:-
Avoids fluctuation in labour demand at a particular location	A14, A19, A20, A21 C1, C2, C3
Allows new opportunities in the organisation of prodn.	B1, B2, B3, B4, B5, B6, B9
Changes hours of work	A13, A15, A16 B7
Alters outflow of labour	A4, A7, A12, A17, A18 B8, B10 C4
Alters inflow of labour (includes steps to retain labour)	A1, A2, A3, A4, A5, A6, A8, A9, A10, A11 B8 C4, C5

Five points need to be made about Tables 2.1 and 2.2:

(a) as already suggested, some of the measures will tend to be taken in a pro-active sense (e.g. reorganisation of the labour process [B4] following the introduction of new technology) rather than in reaction to a labour imbalance. However, such action then sets up pressures for the reactive application of other measures (e.g. a reassessment of the quality and quantity of training [A11]);

(b) most of the mechanisms can work in opposite directions - e.g. a rise or a fall in hiring standards [A2]. However, some work in one direction only (e.g. redundancies [B10]);

(c) only the intended effects are shown in Table 2.2. For example, the transfer of tasks from one occupation to another [C2] may be part of an attempt to rationalise tasks and save on labour. This may have an unintended effect if those workers being asked to take on extra tasks start to exhibit higher rates of turnover [A19].

(d) not all of the mechanisms are the preserve of employers. For example, 'worker's services' [A7], training [A11], retirement/school-leaving ages [B8] and changing peoples' expectations [B9] are partly subject to the actions of others (e.g. Government legislation, trade union pressure, media).

(e) almost half of the listed mechanisms do not, or may not, involve any change in the number of employees (A7, A13, A14, A15, A16, A19, A20, A21, B1, B4, B6, B9, C1, C2). Consequently, simply monitoring changes in the numbers employed at an establishment is very unlikely to constitute an adequate analysis of an employer's management of its changing labour requirements.

Table 2.1 serves as a reference point for the remaining chapters, with adjustment mechanisms observed at the six employers' establishments being discussed in relation to the classification system adopted.

2.2 Operational framework

This section explains how the above conceptualisation of labour market operations was studied 'on the ground'. This is done in five sub-sections as follows:

- (i) Appropriate spatial unit of study and the choice of Stockton-on-Tees.
- (ii) Choice of employers.
- (iii) Employer research- time period, methods and sources.
- (iv) Labour market data sources.
- (v) Other sources.

(i) Appropriate spatial unit of study and the choice of Stockton-on-Tees

Clearly, the substantive issues of this thesis could have been studied in a wide variety of places and it was practical considerations that played a major role in the choice of Stockton. However, this does not mean that the selection of

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the study area was a trivial matter or that it had a 'neutral' impact on the course of the research.

In the mid-1980s there was renewed interest in the impact of 'place' on observed outcomes and events (Pred, 1984) and 'locality' research became fashionable (Beynon et al, 1986; Boddy et al, 1986; Cooke, 1986a; Robson, 1986; Urry, 1986). The precise meaning and the implications of 'localities', however, became the subject of much debate (Warde, 1985; Duncan, 1986). Duncan (1986) makes a useful distinction between 'contingent local variation' and 'causal local variation', where:

The former refers to the contingent effects of spatial patterns, the latter to the local specificity of necessary social relations - necessary that is in terms of causing change rather than contingently affecting how change occurs (Duncan, 1986 p.11).

He continues:

Causal local variation is a necessary condition for the existence of locality as something more than spatial variation... The concept of locality... implies both commonality and specificity where mechanisms and processes link together and reinforce one another so that the whole (locality) is more than the sum of the parts (various locally specific social processes) (ibid. p.15, emphasis in original).

Thus, Duncan argues convincingly that "most places may not be localities" and consequently "locality cannot be assumed and should instead be demonstrated" (ibid. p.16). In making decisions about the choice of spatial area for research, he recommends that "case study selection should be related to those theories or theory which researchers claim inform their analysis" (ibid p.20). Finally, there is the need to avoid spatial determinism:

Delineating locality - when we accept that we are not talking about an autonomous social system - may then be a matter of what sort of locality effects we are

interested in and drawing boundaries appropriately (Duncan, 1986, 1986 p.21-22).

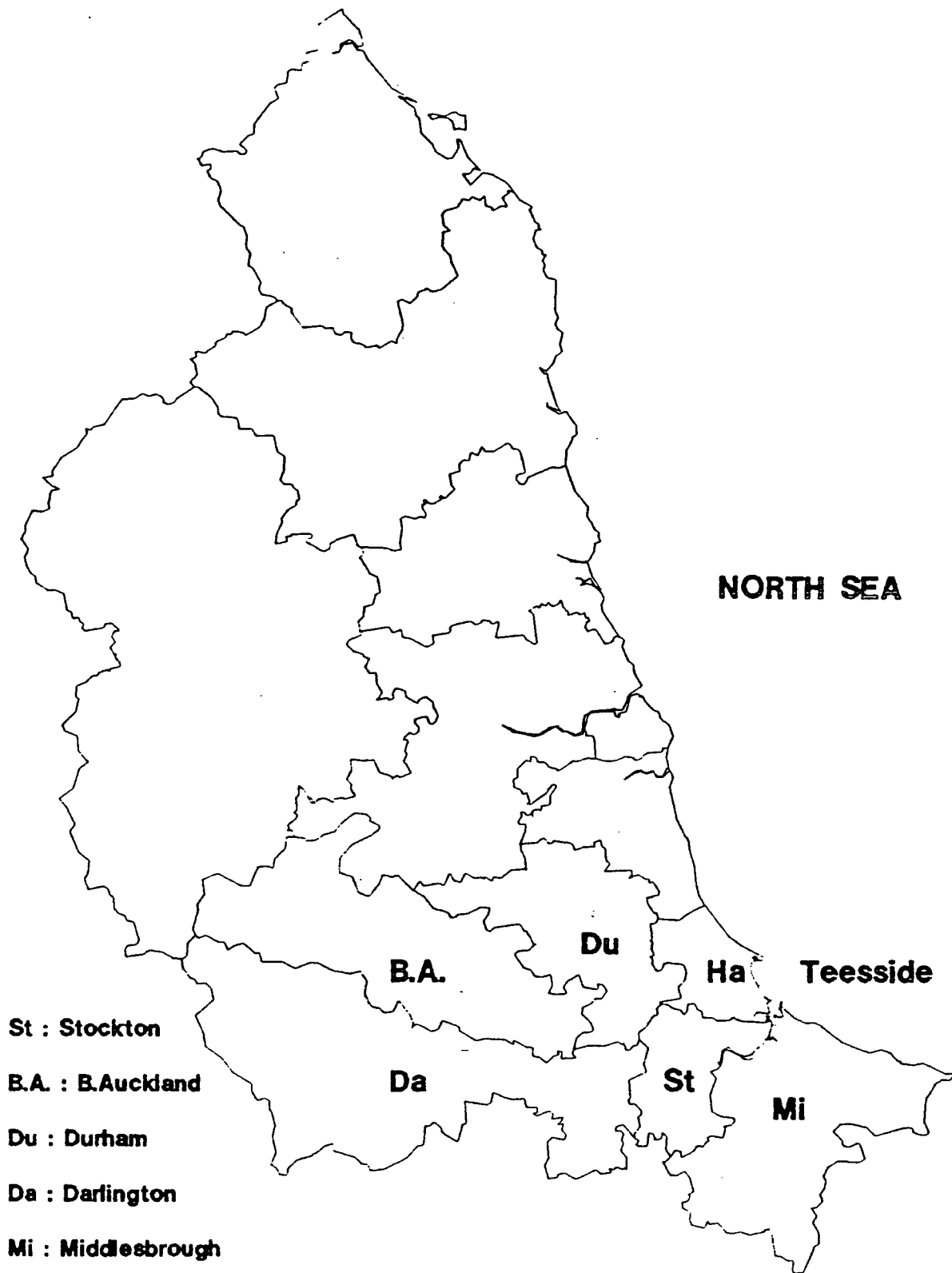
The theoretical underpinnings of much of the locality research have resulted in 'the local labour market area' being chosen as the most appropriate level of analysis. Meanwhile, an attempt has been made to avoid claims of 'economism' and 'spatial fetishism' by introducing concepts such as 'civil society' (essentially the social and cultural structure) as a source of partial autonomy and spatial differentiation at the local level (Urry, 1986).

Whilst in some cases there is legitimate doubt about the use of the local labour market as a spatial basis for the research of certain 'locality effects', there can be little doubt as to its appropriateness in this thesis. However, two questions remain: why a single Travel to Work Area (TTWA) and why Stockton-on-Tees?

Since there is no publicly available and up-to-date information on changes in employment and working practices within individual establishments, most data and evidence had to be obtained at source, through a series of visits to the selected establishments. In order to maximise the use of research time, it was necessary to choose establishments within easy travelling distance of the research base at Durham University, where access to NOMIS and supervisory support were important ties. Nonetheless, by choosing establishments relatively near to Durham (Stockton is approximately 17 miles to the south-east: see Fig 1) it was possible to spend six months (July-December 1987) living in Stockton and commuting in the opposite direction.

The decision to select employers within one specific spatial area (i.e. Stockton TTWA) was taken because external labour market (and other) conditions in a particular place can exert a strong influence on the pattern of internal work organisation in establishments.

**Fig.1; 1984TTWAs in N.E.England
(See Green and Coombes, 1985)**



St : Stockton
B.A. : B.Auckland
Du : Durham
Da : Darlington
Mi : Middlesbrough
Ha : Hartlepool



By choosing employers all in the same TTWA it was possible to investigate local conditions -in particular localised changes in unemployment, but also, for example, local history and possible locality effects - in far greater depth than if the selected establishments had been in a variety of different spatial areas.

In the context of a one-person PhD, limits on research time ruled out the possibility of selecting groups of employers in more than one locality and introducing comparisons between localities. Furthermore, none of the 'locality' studies underway elsewhere in the country had a sufficiently similar focus to enable direct comparisons.

The choice of areal unit was important in terms of the quantitative employment, unemployment and vacancy data used in this thesis. At a local level, labour market statistics are useful only if the basis for their spatial disaggregation reflects commuting patterns in the labour market. This is problematic in that there is not one 'labour market', but rather a series of local labour labour markets differentiated along lines of occupation/class and gender. Thus, markets for 'top' jobs and men tend to operate over wider geographical areas than those for manual jobs and women.

Notwithstanding this problem, the set of TTWAs devised in 1984 explicitly recognises commuting patterns as a basis for labour market delimitation and introduces a 'minimum self-containment threshold' of 75 per cent in most cases (Green and Coombes, 1985 p. 14). Given that no areal unit will satisfy all labour market requirements, the TTWA was chosen in preference to alternative breakdowns based on administrative criteria alone (e.g. district or county boundaries).

Having decided upon TTWAs as the spatial unit for the research, and given the need for accessibility from Durham,

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it was necessary to pick a TTWA from within the counties of Durham, Cleveland and Tyne and Wear. Stockton was eventually selected because it had the following advantages over the other 'candidates':

(a) The 1984TTWA for Stockton covers approximately the same area as the Functional Region in the classification devised by CURDS, in which Stockton features as a 'smaller northern sub-dominant' town (CURDS, 1983). This meant that employment data during the 1970s and registrant-based unemployment data could be obtained on roughly the same spatial basis as the JUVOS (Joint Unemployment and Vacancies Operating System) claimant count unemployment data, enabling comparisons between Functional Regions pre-1982 and 1984TTWA post-1982 (5).

(b) The 1984TTWA for Stockton closely approximates the area covered by both Stockton Borough Council and the North Tees District Health Authority, thus contributing to the 'coherence' of the TTWA as a distinctive spatial entity.

(c) Whilst Durham was ruled out because of its high concentration of employment in the public sector (42 per cent in 1981), Stockton exhibited the most dramatic changes in a preliminary investigation on NOMIS. For example, between June 1983 and February 1986, total unemployment in Stockton increased by 15.2 per cent compared with only 8.7 per cent in Darlington and a mere 0.9 per cent in Hartlepool. Whilst such observations were time-specific and limited to the analysis of official statistics, they suggested that the possibility of proposed field work identifying 'flows' in the labour market was greatest in Stockton at the time the research programme was being drawn up.

(d) One of the other locality studies (Beynon et al, 1986) was based upon Middlesbrough - Stockton's neighbour on Teesside. Thus, much useful contextual and historical

information had already been gathered and provided a useful and up-to-date 'introduction' to the area.

(e) Stockton TTWA contains a small number of relatively compact centres, including Stockton itself, Thornaby and Billingham. This enabled not only a fairly rapid familiarisation with the area but also permitted a more productive use of research time than would have been possible in, say, the sprawling Darlington TTWA.

(f) Finally, at the time when the choice was made, Stockton TTWA was 'host' to a number of employers thought likely to be under diverse pressures to introduce new working practices. Indeed, whilst in no way was Stockton considered to be 'statistically representative' or an 'ideal type', there were examples of change within the TTWA which were felt to be of wider significance and worthy of detailed study.

(ii) Choice of employers

The decision to use 'primary' information, direct from employer sources was based upon three factors:

(a) published employment data are hopelessly out of date (see iv below) and available only at an aggregated spatial and industrial level;

(b) aggregate statistics conceal marked variations in the experience of individual employers (Massey and Meegan, 1982; Peck and Townsend, 1984; Sayer and Morgan, 1985; Littek, 1986);

(c) employment and labour demand are not synonymous (see page 9 above) and the latter can realistically be studied only by intensive analysis at the intra-establishment level.

The information required was qualitative as much as quantitative as the conceptualisation of the labour market in Section 2.1 above should have made clear. Essentially, it was

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necessary to ascertain how and why labour demand was changing in each of the establishments under study, the ways in which the employer was implementing the changes and the implications, if any, for 'flows' into and out of unemployment. The information was gathered through a series of semi-structured interviews (see iii below).

Given the limitations of a one-person research project and the need to maintain regular contact with the selected employers, it was obvious from the outset that only a handful of employers could be studied at the intended level of detail. Consequently, a great deal of time was spent deciding which employers to cover in the field-work. As in a recent study of the labour market in Bristol, the intention was to gain "a series of revealing glimpses through a number of (well-placed) windows" (Boddy et al, 1986 p.137).

Directories ('Kompass'; Yellow Pages) were used to identify local companies and choices were made after discussions with local Job Centre management, with Stockton Borough Council's Industrial Development Officer and with colleagues at Durham University who are familiar with the local economy. One aim was to maximise the possibility of uncovering individual instances where new working practices were being introduced. Another, related aim was to choose a group of employers subject to a variety of pressures, shown by other researchers to be at the heart of contemporary restructuring processes, both locally and elsewhere in the UK.

Essentially, it was hoped to achieve a range of 'service' and 'manufacturing' establishments, with at least one employer in the public sector (North Tees Hospital - see Chapter Six) and with a mixture of male and female employees. KP Foods (Chapter Four) was known to be a major local employer of women but also offered the chance to investigate changes in labour demand in a 'branch plant', being a division of the United Biscuits group.

Given Stockton's tradition in heavy engineering (see Chapter Three) it was thought vital to study at least one company in this business, and I.T.M. (see Chapter Nine) provided an excellent opportunity to look at a traditional engineering establishment that was diversifying into engineering work for the offshore oil and gas industry - a growth sector on Teesside in the mid-1980s. It was also considered important to include at least one 'small firm' (see Chapter Seven). The ability to study a Japanese company was another factor in Stockton's favour, since an electronics company, Tabuchi, had opened there in 1985 (see Chapter Eight). Finally, Sarek Joinery (Chapter Five) was known not only to have been subject to a number of take-overs but also, as a door manufacturer, traditionally to have had strong links with the local construction industry. For both reasons, the company's labour demands were considered worthy of investigation.

Originally, nine employers were approached. However, because of time constraints it quickly became clear that this was over-ambitious. Consequently, when one employer (a contract cleaning company) refused to participate, no attempt was made to replace it. Similarly, although Presto superstore agreed to take part, unforeseen personal problems on the part of the contact person disrupted the planned schedule of visits and compromised the quality of the information obtained. This employer was dropped from the study not only for these reasons but also because the work-load generated by the remaining seven employers suggested that the quality of the research would suffer if it was not dropped. Unfortunately, the loss of these two employers eliminated both the private sector 'service' employers from the research.

Justification for dropping the third employer is equally problematic. The existence of this employer, ICI Billingham, was one of the factors which influenced the choice of Stockton-on-Tees TTWA as the study area. Indeed, a firm

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decision to study this TTWA was delayed until ICI had agreed formally to take part in the study. Although a full set of visits was conducted, the findings are not reported in a separate chapter for two main reasons. First, the scale of operations was such and the range of pressures so diverse that all of the research time could have been spent investigating this particular employer. Second, decisions on day-to-day employment changes were taken largely by line managers as opposed to the Personnel Department with which contact was made. Thus, although the company contacts were able to discuss changes in a general sense and from a company policy perspective, it was not possible to cover the specifics of employment change at these meetings. Setting up a series of meetings with all line managers responsible for coping with changes in labour demand was not, however, a practical option. Although figures on employment change were provided from the employer's own computer data-base, it proved impossible to reach any firm conclusions about the nature of change.

The company was undergoing a major reorganisation at the time of the study and personnel were being transferred between different jobs and between different works within the site. Without detailed knowledge of the nature of these transfers it would be misleading to read too much into the statistics on employment change. One possible solution would have been to have developed links established with a trade union (GMB) convener at the Billingham works. However, the time and effort that would have been necessary to unravel the changes would have undermined efforts at the remaining six employers. Consequently, it was decided not to report ICI in a separate chapter, but rather selectively to use the material gathered in other parts of the thesis (e.g. in Chapters Three and Four).

(iii) Employer research - time periods, methods and sources

Any study of the sort undertaken for this thesis is sensitive to the time at which it is carried out. Given its origins (as a three year PhD thesis funded from October 1985) the choice of time period for the overall research programme was severely constrained. However, within these constraints, decisions had to be made about the period of field-work, the frequency of visits to employers and how far back the historical review of individual employers and of the local economy should be taken.

It was decided that changes should be investigated over a whole year - from July 1986 to July 1987 - and that each employer should be visited once a month for an up-date on developments. However, given the time taken to organise and carry out a series of visits each month, it was recognised that little time would be available for synthesising material and writing up findings at the end of the study period. Therefore, employers were visited monthly for only the first six months and then approached once more for a 'year-on' report. (Whilst the intention was to spend the second half of the year writing up results from the first, it became obvious that more attention on the operation of Government-run training schemes was needed. As reported in Chapter Ten, these schemes tended to have a much more direct and influential role in determining 'flows' in to and out of unemployment than did changes in employers' demand for labour at the selected establishments).

The monthly meetings with employers involved interviews with Personnel Managers in all but one case: for the small firm, the contact was a Company Director. These interviews comprised a series of questions based on background research into each employer's business and about the structure of the employer's workforce. At each successive meeting, labour force and other significant changes over the previous month

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were discussed in detail. This required in-depth preparation, tailored to the specificities of each individual employer. However, an attempt was made to ensure a degree of uniformity over time and between employer studies by covering the same broad topics (e.g. recruitment and 'wastage' over the last month, any changes in hours of work, details of any technological changes, external labour market pressures, product market competition and performance).

In order to obtain different perspectives on the pattern of events, meetings were also held with employees of each of the companies and, where appropriate, with their trade union representatives. It was not practical to conduct these meetings on a monthly basis, nor would it have been particularly fruitful as the interviews were more general and did not require frequent up-dating. Doubts about the "representativeness" of the employees' views might legitimately be raised, since staff were selected by the employers. However, not only was this advisable given the need to retain the co-operation of the employers, it also did not appear to be a problem, since employees were interviewed in private and reported both their own views and feelings amongst other members of the work-force, (with which they did not necessarily agree).

Extensive background research on each employer was an essential part of the research. As North et al (1983) stress:

... explanation of plant level employment change cannot start with an analysis at the level of the plant itself, nor at the level of the firm of which a plant is part, nor in factors local to a particular borough or part of a borough. Rather, the firm and plant [should be] seen as contained within larger economic structures, some analysis of which is vital to understanding changes occurring at the levels of the firm and plant
(p.113 emphasis in original).

Thus, sector studies were drawn upon to provide information on the nature and characteristics of the product and general

labour market conditions faced by the employers. These included various reports from the Engineering Industry Training Board (EITB) the National Economic Development Office (NEDO), trade journals, reports by Cleveland County Council and Stockton Borough Council and specially-commissioned work by consultants, surveys in quality newspapers and magazines, and market research reports. In a few cases it was possible to draw upon other academic research on changes in technology or product markets specific to the employers under investigation. However, for the most part, this did not apply and consequently there is little citation throughout the text.

(iv) Labour market data sources

In its context-setting role, Chapter Three offers details of recent changes in population, employment, redundancies, unemployment and vacancies in the Stockton TTWA (as well as a narrative on local economic history and local socio-economic characteristics). It also includes details of the main components of unemployment change during the study period. Likewise, each 'employer chapter' contains details of labour market statistics relevant to the employer in question. The sources of information used are cited as appropriate throughout this thesis. The main sources, however, are summarised in Table 2.3 below, with references to the Department of Employment's 'Employment Gazette' (EG) for further details, as appropriate.

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Table 2.3 : Main sources of data used

Subject	Source	Details
Population	NOMIS CCC R&I Unit *	1981 Census of Employment and OPCS projections Historical figures and school-leaver projections
Employment	NOMIS EG **	1971-8, 1981 and 1984 - Census of Employment (EG Jan 1987 p.31) Regional level employment estimates (EG Table 1.5) New workforce in employment series (EG Aug. 1988 p.S6)
Self-employment	CCC R&I Unit EG	Cleveland Social Survey (Annual) Regional level estimates (EG Apr. 1989 p.203)
Unemployment	NOMIS	'Flows' data (since June 1986 - (see E.G. Jun. 1980 p. 627-635; Aug. 1983 p. 351-358) Age and duration data (EG Table 2.6) 'Stock' counts - claimant count basis (EG Sep. 1982 p.389-393 and Dec. 1982 p.S.20)
Redundancies	RMIU/EIU ***	Regional figures published by EIU (EG Jun. 1981 p.260-262; Jun. 1983 p.245). County and Stockton figures supplied by RMIU on request. (Also, EG Tables 2.30 and 2.31)
Vacancies	NOMIS/EG Job Centres	Numbers of notified and filled vacancies, numbers placed. Duration of vacancies by occupation and industry (EG Oct. 1985 p. 413; April 1988 p.211-213; Tables 3.1-3.3) Manual recording of advertised vacancies at Stockton and Billingham (Jul.-Dec. 1987)
* CCC R&I Unit - Cleveland County Council Research and Intelligence Unit ** EG -Department of Employment's Employment Gazette *** RMIU - Regional Manpower Intelligence Unit. (In July 1988 RMIUs in England and Wales were replaced by Employment Intelligence Units - EIUs - and Training Information Units - TIUs).		

The data sources shown in Table 2.3 above are explained in greater detail when drawn upon in subsequent chapters. Some important points to note at this stage are as follows.

Estimates of employment beyond the last official Census of Employment in 1987 are made at the regional level only. Similarly, data collected for the annual Labour Force Survey (see Department of Employment, 1989a p.182-196) are not reported below the regional level, nor are interim figures derived from this source (such as for self-employment), or figures on participation on Government training schemes. Redundancy statistics can be obtained at the Office (Job Centre) level on request, but for anything beyond broad aggregates a cost is applied.

The majority of the statistics used were drawn from NOMIS (Department of Employment, 1986a) with especial interest, as already noted, in the statistical series on unemployment 'flows' introduced in June 1983, following the switch from a registrant-based unemployment count to one derived from the numbers claiming benefits as a result of unemployment (Department of Employment, 1982 p.389-393).

(v) Other sources

In addition to the chosen employers, their employees and union representatives, a number of other 'key actors' in the local labour market were contacted during the research. Staff at the Job Centres in Stockton and Billingham were particularly well-informed and could offer both useful 'historical' insights and up-to-date information on the latest developments. Consequently, regular visits to the Job Centres were made throughout the study period and beyond. As a result of these meetings, the need to focus more closely upon the operation of the Government's training schemes became apparent. Meetings were arranged with staff responsible for the 'Restart' initiative, ostensibly designed to help the unemployed back into employment (Department of Employment, 1986b). Similarly, visits were made to the then Government-owned (but now privatised) Skills Training Agency

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at Billingham and to the head-quarters of the (then) Vocational and Educational Training Group of the (former) Manpower Services Commission, based in Middlesbrough.

Local council officers and politicians were contacted too, and the policies of local government towards the local labour market were discussed as another important factor, likely to influence local labour demand and supply. Similarly, visits were made to talk to representatives of the Northern Development Company (set up in Spring 1986 to promote the Northern region overseas, with support from Local Authorities, trade unions and Central Government) and the Teesside Development Corporation (set up by Central Government in mid-1987 to replace Local Authorities as the planning body responsible for an area of 5,000 hectares along the banks of the River Tees, taking in much of Stockton District - see Stoker, 1989).

Having set out the conceptual framework and explained where and how the research was put into operation, attention now turns to the economic and industrial history of the Stockton TTWA. This was drawn together from a wide variety of sources including books and pamphlets on local history, reports issued by the local councils and back copies of local newspapers. Statistical material is drawn both from these sources and from historical series on NOMIS.

After 'setting the local scene' in this way, the results of the field work are presented in Chapters Four to Ten.

Footnotes:

(1) The labour theory of value was preferred to the 'marginal utility theory of value' which underlies neo-classical theories of the labour market (Ferguson and Gould, 1975). The latter envisages exchange between equals and assumes 'preferences' to be determined exogenously.

(2) The term 'production' is used here in a very broad sense, to cover the 'output' of North Tees Hospital as well as that of the other establishments. However, it is recognised that many of the points made in this chapter are less directly applicable to 'service' activities and the public sector. An explanation of how the theoretical framework used in this thesis applies to the hospital is given in the introduction to Chapter 6).

(3) A counter-argument, of course, would be that a focus on recruitment in 'intellectual labour markets' would be more likely to witness flows from unemployment into work, as the 'flows' of labour to and from unemployment tend to be better educated than the 'stock' (see Moylan et al, 1984).

(4) Much has been written about the observed downward rigidity of nominal (money) wages and their stability over a yearly cycle (Thurow, 1983; Clark, 1983). Institutional forces (e.g the power of trade unions), notions of justice and fairness, suggestions of an 'implicit contract' between employer and employee (Azariadis, 1981) and the idea of an 'internal state' within the workplace (Burawoy, 1979) have all been advanced in an attempt to explain why employers - after the annual pay round - offer wage stability and employment instability, rather than vice versa.

(5) In the change-over from 1978TTWAs to 1984TTWAs all of the local TTWAs were changed significantly in shape. Both the Durham and the Darlington and S.W. Durham 1978TTWAs were reshaped following the introduction of a TTWA for Bishop Auckland (see Fig. 1). The 1984TTWA for Darlington incorporated the former Barnard Castle TTWA. Hartlepool and Durham divided parts of the old S.E. Durham TTWA and Stockton became a TTWA in its own right, having been separated from the rest of the Teesside TTWA (now Middlesbrough TTWA). Consequently, data for 1978 and 1984TTWAs are not directly comparable and hence the attraction of being able directly to compare Stockton Functional Region and Stockton 1984TTWA over time.

CHAPTER THREE: HISTORICAL AND STATISTICAL OVERVIEW OF THE STOCKTON-ON-TEES TRAVEL TO WORK AREA (TTWA)

3.1 Introduction

This Chapter is divided into two main sections. First, a brief qualitative account of the economic and industrial history of the TTWA of Stockton-on-Tees is provided. Second, quantitative indicators of relevance to the local labour market - including population, employment, unemployment and vacancy statistics - are presented and analysed. Changes in the structure of unemployment are considered, both over time and in terms of static, intra-TTWA variations. Indeed, since the purpose of the Chapter is to set the context within which the employers were studied, figures for Stockton TTWA are compared and contrasted variously with those for the county of Cleveland, the Northern Region and Great Britain.

If it is accepted that current production and investment decisions are influenced in part by the legacy of previous 'rounds' of investment (Massey, 1983) it becomes essential to understand what this legacy is for any local labour market under investigation. It is not sufficient to examine conditions at the start of the study as these are mere 'snap shots' of an ongoing process. Experiences (direct and indirect) of key actors and agents at previous stages in this process have a vital bearing on current and future outcomes and events. For example, employers' decisions about changes in working practices will depend, amongst other things, on what has been tried before. Local 'custom and practice' thus enter into employers' calculations along with more quantitative indicators of the state of the local labour market. Indeed, for smaller companies the former are probably

of greater importance for those decisions about labour force utilisation where an element of discretion is possible.

Clearly, such considerations do not take place in a vacuum but, rather, are made with due regard given to the opportunities offered by alternative locations. Other things being equal, large multi-locational establishments are in a better position to weigh up the advantages and disadvantages of alternative locations than small, locally based employers. This, in turn, implies that small, independent companies may be more responsive to local labour market conditions than larger ones. Nevertheless, once an investment has been made, no company can afford to ignore local 'traditions' and peculiarities, rooted in the history of a place's development.

3.2 Historical background

Naturally, with the passage of time the influence of past 'rounds' of investment becomes harder to detect. Thus, in Section 3.3 analysis of statistical information (where, in any case, definitional changes complicate comparisons over time) is focused upon developments in the TTWA of Stockton-on-Tees since the mid-1960s. However, a brief background of the TTWA and its industrial and economic history prior to this period is of interest, since some features have been of lasting importance.

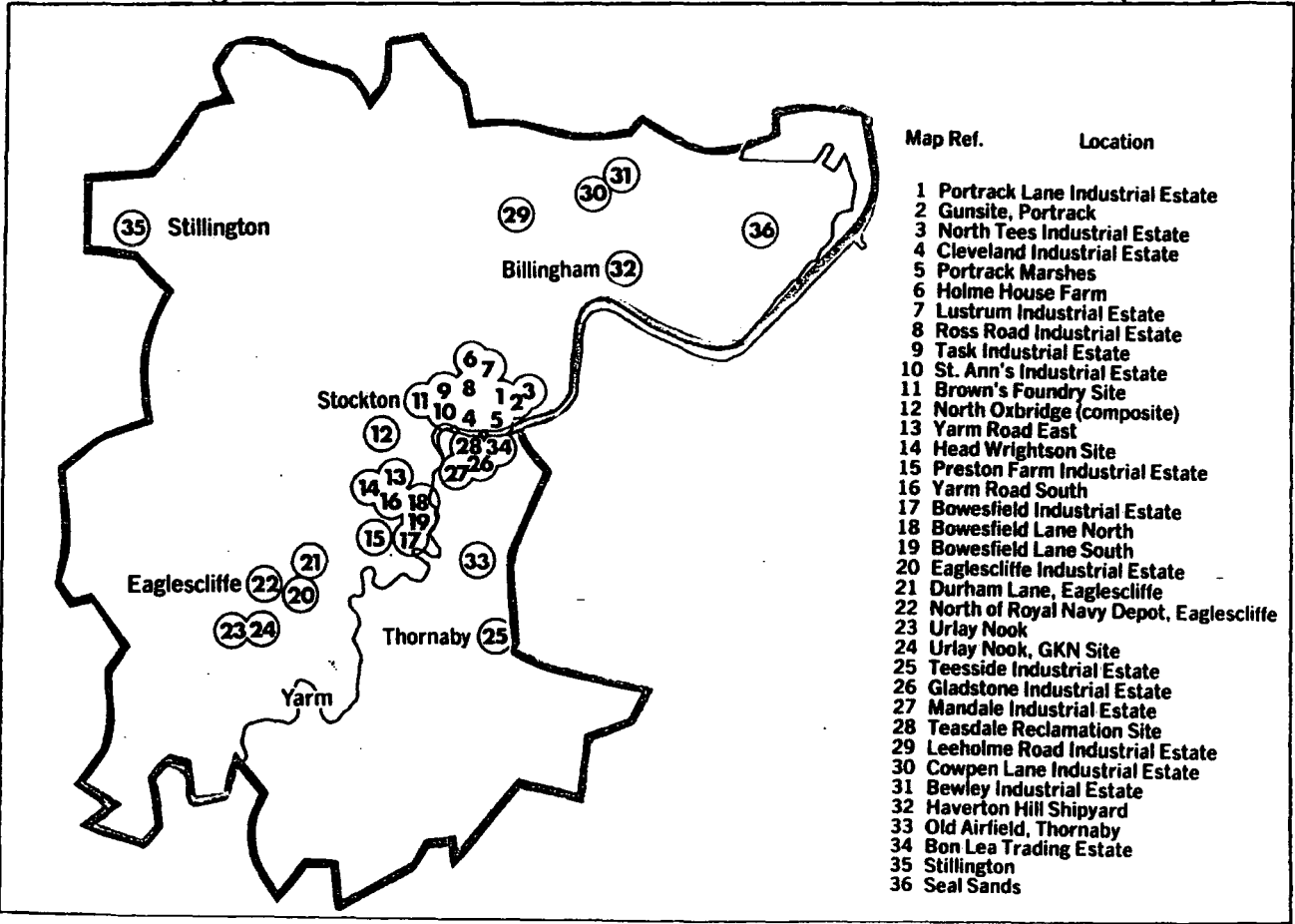
(i) Early history

Fig. 2 (below) shows the relative location of the main settlements in the TTWA, including Stockton itself, Billingham, Thornaby and Yarm. Dissecting and then running along the eastern boundary of the TTWA is the River Tees. The river was one of the primary locational factors responsible for the growth of settlement and industry in the area. From

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the seventeenth century, the growth of Yarm and Stockton was very much influenced by their role as a port - 'exporting' to London agricultural produce from the Vale of York and the Cleveland Plain and receiving return cargoes of, for example, exotic tropical products. This trade stimulated the growth of a local shipbuilding industry, leading to further imports of timber, flax, hemp and iron from Scandinavia and the Baltic. Demand for bulk carriers in connection with the coal trade between Newcastle and London provided a further spur for the growth of the local shipbuilding industry. Yarm concentrated on the assembly and distribution of goods while Stockton became the centre of local shipbuilding activity: "The economy of Yarm thus remained commercial while that of Stockton became industrial" (Harrison, 1972 p. xxiii).

Fig.2. Stockton-on-Tees 1984 Travel to Work area (TTWA)



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According to Harrison (1972), Stockton's association with shipbuilding and sea trade encouraged the development of shareholdings, to spread the risks inherent in the shipping industry. This, he argues, created a strong base for investment and enterprise, with many wealthy local residents prepared to promote and support new inventions and technology. In the early nineteenth century, Stockton was associated with some notable developments, including the invention of the friction match in 1826 and, in the previous year, the opening of the Stockton to Darlington Railway - the first public railway in the world to use steam power to draw both passengers and freight traffic.

The Stockton and Darlington Railway Company was founded in 1821 by a group of local industrialists, headed by Edward Pease of Darlington. The primary objective was to increase the speed of transport of coal from the South Durham coalfield to the port of Stockton-on-Tees. Having chosen to have a railway instead of a canal, the company had the line surveyed and built by George Stephenson. Further railways were built, to Port Clarence (near No.32 on Fig.2), to Hartlepool (see Fig.1) and to Northallerton (North Yorkshire) and York to the South.

The emergence of the local railway network spawned further developments, both directly in the manufacture of locomotives - (Fossick and Hackworth's Locomotive Works was on the site now occupied by Sarek Joinery - Chapter Five) - and indirectly, by increasing the range over which local companies could market their goods. However, the building of a railway extension across the River Tees to deep water staithes at Middlesbrough (then an almost uninhabited area, known as Port Darlington) heralded the decline of the Stockton coal trade (1).

The discovery of iron ore in the Eston Hills to the south of Middlesbrough was followed by the rapid growth of the iron

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and later steel industry in Middlesbrough (see North, 1975; Hudson and Sadler, 1985). Numerous iron foundries were established in Stockton too (see Tomlin, 1986), but the town specialised more in the use of the metal than in its manufacture. Building on the skills developed for the railway industry, the town became a centre of engineering expertise. As iron-clad ships replaced wooden ones, the local shipbuilding industry was transformed. At one time there were three shipyards on the Tees at Stockton (2). Support industries developed alongside the shipyards and Fossick and Hackworth's Locomotive works became Blair's Engine Works, making marine engines.

Other local engineering companies grew, including the Head Wrightson group (see Chapter Nine). The group was set up in 1866 following the purchase of foundries in Stockton and Eaglescliffe and the construction of a fabrication works at the Teesdale site in the loop in the River Tees at Thornaby (near No. 28 in Fig. 2). By 1897, Head Wrightson employed 1,500 men in the TTWA (Sowler, 1972), initially engaged in the production of goods for the mines and railways.

By 1914, Teesside in general, and Stockton in particular, was regarded as one of Britain's most important industrial centres and local companies had established world-wide reputations. In 1917, the Furness Shipyard was opened at Haverton Hill (No.32 on Fig.2) and in 1920, production of ships on the Tees reached a peak with 200,000 gross tons built. During this period, shipbuilding and marine engineering were "synonymous with the name of Stockton" (Sowler, 1972 p.346).

However, markets had been lost during the First World War and changing conditions (including a growing demand for larger ships) began to undermine the position of local yards. By 1923 ship production on the Tees was down to 43,000 gross tons (North, 1975) and the two remaining shipyards near

central Stockton had both closed. The decline of this local market and the Depression of the late 1920s led to the closure of Blair's Engine Works:

The news that Blair's Works was to be scrapped was announced in the press in 1932. This news, though it had been expected for some time, fell like a bomb shell on Stockton. Rogers [Foundry], the shipyards, and now Blairs - all gone (Sowler, 1972 p.355).

Nicholas (1986) notes that during the worst years of the Depression, Stockton had one of the highest unemployment rates in the country, reaching as high as 54 per cent in 1932. However, other companies survived the recession - most notably Head Wrightson and the Power Gas Corporation, which in 1901 had acquired the famous Ashmore, Benson, Pease and Co. of Stockton (Sowler, 1972; see Chapter Nine).

Further relief came from the growth of the chemicals industry on Teesside, following the formation of Imperial Chemical Industries (ICI) in 1926 (3). The background to ICI's fertiliser works at Billingham is well documented (4) (Sowler, 1972; Beynon et al, 1986; Pettigrew, 1985). Interestingly, the Chairman of Power Gas, Dr. Ludwig Mond, was involved in the formation of Brunner, Mond and Co., one of the four chemicals companies which merged to form ICI.

The activities of Head Wrightson, Power Gas and ICI ensured a continuity of demand for labour skilled in the engineering trades. This led not only to the 'absorption' of labour laid off during the recession but also to a growth in local supply of skilled labour. On the one hand, workers were attracted from outside the area (see Pettigrew, 1985) and, on the other, local youths benefited from the extensive apprentice training schemes in operation at all three companies.

Expansion of ICI had a marked impact on the development of the parish of Billingham, which became an urban district in 1923. Initial population growth was concentrated around Port

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Clarence, by the River Tees, in association with local employment opportunities (5). However, by 1931 ICI employed 5,700 manual workers and a further 1,200 staff and by 1939 total ICI employment at Billingham had risen to 12,500 (Sowler, 1972).

Along with the Urban District Council and Furness Shipbuilders, ICI engaged in a programme of house building, to accommodate the influx of population attracted by the employment opportunities. Gradually, the focus of activity in the district switched to Billingham and, in 1951, Durham County Council (6) produced a Town Map, based on plans for a phased and comprehensive development of a new town (Leishman, 1971). Despite recognition of the need to diversify the town's industrial base, employment at ICI Billingham continued to dominate the scene (rising to 17,400 by 1966). According to Pettigrew (1985), around 30 per cent of the workforce were residents of Billingham, the rest travelling to work by public transport.

The establishment in 1945 of ICI's organic chemicals complex at Wilton, on the South side of the River Tees and the later development of land on Seal Sands (beneath No. 36 in Fig.2), partly in association with oil and gas from the North Sea, have consolidated the position of Teesside as a chemicals centre of world-wide importance (see Beynon et al, 1986).

Meanwhile, the leading engineering companies had been engaged during the inter-war period in work for major construction projects overseas. After the Second World War many 'traditional' overseas markets were lost or the countries insisted on fabrication work being performed by their own work forces. However, the local chemicals industry and capital re-equipment in the coal, iron and steel and transport industries provided a ready source of domestic demand. Along with energy-related developments, a steady flow of work was generated for the local companies, ensuring the

continuation of the mechanical engineering traditions of the town.

Ashmore, Benson Pease and Co. built a large fabrication facility in the 1950s, which was acknowledged to be one of the best-equipped in the world. In 1960, its parent company, Power Gas, merged with Davy-United of Sheffield to become Davy Ashmore. Then in 1961 the group, significantly, sold its iron foundry in Stockton (7), marking the first stage in a process of withdrawal from the manufacturing end of the business (full details in Chapter Nine).

In 1963, after a study of economic conditions in the Northern Region, the Government produced a White Paper - The North East: A Programme for Regional Development and Growth (Cm. 2206; HMSO, 1963). This designated Teesside as part of a growth zone and called for diversification of the Region's industrial base. It made a number of recommendations for the improvement of infrastructure, several of which had implications for the Stockton TTWA. These included proposals for a large new industrial estate - the Teesside Industrial Estate (8), which now houses Tabuchi (Chapter Eight) - and for major investment in the road network, including the replacement of the A19 north-south route with an improved highway, crossing the Tees between Stockton and Middlesbrough.

(ii) Developments in Stockton TTWA since the 1960s

Another of the recommendations of the 1963 White Paper was for a comprehensive survey and plan of the Teesside area, upon which to base decisions about its future development (9). Thus, in 1965 a team of consultants was commissioned to carry out a "thorough survey and analysis of Teesside and a pragmatic testing of the alternative opportunities for its

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future urban structure" (Wilson and Womersley, 1969 p.3). This team reported that:

The main characteristic of the economy of Teesside in 1966 was that it depended on a very narrow range of heavy industries: chemicals, iron and steel, heavy engineering and shipbuilding. These industries employed 40 per cent of the total employment in Teesside and other manufacturing activities were relatively unimportant...
(Wilson and Womersley, 1969 p.14)

Details of employment in 1966 were collected as part of the research for the Teesplan and these are reported below in Section 3.3.

In 1968, a new County Borough of Teesside was created, taking in the Municipal Boroughs of Stockton and Thornaby, the Urban District of Billingham and part of the Rural District of Stockton. The County Borough was relatively short-lived, surviving only until the 1974 reorganisation of local government when the County of Cleveland was formed, comprising the boroughs of Stockton, Middlesbrough, Harlepool and Langbaugh. (The Stockton borough takes in Thornaby, Billingham and Yarm and covers the same area as the Stockton 1984TTWA). However, during its existence, the reclamation and development of Seal Sands occurred (see Cleveland County Council, 1975; Chapman, 1986) and Stockton councillors accepted the decision to re-route the A19 near to Middlesbrough.

With generous grants on offer under the Government's Regional Policy (see Armstrong and Taylor, 1978) national and multinational companies were attracted to invest on Teesside. In addition to the capital-intensive chemical operations which moved onto Seal Sands (including, for example, Monsanto, Phillips, Rohm and Haas), other companies identified the area, with its tradition of male-dominated employment, as a source of abundant female labour. It was in this context that Lyons-Tetley established its tea-bag

factory in Eaglescliffe and KP opened its potato crisp factory in Billingham in the late 1960s (see Chapter Four).

In the early 1970s, then, it was widely believed that Teesside was on the threshold of an economic boom:

The unique combination of deep water, large expanses of flat, developable land, a workforce with engineering skills and a community spirit of optimism and pride, matched the national requirements to develop and exploit the wealth to be created by North Sea oil and gas discoveries and the world markets seen to be opening up in steel and associated construction industries
(Cleveland County Council, 1986 p.1).

Yet, by the late 1970s, changed economic circumstances made earlier forecasts of growth appear hopelessly optimistic. Following the second oil price 'shock' of the decade, in 1979/80, the investment climate was changed fundamentally. This coincided with the faltering of the 'growth dynamic' associated with product and process innovations in the petrochemicals industry which had encouraged massive investments on Teesside in the 1970s:

Overcapacity [was] a symptom of the collective failure of the enterprises involved in the industry, which had become accustomed to rapid rates of growth, either to appreciate the onset of maturity in many of their markets or to anticipate the depressing effect of oil price increases upon the macro-economic situation
(Chapman, 1986 p.43).

Despite, or in part because of, the high levels of (Government subsidised) capital investment in the 1970s, unemployment in Cleveland was rising by the latter part of the decade and into the early 1980s (Foord et al, 1985). Some of Stockton's recently-established companies found that their plants no longer fitted in with their corporate strategies - in 1981 Rohm and Haas and in 1985 Monsanto both sold their (chemicals) businesses on Seal Sands. Paton and Baldwin (knitwear) closed its Billingham branch in the early 1980s and London-based Peter Blond (jeans and trousers) pulled out

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of Stockton in 1983. In the electronics sector, Mullard closed a components factory in Thornaby, with the loss of almost 300 jobs and, in 1985, Rediffusion closed its colour television factory in Billingham. The latter was established in 1973 and at one time employed around 400 workers. A small scale operation opened in the 1960s in Eaglescliffe by the computer company, Commodore, closed in 1979 with the loss of over 200 jobs.

Older, established firms also closed down parts of their Teesside operations as part of the national pattern of job loss. For example, in 1978 Whessoe closed down and later demolished the fabrication shop it bought from Ashmores, and BTP Tioxide (chemicals) shut its Billingham works. Haverton Hill shipyard closed in 1979 and Head Wrightson, which at one time had ten manufacturing establishments on Teesside, closed its manufacturing facilities one by one in the late 1970s and early 1980s after being taken over by the Davy Corporation in 1976 (see Chapter Nine).

Meanwhile, other significant employers in the TTWA reduced their labour forces considerably. Chapter Five reveals that employment at Bowater Hills (now Sarek Joinery) - the largest door manufacturer in England in the 1950s - declined from over 1,000 in 1978 to under 400 by 1986. ICI Billingham's fertiliser works faced increased competitive pressures after Norsk Hydro purchased Fisons' U.K. fertiliser business in 1982 (Beynon et al, 1986). Combined with growth in the import of urea (a cheap fertiliser substitute) and tighter restrictions on the use of nitrates (on environmental grounds), the performance of ICI's fertiliser business has undergone a complete turnaround from a position in the 1970s when it was a reliable source of company profits (Pettigrew, 1985). From a peak in the 1960s when ICI Billingham employed over 17,000 workers, the current figure is down to around 5,000 (not all in fertiliser production).

In September 1986, shortly after the start of the study period for this research, it was announced that ICI's four bulk European chemicals activities (fertilisers, petrochemicals and plastics, fibres and general chemicals) were to be merged into a wholly owned subsidiary company, known as the Chemicals and Polymers Group (C&P). Significantly, the headquarters of the new company are in Runcorn in Cheshire, representing a loss of control for Billingham which, until then, had been the Head Office for ICI Fertilisers (formerly the Agricultural Division). Fears were expressed at the time of C&P's formation about the possible sale of the new company by ICI in order to concentrate upon speciality chemicals with potentially higher profit margins. There was also concern about pay and conditions in the new company and about the possibility of 1,800 job losses in ICI Fertilisers (Evening Gazette, 20.9.86. p.5).

Employment decline at ICI Billingham in recent years has been steady rather than sudden, and achieved largely through natural wastage and voluntary redundancies. However, in June 1988, ICI announced 550 job losses throughout its U.K. fertiliser operations, including 50 at Billingham (Financial Times, 9.6.88. p.6). More recently, in October 1989, a further 300 redundancies were announced at Billingham alone as a result of the closure of four more fertiliser plants (250 workers) and cutbacks in office staff (50 jobs) - all through 'voluntary' redundancy (Evening Gazette, 3.10.89. p.1). Meanwhile, efforts to introduce new working practices are continuing alongside workforce reductions, with the aims of moving towards team working and reducing demarcations between different trades (10) (Financial Times, 23.11.88. p.32.; Evening Gazette, 13.9.89. p.18).

However, since the study period, as the national and international economies have improved, a number of

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developments have raised hopes of a new wave of job creation. Since these developments are not strictly relevant to the study period they are covered in an Appendix at the end of this Chapter.

Section 3.3 now presents and examines statistical evidence of the changes that have taken place since the late 1960s, as further background information setting the scene for subsequent employer studies.

3.3 A statistical overview

(i) Population

Table 3.1 shows how the population of the Stockton TTWA has changed since 1951.

Table 3.1 Population change: Stockton TTWA and Cleveland

Area	Year					
	1951	1961	1971	1981	1987	1989
Stockton TTWA	130,090	145,880	163,260	172,440	175,900	175,300
Cleveland	473,270	526,500	567,770	567,960	554,500	554,400
Source: Cleveland County Council Research & Intelligence Unit, 1989a.						

The table captures the rapid increase in population in Cleveland in the post-war period. The rise of 20 per cent between 1951 and 1971 compares with a figure of 11 per cent for England and Wales. For the Stockton TTWA the increase was even more impressive, standing at over 25 per cent. Indeed, during this period, Stockton superseded Middlesbrough as the most populous of the four districts of Cleveland. However, with only just over a quarter of the land area of Stockton, Middlesbrough remains the most densely populated district (26.7 people per hectare compared to 8.8 for Stockton). Given the position of Stockton, adjacent to Middlesbrough, there are, in a labour market context, considerable 'leakages' across the imagined TTWA boundaries.

The population of Cleveland stabilised in the 1970s and, as economic conditions worsened in the 1980s, entered into decline. In 1987, Stockton was the only one of the four districts to have a higher population than in 1971 and the total figure for Cleveland had fallen by over 13,000. Between 1987 and 1989 even Stockton registered a small drop in its population. These declines cannot be explained in terms of a surplus of deaths over births. In 1986, total births exceeded total deaths in Hartlepool and in North and South Tees. (For North Tees, there were 2,591 births and 1,652 deaths - a net increase of 939; OPCS, 1986).

As the County's Research and Intelligence Unit (1989b) concludes, the decline in Cleveland's population:

has basically resulted from the poor economic performance creating many fewer job opportunities to attract people to the county. The 1970s, with migration losses around 2,000 people a year, saw little change in population with the excess of births over deaths making a balance. This decade's migration has typically produced a 4,000-5,000 annual migration loss. Indeed, the annual losses of 5,200 in the period 1984 to 1987 were the highest in recent times and possibly in Cleveland's history (p.11).

These figures are corroborated by data held on NOMIS based on NHS records. These show that between June 1986 and June 1987 (i.e. the study period for this research) there was a net out-migration of 4,868 people. Of these 4,443 (91 per cent) left the Northern Region altogether. Table 3.2 breaks down the migration figures by age group. From this table, it is clear that migration is concentrated upon the population of prime working age (and their families). It is unsurprising, therefore, that the working age population of Cleveland is falling. The combination of net out-migration and the declining number of school leavers means that "the 17-44 [age] group, which peaked in 1985, is now decreasing and this trend, accelerating in the 1990s, should lead to a twelve per

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cent drop to 200,000 in 2001" (Cleveland County Council R&I Unit, 1989b, p.13).

Table 3.2 Migration to and from Cleveland by age, June 1986 to September 1987

Age	Male		Female		Total		Net change
	In	Out	In	Out	In	Out	
Under 16	1,209	1,772	1,148	1,642	2,359	3,466	-1,107
16-24	1,700	2,462	1,960	2,994	3,664	5,499	-1,835
25-39	1,933	2,890	1,769	2,412	3,707	5,450	-1,743
40-59	812	1,350	665	1,075	1,479	2,447	-968
60-64	152	175	157	171	309	350	-41
65+	310	363	529	591	841	960	-119

Source: NOMIS

These statistics have implications for any analysis of change in the unemployment situation. Paradoxically, if there is a net outflow of unemployed people leaving the county to find employment elsewhere, this will cause an apparent improvement in the unemployment count, other things remaining equal. Yet such an improvement clearly does not reflect underlying labour market conditions.

As argued in Chapter Two, the labour market is best viewed from a 'stocks and flows' perspective. There are continuous flows of people into and out of the local labour market. This includes an important flow of women into the labour force as female activity rates have increased over the years (11). 'Snap-shot' statistics provide some indication of the state of the market, but in order to explain observed changes it is necessary to understand the processes which give rise to them.

Unfortunately, it is not possible to identify the proportion of out-migrants previously claiming unemployment benefit. However it would, in any case, be beyond the scope of this thesis to investigate the influence of demographic changes on the unemployment count. Attention is concentrated instead upon flows generated more directly by changes in production. The two important points to emphasise are as follows. First, the labour market is an 'open' system and it is impossible to

devise precise 'accounting' methods. Second, after a long period of increase, the population of Stockton was levelling out at the time of the field work, suggesting low levels of recruitment and few attractive and available job opportunities.

In terms of population characteristics, NOMIS holds detailed data collected by the Office of Population Census and Surveys (OPCS) every ten years. However, the last Census was in 1981 and the information is now considerably out of date. Fortunately, Cleveland County Council's Research and Intelligence Unit (R&I) produces population projections for the county on an annual basis and also conducts an annual Social Survey. In the latter, information is collected on the industrial, occupational and socio-economic status of the head of all households that are surveyed. Information from NOMIS and the R&I Unit forms the basis of the remainder of this sub-section.

Both Census and R&I statistics reveal that Stockton's socio-economic structure is closer to the national average than the rest of Cleveland. Thus, for example, it has a higher percentage of professional and managerial workers than the other districts of Cleveland. These workers tend to be concentrated around Eaglescliffe, Yarm and Ingleby Barwick, at the upper end of the housing market in the county. To a considerable extent, this builds upon the historic position of Stockton and Yarm as commercial and more 'entrepreneurial' centres than the manual-dominated labour markets elsewhere in the county. Based on a ten per cent sample, the 1981 Census of Population found that 18.5 per cent of (non-retired) heads of household in Stockton were employers, managers or professionals compared to 15.5 per cent for the whole of Cleveland. Stockton also had the lowest percentage of unskilled manual workers (7.5 per cent compared to 9.1 for all Cleveland) (12). Table 3.3 (below) shows that, if

anything, the position of Stockton relative to the county has been compounded during the 1980s.

Table 3.3 Socio-economic group of head of household, Stockton and Cleveland, 1983 and 1987 (%)

	1983		1987	
	Stockton	Cleveland	Stockton	Cleveland
Prof'l/Managerial	17.7	15.3	21.9	15.6
Intermed/Jnr. non-man	20.0	16.6	19.8	15.6
Foreman/Skilled man.	37.6	38.8	32.4	38.1
Semi-skilled	17.5	20.6	17.0	18.0
Unskilled	7.3	8.6	8.9	10.1

Source: Cleveland County Council R&I Unit Social Survey (13).

Similarly, in terms of household tenure, the percentage of owner occupiers in Stockton in 1981 (58.2) was above the average for Cleveland (56.2) and similar to the figure for England and Wales (57.8). By 1987, the Survey found that 66.1 per cent of heads of households in Stockton were owner occupiers compared to 61.8 per cent for Cleveland.

Numerous studies have highlighted the strong relationship between housing tenure and economic activity (for example, McGregor, 1977; McCormick, 1983; Clark and Whiteman, 1983). Table 3.4 illustrates the position as far as Stockton is concerned, with a concentration of unemployed, sick and retired people living in council accommodation and a notable difference between owner occupiers and council tenants in terms of the percentage in full-time work.

This pattern of association is important since the unemployment count is residentially-based. Consequently, the distribution of council and private estates helps to 'explain' why unemployment is concentrated in particular wards (see 3.3 below). To the extent that some council estates are remote from workplaces and many unemployed may be without access to a car or unable to afford public transport, the distribution of housing estates can contribute to unemployment in a causal sense, by limiting access to employment opportunities.

Table 3.4 Economic activity of head of household by tenure, Stockton, 1987 (%)

	Owner occ.	Council	Other	Total
Full-time work	65.7	14.4	11.6	48.3
Part-time 10-30hrs	0.8	6.5	5.0	2.6
Part-time < 10hrs	0.6	-	5.0	0.7
Looking for work	4.5	16.5	12.4	8.2
Long-term sick	4.0	13.7	4.1	6.4
Retired	17.3	32.3	27.3	22.1
Other (inc. housewives)	7.1	16.5	34.7	11.6
TOTALS	100.0	99.9	100.1	99.9

Source: Cleveland County Council R&I Unit Social Survey.

(ii) Employment

Details of employment in manufacturing industry in Cleveland in 1966 are known as a result of the data collection exercise carried out in connection with the Teesside Survey and Plan (Wilson and Womersley, 1969). A database was compiled on an establishment level basis using records supplied by the Ministry of Labour. These figures were then aggregated into 14 'orders'. Table 3.5 (below) presents these data for Stockton TTWA.

Table 3.5 Manufacturing employment in Stockton TTWA, 1966

Order	Description	Employment	Number of companies
III	Food, drink and tobacco	1,121	10
IV	Chemicals and allied industries	19,861	7
V	Metal manufacture	4,840	11
VI	Engineering and electrical gds	6,752	20
VII	Shipbldg and marine engineering	1,861	1
VIII	Vehicles	-	-
IX	Metal goods N.E.S.	861	9
X	Textiles	447	2
XI	Leather, leather goods and fur	70	1
XII	Clothing and footwear	502	5
XIII	Bricks, pottery, glass, cement	837	9
XIV	Timber, furniture	1,009	6
XV	Paper, printing and publishing	268	5
XVI	Other manufacturing	294	3
TOTAL		38,723	89

Source: Teesplan original records.

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The domination of chemicals employment at ICI Billingham is revealed by Table 3.5, with over half of total manufacturing employment in the TTWA being in Order IV, Chemicals and allied products. The Stockton figure represented 60 per cent of the total employed in chemicals in Cleveland.

Engineering and electrical goods (Order VI) and metal manufacture (Order V) ranked second and third in employment terms, together accounting for a further 30 per cent of manufacturing employment in the Stockton TTWA. Remarkably, 82 per cent of employment in the engineering sector was in either a Davy or a Head Wrightson workplace. In aggregate, over half of all those employed in the engineering and electrical goods sector in Cleveland worked in Stockton (6,784 out of 12,468). With a further 1,800 employed at the Furness shipyard, heavy engineering was easily the second major source of manufacturing employment for Stockton residents.

Teesplan (see Wilson and Womersley, 1969) noted that total employment on Teesside grew between 1954 and 1966 at a rate slightly faster than G.B. as a whole and more than twice as fast as the rest of the Northern Region. This was attributed largely to the expansion of ICI's Wilton complex and a 'catching up' in service sector employment. After national economic recesssion in 1963, employment started to decline in steel, heavy engineering and shipbuilding and stabilised in the chemicals industry. The report went on to highlight general trends in employment which have continued through to today:

... the fall in employment was confined to male jobs in heavy industry. Employment in other manufacturers and in services and female employment continued to rise slowly but steadily
(Wilson and Womersley, 1969 p.15).

From 1971 onwards, employment data for Stockton are available on NOMIS. Table 3.6 gives details of the absolute and

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percentage changes in employment in Stockton Functional Region (14) between 1971 and 1981 and compares this with national change.

The table is remarkable in that although total employment in Stockton FR was broadly unchanged between 1971 and 1981 at around 71,000, the composition of this employment changed dramatically. Job losses in chemicals, engineering and construction were 'compensated', in a statistical sense, by gains in distributive trades and, especially, financial, professional and miscellaneous services (15).

Table 3.6 Employment change: Stockton Functional Region and G.B. 1971-81, by Group.

Group (SIC 68)	Stockton Functional Region				G.B.
	1971	1981	Change	% change	% change
Agric/forest/fish	378	280	-98	-26	-18
Mining + quarrying	44	400	+356	+809	-15
Food/drink/tobacco	2,114	3,034	+920	+44	-15
Coal/petrol/chem'l	17,309	11,307	-6,002	-37	-21
Metal manufacture	3,111	2,917	-194	-6	-43
Eng'g + allied	10,368	5,623	-4,745	-46	-22
Textiles/clothing	1,376	458	-919	-66	-41
Other manufacturing	3,109	2,439	-670	-22	-20
Construction	6,632	4,951	-1,681	-25	-8
Gas/elec/water	1,229	1,770	+541	+44	-8
Transpt/communicn.	2,902	3,444	+542	+17	-9
Distrib. trades	7,353	9,692	+2,339	+32	+5
Financ/prof/misc	10,149	19,553	+9,404	+93	+29
Pub. admin/defence	4,751	4,569	-182	-4	-5
Unclassified	0	116	+116	-	-
TOTALS	70,825	70,553	-272	-	-2
Source: NOMIS					

The nature of the jobs had changed in other ways though. By 1981, 19 per cent of the jobs were part-time, compared to just 10 per cent in 1971. Furthermore, whereas 28 per cent of jobs in 1971 were performed by women, this proportion had risen to 40 per cent by 1981. The number of women in part-time employment more than doubled during this period from 5,939 in 1971 to 12,471 by 1981. The number of all full-time jobs fell by eleven per cent over this period and for men the

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drop was steeper at 18 per cent. The job losses are accounted for largely by labour shedding and closures amongst the major chemicals and engineering companies and the closure of the Haverton Hill shipyard (see Section 3.1 above), especially between 1978 and 1981.

However, in net terms manufacturing in Stockton fared better than in the rest of the county. A study of manufacturing employment change in Cleveland between 1965 and 1981 (Storey, 1985) noted that:

Stockton is significantly more successful than the remainder of Cleveland in both the 1965-76 period and the 1976-81 period at creating new jobs in openings [of new establishments]. Although it had only 32 per cent of Cleveland's manufacturing jobs in 1976 it created 42 per cent of the new jobs in openings in the 1965-76 period and 43 per cent in the 1976-81 period. It is primarily for this reason that the net shrinkage of manufacturing employment in Stockton is the smallest of the four boroughs (Storey, 1985, p.4).

Some of the openings have since become closures (e.g. Rediffusion, Commodore, Waddingtons) but others have been longer lasting (e.g. KP, Hygena, Scottish and Newcastle Breweries).

Job gains in the service sector are harder to identify, partly because they tend to be spread across large numbers of small businesses where failure rates can be high. Although many of these new businesses are less 'visible' than the manufacturing establishments they have 'replaced', Barclaycard - in a vacated Ashmore, Benson and Pease office block - provides one good example of the 'new' jobs, employing mainly female part-time workers processing credit card slips.

Subsequent employment change, between 1981 and 1984 is shown in Table 3.7 below.

Table 3.7 Employment change in Stockton TTWA compared to Cleveland and G.B. 1981-4

	1981	1984	% change 1981-84		
			Stockton	Cleveland	G.B.
Male full time	38.9	34.5	-11	-13	-5
Male part time	1.2	1.4	+16	+19	+7
Female full time	14.7	12.6	-14	-11	-
Female part time	12.0	12.0	-	+9	+2
TOTAL	66.8	60.5	-9	-8	-2
Source: NOMIS (figures rounded).					

The remarkable feature of this table is that the increase in female part-time employment in Stockton between 1971 and 1981 disappeared between 1981 and 1984. Interestingly, the national rate of increase in female part-time employment was only two per cent during this period and Stockton's rate of increase looks slow relative only to the county's figure of nine per cent. To an extent this can be explained by the rest of Cleveland 'catching up' on service sector employment rather later than Stockton. Indeed, for the county as a whole, there was no increase in female part-time employment between 1975 and 1978 and a decline of 1.3 per cent between 1978 and 1981, cancelled by an 8.6 per cent increase between 1981 and 1984 (Cleveland County Council R&I Unit, 1988a). Male full time employment in Stockton continued to decline (by 11.5 per cent) with the biggest absolute declines still in chemicals, mechanical and civil engineering and foundries.

Stockton's total employment figure was almost identical at the 1987 Census of Employment. However, male full-time employment had suffered a further decline of five per cent (to 32,700). Male part-time employment rose (from a small base) by 50 per cent to stand at 2,100. The number of female full time workers was broadly static while female part time employment increased by seven per cent. The resumption of employment growth amongst female part timers in Stockton TTWA probably reflects, in part, the consumer boom as the economy recovered from the recession of the early 1980s.

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In Cleveland as a whole, male employment fell by two per cent (compared to a U.K. fall of one per cent), while female employment rose by four per cent (compared to a U.K. rise of six per cent). Significantly, part time employment in Cleveland rose by nine per cent while full time employment fell by two to three per cent. This compares with a national increase in part time employment of eight per cent and a small increase in full time employment (0.3 per cent).

Further details of employment change in Stockton between 1984 and 1987 are given in Table 3.8 below, which breaks down the figures on employment change by industry.

Table 3.8 Change in employment in Stockton TTWA 1981-1987 - breakdown by industry (division)

Division	Sep 1981	Sep 1984	Sep 1987	% Change 1981-87
0-1 Other primary	2,300	2,550	2,050	-11
2 Extraction/manuf-minerals + metals*	13,600	11,300	8,400	-38
3 Metal gds/vehicles	6,000	4,450	4,700	-21
4 Other manuf'g	5,200	3,700	4,400	-15
5 Construction	4,550	3,750	4,200	-8
6 Distribn: hotels, catering, repairs	13,550	12,900	10,800	-20
7 Transpt/communicn.	3,100	2,400	2,900	-6
8 Bank/finance/insur.	4,550	4,700	5,550	+22
9 Other services	14,000	14,800	17,450	+25
TOTALS	66,850	60,550	60,450	-10
* - includes chemicals.				
Source: NOMIS (figures rounded).				

This shows that the only division recording a sizeable (absolute) gain in employment between 1981 and 1984 was that for 'other services'. This includes - amongst other things - local government, hospitals, education, leisure and tourism, cleaning and hairdressing. The 1981-4 increase of 800 in this division was the net result of declines of around 250 amongst both male and female full-timers (respectively) and increases of approximately 100 and 1,200 amongst male and female part-timers.

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After 1983/4, the national economy recovered and entered into a period of what has been termed 'jobless growth' with increased output achieved through improved productivity and little or no additional employment (Campbell, 1988). In Stockton between 1984 and 1987, aggregate employment actually decreased slightly but, as Table 3.9, reveals the period brought an improvement in construction. Within the services group, employment in transport and communications rose and there were considerable further increases in banking, finance and insurance and other services. Only a 16 per cent decline in 'distribution, hotels, catering and repairs' prevented a more impressive increase in service sector employment. The decline in manufacturing employment in Stockton continued but at a slower rate (see c below on the slowdown in redundancies).

Table 3.9 Employment change* in Stockton TTWA compared with Cleveland and the U.K., 1984-7 (SIC Division)

Div.	Stockton TTWA			Cleveland	U.K.
	1984	1987	%change	%change	%change
0 Agric/fores/fish	200	200	-4.0	-11.2	-5.5
1 Energy and water	2,350	1,850	-20.5	-21.0	-17.1
2-4 Manufacturing	19,400	17,500	-10.0	-6.0	-4.1
5 Construction	3,750	4,200	+11.2	+4.7	-2.5
6-9 Services	34,800	36,700	+5.6	+3.9	+5.8
TOTAL	60,500	60,450	-0.1	+0.4	+2.0

* The employment figures are rounded, but percentage changes are calculated for the 'raw' data.

Source: NOMIS; Cleveland County Council, 1989a.

Within manufacturing, Division 2 (which includes chemicals) employment declined by a further 3,000 in the TTWA between 1984 and 1987. This decline disguised improvements in metal goods/ vehicles (Division 3) where employment rose by almost 300 between 1984 and 1987 and other manufacturing (Division 4) which recorded an increase of around 700 over the same period. However, the size of the decline in Division 2 meant that, relative to the rest of Cleveland and the national average, Stockton suffered a high percentage decline in its overall manufacturing employment. In contrast, the percentage

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increase in construction employment was better than for Cleveland and the U.K..

By 1987, then, manufacturing employment in Stockton TTWA accounted for just 29 per cent of total employment compared to 53 per cent in 1971. Whilst the 1987 share was still greater than the rest of the Northern Region (24 per cent) and the national average (23 per cent) the change in the local employment structure is remarkable. Notwithstanding some small-scale manufacturing gains between 1984 and 1987 it is clear that most 'new' jobs have been in the service sector. Some of the shift towards service employment, though, is more apparent than real as, for example, services previously conducted in-house are contracted out and the jobs become reclassified.

It is important to remember that many of those seeking jobs during the study period for this thesis would have been brought up in an era when employment in manufacturing (or construction) was the norm for the majority of the work-force (especially for males). The scale of readjustment required to meet the 'new' demands of employers should not be underestimated. Emergent patterns of employment - reflecting the restructuring of demand for labour - have major implications for job-seekers (including school leavers) who must decide on their own, 'supply-side', adjustment.

Finally, in this section, it is important briefly to consider available evidence on one supply side response that is not directly dependent on employers' demands - entry into self-employment. Much of the improvement claimed by the Government in its new 'workforce in employment' series (see Chapter Two) is attributable to growth in the self-employed rather than employees in employment. Indeed, the number of employees in employment is still considerably below the 1981 level despite the economic recovery.

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Data on self-employment are poor. The last reliable figures are those collected by the 1981 Census of Population. Subsequent figures are estimates, based on the annual Labour Force Survey, but these are not produced for the sub-regional level. Some post-1981 evidence is available for Stockton TTWA, however, from Cleveland County Council's Social Survey. The following comments are based on these two sources.

In 1981, there were 1,853 self-employed people in Stockton TTWA without employees and 1,652 with employees. Of the total 3,505 self-employed people, over three quarters were men. In the 1983 Social Survey, 5.3 per cent of heads of households in Stockton identified themselves as self-employed and this had risen to 8.1 per cent in 1987. (However, given the size of the sample - 512 households - this increase could be the result of sampling variation).

(iii) Redundancies

Table 3.10 gives details of redundancies in Stockton and Cleveland for the period from 1981 to mid-1987. These figures are based on records kept by the Manpower Services Commission (now the Training Agency) and form one of three sets of data on redundancies (16).

Table 3.10 Redundancies in Stockton, Cleveland and the North East, 1981-7

	1981	1982	1983	1984	1985	1986	1987*
Stockton	3,306	1,672	3,845	1,662	2,102	814	61
Cleveland	10,985	10,643	9,732	6,192	5,128	4,079	1,497
North East			28,718	23,495	23,117	12,864	11,044
* First six months only of 1987 (provisional).							
Source: Manpower Services Commission VET Group, Newcastle.							

The number of redundancies has declined significantly since the peak in the early 1980s when the steel and chemicals industries were shedding labour at a rapid rate. The final

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outcome for Cleveland in 1987 was 3,915 and many of these redundancies were accounted for by the offshore yards.

Redundancies constitute one important 'out-flow' from employment. Not all of those made redundant, however, flow into unemployment. Unfortunately, there are no regularly published official statistics to show the labour market 'destination' of people made redundant. Details of the last job held by people entering unemployment, for instance, have not been coded since the count switched from a registrant basis to a computerised claimant count in 1982.

One fairly recent study that did follow up this issue, however, found that where redundancies result from contraction rather than closure, an 'assortative' process takes place, whereby many of those selected for redundancy are approaching retirement or have health problems. Thus, the unemployment impact of large-scale redundancies, while significant, will by no means be on a one for one basis (Lee, 1985). Similarly, since recruitment, voluntary quits and other flows can occur alongside redundancies, a direct link between redundancy and employment decline should not be expected (see also Martin, 1984).

(iv) Unemployment

As noted in Chapter One, there have been so many changes in the unemployment count that it is almost impossible to construct a reliable time series on unemployment at the local level (see Cleveland County Council, 1989b; 1990). However, Table 3.11 below charts the steady rise in the number of unemployed in Stockton Functional Region (roughly equivalent to the TTWA) in the late 1970s and early 1980s. These figures are based upon the old registrant count.

Table 3.11 Unemployment change in Stockton FR 1972-82

Male	Female	Total	Year (all June)
3,785	611	4,396	1972
2,524	377	2,901	1973
2,202	462	2,664	1974
2,836	706	3,542	1975
3,652	1,574	5,226	1976
4,387	1,980	6,367	1977
4,523	2,152	6,675	1978
5,210	2,344	7,554	1979
6,238	2,972	9,210	1980
9,468	3,858	13,326	1981
10,106	3,803	13,909	1982
Source: NOMIS.			

The tripling in unemployment between 1972 and 1982 was not unique to Stockton, of course. The rate of unemployment in Cleveland rose from 6.9 per cent in 1972 to 20.2 per cent in 1982 and for a time was the highest county rate in mainland Britain. The Northern Region experienced a rise from 5.8 to 17.3 per cent and the national rate rose from 3.4 to 12.5 per cent - representing almost 3,000,000 people.

In May 1982 (the last date for which the information is available) 19.5 per cent of those registered as unemployed in Cleveland had been working in the construction industry prior to becoming unemployed, 12.3 per cent had been in metals (principally steel) and 5.3 per cent in the chemical industry (Foord et al, 1985).

Whilst previous comments indicate that it is too simplistic to assume a direct link between job loss, redundancy and an increase in unemployment, it is clear that for many individuals this was the path followed in the late 1970s and early 1980s. However, data on inflows to unemployment and on unemployment duration allow a more sophisticated examination of the 'dynamics of unemployment'. At the national level, Hawkins (1984) noted the remarkable stability of the inflow to unemployment, even in the first half of the 1980s. Instead, increasing unemployment - as indicated in Chapter Two - was more a function of increasing durations of

unemployment. Table 3.12 shows the average monthly 'on-flow' into unemployment in Stockton between 1983 and 1987.

Table 3.12 Average monthly 'on-flow' into unemployment in Stockton TTWA 1983-88 (claimants for benefit)

Year	Average monthly inflow to unemployment
1983*	1,652
1984	1,516
1985	1,594
1986	1,547
1987	1,561
1988**	1,409
Source: NOMIS.	
* - Average for June to December.	
** - Average for January to July.	

Table 3.12 shows that the consistency of inflow is repeated in Stockton TTWA, but two other important points need to be made about the magnitude of the flow. First, the size of the monthly flow is remarkable in relation to the total unemployment count which varied from 12,000 to 16,000 over this period. (Notions of the unemployed as a 'stagnant pool' are clearly inappropriate). Secondly, the average numbers entering unemployment in any one month are not much less than the numbers of redundancies notified in any one year - and notifications invariably exceed actual redundancies. Similar findings have been made at the national level (for example, see Nickell, 1979; Chiplin, 1982; Armstrong and Taylor, 1985) and they highlight the importance of other flows influencing the unemployment count.

Meanwhile, Table 3.13 (below) reveals that the average monthly outflow from unemployment in Stockton TTWA was of a magnitude similar to the the inflow between 1983 and 1988 and it, too, was fairly stable over this period.

Table 3.13 Average monthly 'out-flow' from unemployment (claimants) in Stockton TTWA, 1983-88

Year	Average monthly outflow from unemployment
1983*	1,412
1984	1,339
1985	1,497
1986	1,532
1987	1,582
1988**	1,487
Source: NOMIS.	
* - Average for June to December.	
** - Average for January to July.	

Clearly, where inflows exceed outflows, the unemployment count will increase as the duration of unemployment spells rises. This can be seen in Table 3.14 (below) with unemployment and the percentage of long term unemployed increasing until inflows started to dip relative to outflows from 1986/7 onwards.

Table 3.14 Size and duration of unemployment in Stockton TTWA, 1983-88

Year	Av. no. unemployed*	% unemp. > 6mo.	% unemp. > 1 year
1983**	14,345	60	42
1984	15,372	63	44
1985	15,653	65	48
1986	14,977	66	49
1987	13,445	63	46
1988***	11,960	62	44
Source: NOMIS.			
* - Claimants, subject to national changes in definition			
** - Average for July and October.			
*** - Average for January and April.			

As might be expected, long term unemployment (LTU) is not spread evenly across all age groups. Table 3.15 (below) compares the proportion of total unemployment accounted for by different age groups with these groups' share of long term unemployment (i.e. over one year). Whilst people aged between 40 and 59 account for 29 per cent of total unemployment, they constitute 38 per cent of the **LTU**. In contrast, short term unemployment is more characteristic of the 18-24 year old group: whilst they also make up about 29 per cent of the

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total unemployed, they represent only 23 per cent of the long term unemployed. Likewise, around 64 per cent of the 40-59 age group have been unemployed for over a year, compared to 39 per cent for the group of 18-24 year olds (17).

Table 3.15 Age and duration composition of the unemployed, Stockton TTWA, October 1986.

Age group	Unempld	% of unempld	Long term unemployment (LTU)		
			No. LTU	% of unempld. that are LTU	% of total LTU
16-17	747	5.2	59	7.9	0.8
18-24	4,139	29.0	1,609	38.9	23.1
25-39	4,981	35.0	2,562	51.4	36.7
40-59	4,159	29.2	2,685	64.6	38.4
60+	224	1.6	64	28.6	0.9
TOTAL	14,250	100.0	6,979	--	99.9

Source: Calculated from NOMIS

Such findings are consistent with the picture painted above, where job shedding in 'traditional' industries has left an older generation of workers without (or perceived to be without) the skills necessary to compete for 'new' jobs. This is particularly true of male workers who dominated employment in the 'traditional' industries and who accounted for 71 per cent of the total unemployment shown in Table 3.15. However, statistics on female unemployment tell only a partial tale, due to the complex eligibility rules which exclude many unemployed women from the official count (see Peck, 1984).

Table 3.16 updates the situation for Stockton with an age and duration breakdown of unemployment in the TTWA in April 1989.

Table 3.16 Unemployment by age and duration, Stockton TTWA, April 1989

Age group	Up to 6 mo.	6-12 mo.	12-24 mo.	over 24 mo.	Total
16-17	10				
18-24	1,460	680	360	210	2,710
25-34	1,060	480	350	550	2,440
35-44	540	240	210	540	1,530
45-49	200	90	80	250	620
50-64	450	270	290	960	1,970
Total	3,720	1,760	1,290	2,510	9,280

Source: NOMIS (figures rounded).

From Table 3.16 it can be shown that, by April 1989, the share of long term unemployment in the TTWA had fallen further from the 1988 figure of 44 per cent (Table 3.14) to 41 per cent. The total number of long term unemployed fell by almost half, from 7,358 in April 1986 to 3,800 in April 1989. This 'achievement' occurred against a 40 per cent decline in total unemployment, from 15,546 in April 1986 to 9,280 in April 1989 (18). The decline in long term unemployed therefore accounted for a 'disproportionate' share of the overall decline. This is reflected in an increasing share of the outflow from unemployment being made up of the long term unemployed - from 17 per cent in 1983 to 21 per cent in 1986. Only after the national and local economy started to improve in 1987 did the proportion of long-term unemployed in the outflow from unemployment fall back again, to 18 per cent in 1988.

Less than a quarter of the decline in long term unemployment between April 1986 and April 1989 occurred in the first year (i.e. during the study period for this thesis). Almost half occurred in the final year, to April 1989, when total LTU fell by 25 per cent. This rate of decline was repeated at the county level and for the North East. However, the national rate of decline was even higher, at 29 per cent.

Undoubtedly some of the recent drop in unemployment in Stockton has been due to more unemployed people finding jobs and less employed people losing theirs. However, much of the 'turnover' amongst the long term unemployed has been a result of the 'Restart' initiative introduced in 1986 (Department of Employment 1986b). This has discouraged fraudulent claims and 'encouraged' the long term unemployed to take up a training scheme, to enter self-employment or to look further afield for work (see also, Robinson and Gillespie, 1989; Robinson, 1990). Long term unemployed people who sign off to try one of these options only to sign on again at a later date are

counted then as a 'fresh claim'. Since someone moving in and out of (official) unemployment has a statistically lower probability of being counted at a monthly count than someone who is permanently unemployed, the creation of 'turbulence' amongst the long term unemployed can, by itself, contribute to a lowering of the unemployment (and the share of LTU) count, without necessarily creating any new jobs.

Finally in this section on unemployment, it is important to remember that the incidence of unemployment varies within the TTWA. Cleveland County Council's Research and Intelligence Unit (1988b) supplies estimates of ward unemployment rates calculated from official unemployment statistics and the Unit's own estimates of the numbers of economically active people in each ward. In January 1988 these rates ranged from 34.0 per cent in Parkfield ward (near the town centre) to 5.8 per cent in Wolviston (on the outskirts of Billingham). The range for males on their own is even wider - from 40.2 to 5.1 per cent for the same two wards. In Parkfield over half of all the unemployed had been out of work for a year, while this condition applied to less than a quarter in Wolviston.

(v) Vacancies

In the absence of regularly published data on employers' demand for labour, vacancy statistics act as a substitute. However, it is widely believed that vacancies notified to Job Centres (the source of published vacancy statistics) represent only about a third of all vacancies available at any one time. Furthermore, the vacancies that are notified to Job Centres are not 'representative' of vacancies available in the local economy. Thus, for example, Cleveland County Council (1989c) found that over half of the vacancies notified in Cleveland in October 1989 were in just five job groupings - all low grade, relatively poorly paid and manual.

During the study period, certain categories of vacancy - the same type as found by Cleveland County Council - tended to dominate the statistics for Stockton, Thornaby and Yarm and for Billingham. Clerical and machine operators, selling (distribution), catering and cleaning consistently recorded over 100 vacancies in each three month period for which statistics are compiled. More erratically, there were large numbers of vacancies for 'assembling, packaging and inspecting' and for 'welding/fabrication'. An average of around 400 vacancies a quarter was recorded for Billingham during the study period (June 1986 to June 1987), while the figure for Stockton, Thornaby and Yarm was just under 1,500. Very roughly, this represented around one vacancy notified every quarter for every seven unemployed people in the TTWA (i.e. approximately 1,900 vacancies in the whole TTWA for around 14,000 unemployed).

Beyond such general statements, however, it is difficult to draw any clear conclusions from the statistics by themselves without detailed knowledge of the employers' reasons for advertising the vacancies. For example, in Chapter Nine, after ITM (Head Wrightson) went into receivership, late in 1986, vacancies for welders were advertised in Stockton Job Centre in an effort to complete outstanding contracts. However, it clearly would be misleading to interpret the resulting increase in vacancies for welders as an area of growth in employers' demand for labour.

Finally, until August 1988 details of vacancies on Community Programme (CP) courses were kept. (Employment Training, or ET, replaced CP in September 1988 and there are no longer any CP vacancies. Since ET places are training courses tailored to the individual needs of the unemployed they are not counted as vacancies). An average of 57 CP vacancies a month was notified in Billingham during the study period and an average of 48 was filled. In Stockton the average monthly

figures were 155 notified and 157 filled. Since CP vacancies were eligible only to people unemployed over six months or a year (depending on their age), each one filled would have resulted in a person ceasing their unemployment claim. During the study period, the approximate total TTWA figure of 200 people a month leaving the unemployment count in Stockton TTWA to fill a CP vacancy represented about a third of the average monthly outflow from unemployment of people unemployed for six months or more.

3.4 Final Comments

Much of the above material has been descriptive in nature. In order to understand the processes behind the observed patterns of labour market change, one of the central arguments of this thesis is that it is necessary to examine employers' changing demands for labour. These demands are conditioned largely by the state of the market in which the employer operates and by the employer's competitive position in this market. However, the way in which the employer responds to changes in this environment and the pressures that these create depends to a considerable extent on the opportunities for introducing new methods of work (including new technology) and new working practices into the workplace. In turn, the ability to achieve the necessary changes in situ depends partly on the history of previous attempts to introduce changes and partly on conditions and past experiences in the external labour market and the wider local economy. Thus, the aim of this Chapter was to set out some of the key parameters within which the employers that were studied had to make their labour force decisions. It is to the first of these employers, KP Foods that attention now turns.

Appendix - Possible future sources of employment in Stockton

ICI has supported the establishment of a science park - Belasis Hall Technology Park - on a greenfield site near to the Billingham works. Incoming companies are invited to 'plug into' ICI's resources:

That does not just mean chemicals - far from it - the breadth of experience within ICI includes information technology permeating all activities, from plant control to the electronic office, and it stretches from patents agents to the whole gamut of engineering disciplines
(Belasis Hall publicity material).

The Park has had considerable early success and a third phase of construction was brought forward because of the demand for space. A private sector developer will undertake this latest phase, helped by a £2.2 million City Grant from the Department of Environment.

Elsewhere, the old Whessoe site is to house a Quality Assurance Unit of the Ministry of Defence as part of the Government's policy of dispersing functions to the regions. Around 1,500 jobs are anticipated, about 1,000 of which will be available to local residents.

Meanwhile, in 1985, the decision by Tabuchi Electric of Japan to locate in Stockton was welcomed and has been publicised by Stockton Borough Council as an indication of the borough's attraction to 'new' industry. Chapter Eight investigates the impact Tabuchi's arrival has had on the local labour market and examines the alleged benefits of 'Japanisation'. The issues raised are especially important given, first, the decision of Samsung of S.Korea, during the study period, to set up in Rediffusion's old factory in Billingham and, second, the widely promoted view that attraction of investment from the Far East (especially in the run-up to the creation of a Single European Market by 1992) should be an

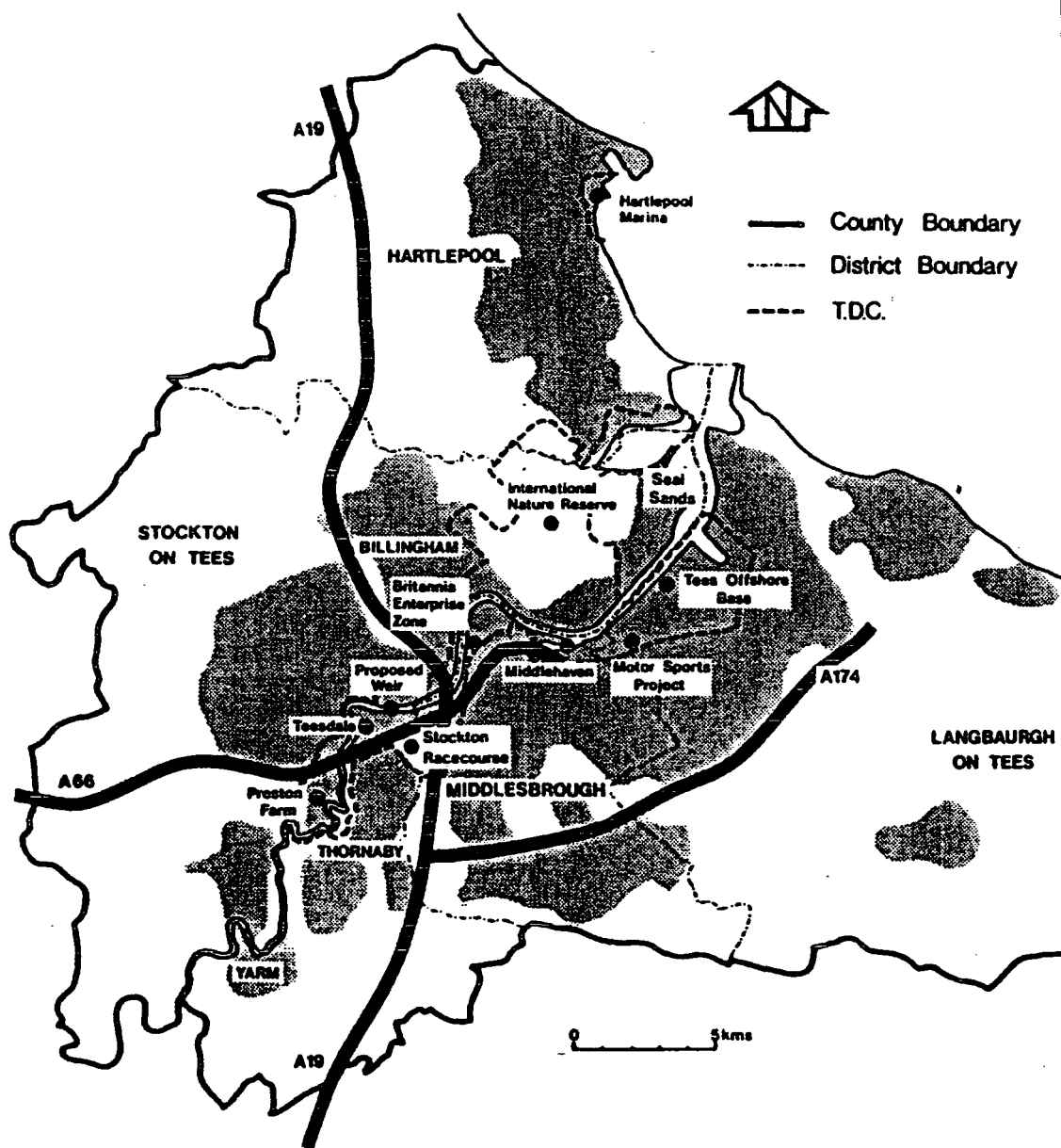
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important 'plank' in area-based economic development strategies.

The encouragement of small firms is widely regarded as another essential part of any such strategy. This is true of Stockton Borough Council and, though less pronounced than in other parts of the country (see the Background section of Chapter Seven on Glamal Engineering), there has been a shift towards employment in small firms as opposed to the traditional dominance of a few major companies. The Borough's Industrial Development Officer reported, at the start of the study period in June 1986, that the number of inquiries for premises was up from twelve to 17 a month in the early 1980s to 40 to 60 per month and many of these were from potentially new enterprises. However, whilst the quantity of enquiries was up, the quality was down, partially as a result of increased efforts by the Employment Service to encourage unemployed people to set up their own businesses under the Enterprise Allowance Scheme.

Finally, the announcement in May 1987 that an Urban Development Corporation was to be imposed on Teesside (see Stoker, 1989) received a mixed reaction in Cleveland. Many local politicians (and residents) resent the loss of planning powers to the (unelected) Development Corporation within its designated area (see Fig. 3). However, with over £150 million to spend on 'flagship' projects - many of which are in Stockton TTWA - substantial job creation is likely both in construction and in the completed developments. Whether the latter type of job is 'new' or simply displaces jobs elsewhere in the county is the subject of much debate (Colenutt and Tansley, 1989; Coulson, 1990).

Fig.3: Designated area of the Teesside Development Corporation



Source: Coulson (1990).

Footnotes

(1) Again, the Pease family were involved, with Joseph Pease having bought up much of the land that was to become Middlesbrough.

(2) According to Withington (1989) Teesside was producing 15 per cent of the world's ships at the turn of the century and there were nine yards on the River Tees (including Hartlepool).

(3) The chemicals industry on Teesside dates back to 1833 when a factory was established on the site of what is now British Chrome and Chemicals in Eaglescliffe.

(4) In 1918 the Government chose Billingham as a site for the production of synthetic ammonia for the manufacture of explosives. Existing nitrate supplies from Chile were under threat as a result of a German blockade on sea routes to South America. Although the war ended, the site was taken over by a subsidiary company of Brunner Mond in 1920. In 1926 Brunner Mond merged with three other chemical companies to form Imperial Chemical Industries (ICI) Ltd.

(5) Anderston's Foundry was established at Haverton Hill in 1874 and was followed shortly afterwards by Hemmingways Bridge and Engineering Co. (later known as the British Chilled Roll Co.) and Casebourne's Cement Works. Along with Bells Iron Works, the employment on offer was almost exclusively taken by males.

(6) Until the formation of the County Borough of Teesside in 1968, Stockton was part of Durham County.

(7) This foundry is still in operation today as part of the expanding Parkfield Group. It recently won major contracts to build tunnel segments for the Channel Tunnel.

(8) The original target workforce for the estate was 10,000. Between 1977 and 1987 employment nearly doubled but to a new total of just 1,920 (Evening Gazette, 24.2.88. p.4). The number of firms increased from 23 to 78 over the same period - including Tabuchi, covered in Chapter Eight.

(9) Around this time a number of attempts were being made to establish formal regional planning procedures. In 1964, a national Department of Economic Affairs (DEA) was set up and Regional Economic Planning Councils were formed in the regions. However, the attempts were short-lived. The DEA was wound up in 1969 and the regional planning councils closed down within a couple of years.

(10) In April 1987 a wholly owned subsidiary of ICI (Scottish Agricultural Industries) withdrew recognition of collective bargaining rights from its three manual trade unions and introduced a consultative committee instead. The subsidiary claimed that these changes complemented its attempts to

introduce team working and flexibility over work tasks (Financial Times, 4.4.87. p.4).

(11) Cleveland County Council's Research and Intelligence Unit estimates that activity rates of females in Cleveland over the age of 16 have risen from 46.6 per cent in 1981 to 50.2 in 1989 (Personal communication with Chief Statistician, Alan Tinkler).

(12) At the 1981 Census of Population, the percentage of workers in professional occupations in Stockton TTWA - four per cent - was the same as the national average. The average for the Northern Region was 3.2 per cent.

(13) These figures from the Cleveland Social Survey were supplied by Liz Crookston, Senior Social Research Officer in the Research and Intelligence Unit.

(14) As noted in Chapter Two, until the current '1984 Travel to Work Areas' were derived, employment data for Stockton were incorporated within the larger Teesside TTWA. Thus, to reach an approximate figure for employment change in the 1970s for the Stockton 1984TTWA it is necessary to aggregate data for the Amalgamated Office Areas (AOAs) of Billingham and of Stockton, Thornaby and Yarm. Fortunately, the 'Functional Region' (FR) of Stockton, based on the classification drawn up by CURDS (CURDS, 1983), is a combination of these two AOAs.

(15) Financial and professional services include accountancy, educational and legal services, medical and dental services, religious organisations, research and development and other professional and scientific services. Miscellaneous services cover such things as cinemas, sport, hotels, public houses, catering, hairdressing, private domestic services, motor repairs and dry cleaning.

(16) There are three main sets of redundancy statistics. For the first, data are compiled from statutory notices of impending redundancies, sent to the Secretary of State for Employment in accordance the provisions of the 1975 Employment Protection Act. The second is drawn from records maintained by local offices of the Training Agency, which follow up statutory notices with the employers concerned. The third is based upon lists of statutory redundancy payments (for full details see Department of Employment, 1981, p.260-2).

The actual numbers of redundancies invariably are less than the number that are notified in advance, as employers usually announce the maximum possible number to allow room for manoeuvre. Thus, the records maintained by the Training Agency - based on a follow up nearer the time of the actual redundancies tend to be closer to the true picture than statutory notifications. However, since employers with less

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than ten workers are exempt from the legislation, small scale redundancies are missed.

(17) Figures quoted are for October 1986, around the beginning of the study period for this thesis. Whilst the precise percentages do vary from month to month, the situation is sufficiently stable for one month's figures to be treated as reasonably representative.

(18) Unemployment in Stockton TTWA had fallen further to 8,198 by January 1990.

CHAPTER FOUR: KP FOODS

4.1 Introduction

KP Foods' potato crisp factory on the Cowpen Lane Industrial Estate, Billingham, was included in the field-work for a number of reasons. First, it is one of the largest employers in the TTWA with around 1,300 employees. About 1,000 of these workers are women, making KP the second largest individual employer of females in the TTWA (after North Tees Hospital - see Chapter Six). Thus, the second reason for selecting KP was that it would enable a study of some of the processes affecting female employment in the private sector.

Thirdly, since KP is situated in, and draws upon, the same spatial labour market as ICI Agricultural Division (now part of ICI's Chemical and Polymers Group), it is possible to comment upon employment structure at the two companies in the context of the wider community. Fourthly, a Business Gazette Special Supplement (22.4.86. p.5) revealed that a £10 million refurbishment programme had been started at the KP works in 1983. This presented an opportunity to investigate the employment impact of the new technology and the way in which local circumstances can influence the way in which it is introduced and the pattern of labour demand on the shopfloor.

A fifth factor in the choice of KP was that it is a 'branch plant' of KP Foods, itself a division of the United Biscuits Group. Much concern has been expressed over the long-term security of branch plant employment in the North-East of England (for example, Smith, 1985). KP, therefore, could be studied with a view to establishing the degree of local autonomy in work force changes.

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Finally, as a consumer goods industry (producing potato crisps), KP's main customers are in the increasingly concentrated retail sector. The growing power of retailers has been identified as one of the major factors affecting the food industry (Rajan and Pearson, 1986). By including KP in the study, it was possible to assess the impact that the purchasing policies of large supermarket chains have had on work organisation and employment at the manufacturing end of the industry.

For all these reasons then, KP was studied over the period between June 1986 and January 1987, with a follow-up interview in July 1987.

This chapter demonstrates that the level of employment at the KP potato crisp factory at Billingham can be understood only in the context of the evolving organisation and objectives of the holding company, United Biscuits. Thus, although many short-term decisions regarding labour demand at KP Billingham are made with regard to variations in product demand and conditions prevailing in the local labour market, decisions of potentially greater import derive from UB's corporate investment plans (1). These in turn are shaped by developments in the product market environment (e.g. changing tastes and preferences of consumers under the influence of product innovation and mass-advertising; introduction of new technology; actions of competitors, changes in methods of marketing).

The overall effect of these changes has been a requirement for more flexible production patterns, responding to short-term (daily) variations in product demand at the leading retail outlets. In an industry that still has several labour intensive functions, this has placed a premium on flexible working arrangements, leading to the increased use of temporary labour. Meanwhile, in a move to raise the level of return on capital invested in new machinery, there has been a

change-over from one full-time to two part-time day shifts. Local labour market conditions and the issue of gender are shown to be significant factors enabling the change-over and influencing the way in which the transformation has worked out 'on the ground'.

A wide variety of the adjustment mechanisms listed in Table 2.1 was discovered to be in operation. However, the impact of changes in labour demand at KP Billingham on (official) local unemployment during the study period could not be estimated to an acceptable degree of accuracy without detailed knowledge of workers' benefit eligibility. This depends, amongst other things on their length of service (and thus their National Insurance contributions record) and on the employment status and income and/or benefit levels of their partners where appropriate.

The case study is reported below in sections as follows:

- (i) background information;
- (ii) product market context;
- (iii) work patterns and practices;
- (iv) employment structure and monthly changes in labour demand during the study period;
- (v) recruitment methods and catchment area;
- (vi) unions, pay bargaining and wage levels;
- (vii) net impact on the local labour market and unemployment.

Concluding comments are made in Section 4.3 where the issues of central concern to the thesis are drawn together. Looking to the future, this section also briefly considers the position of the Billingham factory in light of the moves towards a 'Single European Market' (see Cecchini, 1988).

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4.2 The KP Case Study

(i) Background

United Biscuits (Holdings) plc. is a leading international food group (2) and the second largest manufacturer of biscuits in the world after Nabisco (U.S.). In the mid-1960's, the management identified a need not only to modernise its biscuit business but also to diversify into other products and overseas markets.

In 1967, United Biscuits took over Meredith and Drew (E.London, Halifax, Ashby-de-la-Zouch), which not only made biscuits but also had a four per cent share of the U.K. potato crisp market (3). In May 1967, Meredith and Drew added to its crisp-making capacity through the purchase of Crimpy - a wholly-owned subsidiary of Pepsico (U.S.). In October 1968, UB acquired a Rotherham-based company - Kenyon Son and Craven (Europe's largest makers of salted peanuts under the brand-name of "K.P."). Another crisp manufacturer, Watmoughs of Grimsby, was added to Meredith and Drew and Kenyons and together they traded as "Crispi" - the fore-runner of the present-day "K.P.Foods" division of United Biscuits. It is to this division that the potato crisp factory at Billingham belongs - built in 1969 at a cost of £1.5 million by UB's subsidiary company, Meredith and Drew.

In selecting Billingham as the location for this new investment, the local supply of female labour (see Section iii(d) below) was given by the company as the main reason, along with the availability of grants under the Government's regional policy (Evening Gazette Industrial Review 13.1.70. p.X). This aid, in effect, compensated for the higher transport costs incurred as a result of locating away from the major potato growing areas of Thirsk (North Yorkshire) and Lincoln (Lincs.). A 27-acre serviced site was made

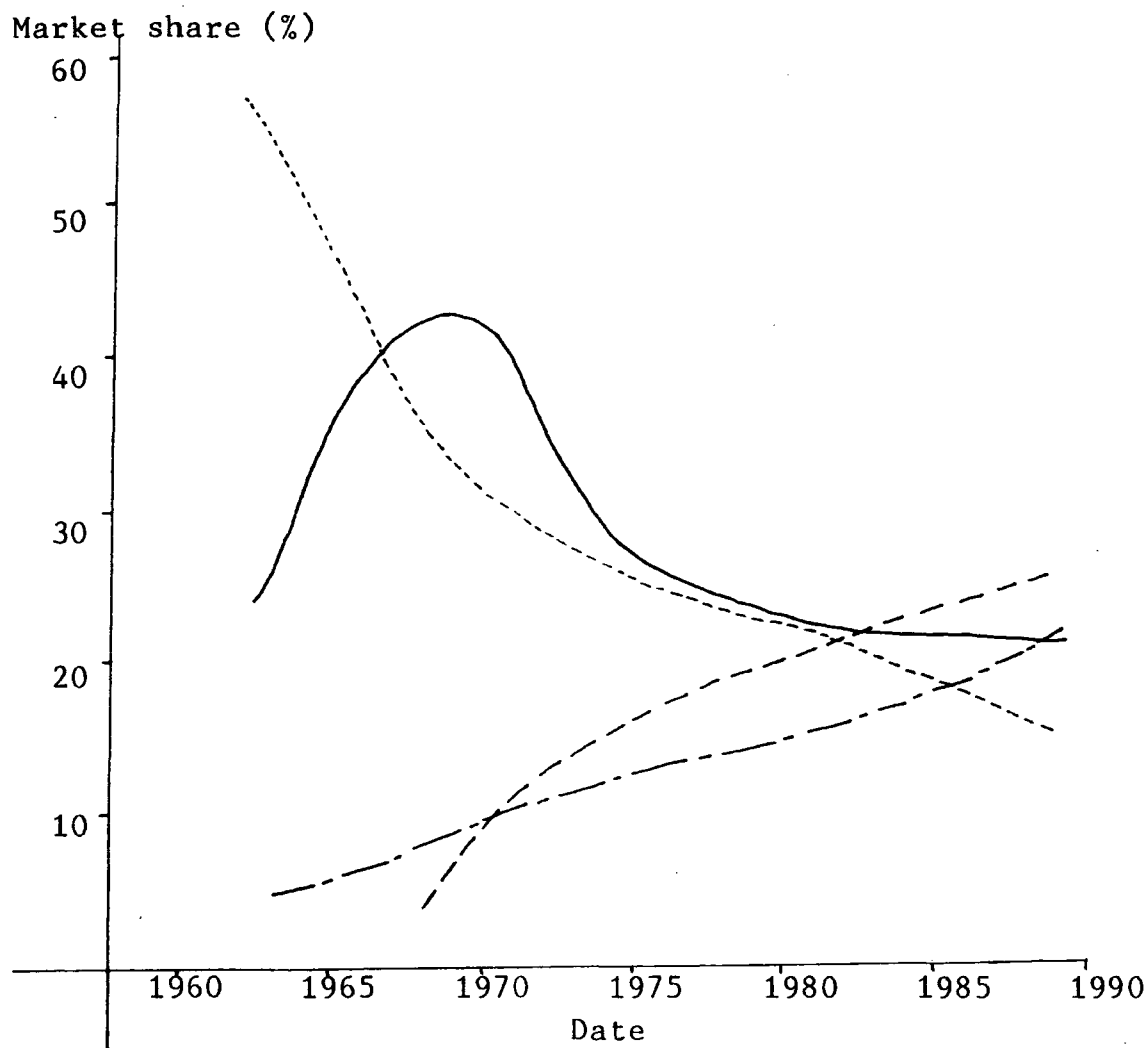
available on the Local Authority's Cowpen Lane Industrial Estate (see Fig.2).

(ii) Product Market Context

The market for potato crisps, at least until recently, has been almost exclusively a domestic one, with imports and exports amounting to less than two per cent of U.K. output (H.M.S.O., 1982; NEDO, 1986). For many years the limited shelf-life and the low value-to-bulk ratio of the product have combined with national differences in both eating habits and requirements for product packaging and labelling to restrict the scope for international trade. Greater productivity, improved methods of packaging, the introduction of greater 'value-added' into snack products and the steady stream of measures designed to harmonise standards and reduce trade barriers within the 'Single European Market', however, are causing companies to re-examine the situation. Since such developments had no perceptible impact on labour force changes during the study period, discussion in this section is limited to a consideration of the 'home' market.

For many years Smiths was the undisputed market leader in the U.K. potato crisp business (4). However, the invention of cellulose film packaging by Golden Wonder in the 1960s led to rapid growth in sales and profitability and, in turn to an increase in competition (Leach and Shutt, 1984). Not only did the market conditions encourage food companies with well-established distribution networks (such as United Biscuits) to enter the crisp business, they also enabled existing companies to expand from their regional bases. Walkers, based in Leicester with a strong market position in the Midlands, was an example of the latter. Both UB and Walkers invested heavily in new technology, and growth in their sales had a marked impact on Golden Wonder's market share (see Fig. 4).

Fig.4 Changing market shares of the four leading producers in the branded crisp market (not own-label)



Key:-

- Smiths (including Tudor Foods) (a)
- Golden Wonder
- K.P.
- Walkers (b)

(a) Between 1966 and 1978, Smiths was part of General Mills (U.S.). In 1978 it was purchased by Associated Biscuit Manufacturers (U.K.) who included it in its Huntley and Palmers Division. In 1982, Nabisco bought Huntley and Palmers and thus took over Smiths.

(b) Walkers was acquired by Standard Brands (U.S.) in 1971. In 1981 Standard Brands merged with Nabisco. Thus, from 1982 both Smiths and Walkers were part of Nabisco. In 1989, Smiths and Walkers were sold to BSN (of France) who subsequently sold both businesses to Pepsico (U.S.).

Sources: Monopolies and Mergers Commission, (H.M.S.O., 1982)
The Times and Financial Times (various dates).

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Smiths, Golden Wonder, KP and Walkers are still the leading four crisp manufacturers, although there are some significant smaller players in the U.K. market (e.g. Borden, U.S. - owners of the Murphys and Rileys brand names produced in Scunthorpe; Bensons in South Wales).

It is difficult to establish an accurate picture of relative market shares for a number of reasons. First, ownership of the companies has changed frequently over the years (e.g. see notes to Fig. 4) and smaller companies have been acquired, leading to sudden jumps in market share (for example, in October 1988 Dalgety - owners of Golden Wonder - acquired Hunters of Corby, thus boosting its share of the market from 15 to 20 per cent; Financial Times, 24.10.88. p.32). Secondly, reported figures are often based on estimates made by the companies themselves and must therefore be treated with caution. Thirdly, it makes a significant difference whether it is branded crisp products that are the basis of calculations or branded and 'own-label' (5). Finally, it is not always clear whether quoted figures relate specifically to crisps or to the snack market as a whole (since most crisp producers are involved also in the production of other snack foods).

On this final point, it is clear that estimates of relative shares of the crisp market (6) tell only part of the story. Increasingly, competition in the market-place is coming from other snack foods including nuts, savoury snacks, chew bars, confectionery and even biscuits and cakes. Since most crisp manufacturers are active in producing some or all of these other products, it makes sense to consider the performance of an individual factory such as KP Billingham only in the context of the parent organisation's wider corporate strategy (including its emphasis on advertising between different product lines).

The pressures upon crisp and other snack food producers, and KP Billingham in particular, are considered below under three headings:

- (a) product innovation;
- (b) process innovation;
- (c) changing methods of marketing and distribution.

(a) Product innovation

The turnover of new products in the snack foods industry is becoming ever-more rapid, with some having a 'life' of less than two years. In 1985, for example, 37 per cent of KP's sales were in products not listed four years earlier. At any one time there are some 50 to 80 ideas under development at KP's research headquarters in Ashby-de-la-Zouch, Leicestershire (KP Foods Report to Employees, 1985). In such a climate, the competitive position of the Billingham factory is crucially dependent on the product lines that it is allocated by senior KP management at Ashby.

Table 4.1 shows the distribution of products between KP's manufacturing establishments in 1987/8.

TABLE 4.1 KP Snack food establishments and products 1987/8

ASHBY SNACK	GRIMSBY	HALIFAX *
Twirlers Alien Spacers Cheese Crunchies Skips Space Raiders Multi-packs World Snacks	KP crisps Own-label crisps Hula-Hoops Discos McCoys ** 10 packs (joint KP crisps and Hula Hoops)	Choc Dips Toffee Dips Own-label biscuits
ROTHERHAM	BILLINGHAM	
Packet and potted nuts	KP crisps (incl. Lower Fat) Own-label crisps (6, 10 +18 packs) Crunchy Waffles McCoys ***	* Closed in 1988 ** until 1987 *** after 1987

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Several points about corporate strategy can be made about Table 4.1. First, most of the newer snack products are produced at the Ashby works, adjacent to the headquarters and research centre. Second, the parent UB organisation can have a decisive influence over the allocation of production between sites. Thus, the products of the Halifax plant - distinct from those of the other KP establishments - are to be made at other sites within the UB organisation following a sudden decision by UB to close the works in 1988. Third, the Grimsby factory covers a similar product range to the Billingham works. Both sites have benefited in recent years from their specialisation in multi-packs, "Lower Fat" crisps and 'own-label' crisps, all of which have enjoyed strong sales. The overlap in product lines reflects a tendency to split production between sites to minimise the possibility of a disruption in supplies (e.g. due to fire or industrial action). Thus, KP Billingham was allocated the first "Lower Fat" line in 1985 but, after heavy demand encouraged investment in new capacity, the second line was installed at the Grimsby factory. In return, Billingham took over the production of McCoys from Grimsby.

Fourth, unlike Grimsby (and Ashby), Billingham has no capacity to produce 'extruded' snacks (7), such as Hula Hoops. Instead, all of its products derive from the whole potato (as opposed to potato powder or corn/maize). Thus it loses out on many of the advantages of extrusion (8). A final point is that although Billingham's concentration on 'own-label' products is an advantage in terms of current sales growth, it is a disadvantage in the sense that profit margins are lower for such products - especially for multi-packs, where competition to secure orders from the leading supermarkets is intense (see c below). Moreover, it is widely believed that the growth in the 'own-label' market has nearly peaked:

Retailers fear that customers are put off if more than a certain proportion of the goods on their



shelves - 40 per cent is the current hunch - bear the same name
(Economist 16.4.88 p.84).

Against this background, the future of the Billingham factory depends on it being allocated (and allowed to retain) new and successful product lines. Competition in terms of product differentiation in the crisp business really began in the 1960s with the introduction of different flavours. This continues to be a source of new product launches, with a growing emphasis on 'adult' flavours (such as Tandoori and Worcester Sauce) in response to demographic shifts in the market for snack products. However, it is increasingly the extruded products sector that dominates the new product launches with a host of products challenging KP's "Hula Hoops", Smiths' "Monster Munch" and Golden Wonder's "Wotsits" for market supremacy. Likewise, the success of recent 'entrants' to the market is founded on the use of extrusion techniques and maize as a raw material (e.g. Derwent Valley Foods in Consett, Co. Durham with its "Phileas Fogg" range of snacks directed at the adult market). In response, KP itself launched its "World Snacks" range in 1986, covering "Popadoms", "Pizza Biscuits" and "Mexican chips".

In contrast, after a string of new flavours, "Lower Fat", thicker-cut and unpeeled variations, there would appear to be little scope for the introduction of new product lines in the potato crisp business. This has obvious implications for the Billingham works, currently geared up to deal only with production based upon the whole potato.

(b) Process innovation in the potato crisp industry

Product and process innovation are closely related (Massey and Meegan, 1982; Freeman, Clarke and Soete, 1982). This is clearly demonstrated in the case of extrusion techniques enabling the production of a whole new range of extruded

products. Similarly, the introduction of cellulose film packaging transformed the nature of the crisp product market. However, new technology is not merely 'invention-led'. There is a pressure constantly to discover more efficient methods of producing output in order to keep costs down and thus protect or enhance market share (see Chapter Two).

Although the technology involved in potato crisp production has become increasingly sophisticated, the basic process is straightforward (see iii below).

The most important innovation in recent years has been the introduction of computer-controlled weighing and packing. The first generation of automated crisp weighing and packing machines was introduced in the late 1960s by Smiths' Tudor Foods subsidiary in Peterlee, Co. Durham. These machines increased productivity and led to a wave of rationalisation. However, a number of problems were experienced with them, since the irregular size of the crisps led to unacceptable levels of 'giveaway' (Leach and Shutt, 1984). In addition, over-filling of bags can cause problems of 'crisp-in-seal', resulting in a high proportion of rejects. The second generation of machines was introduced in 1981 in the form of a computer-controlled weigher, brought into the U.K. from Japan. This weigher automatically selects that combination of hoppers that comes closest to the target weight and discharges them to a packing machine below. Purchasers generally expect the machines to pay for themselves in nine months (Leach and Shutt, 1984).

Smiths was the first company to introduce the new machines in a bid to halt its declining share of the market. The faster and more accurate operations greatly increased productivity and, within the overall Smiths organisation, four factories were closed and 1,500 workers lost their jobs as a result (ibid. p.80). Walkers followed soon afterwards and in 1983 KP announced a major investment campaign to introduce the new

equipment throughout most of its factories, including expenditure of £4 million on the new equipment at the Billingham works (9). Thus, in 1985, four of the packing lines at the Billingham works were fitted with the new weigh-heads. In 1986, two new wrapping machines, capable of making bag sizes of up to 500g capacity (for multi-packs) were installed.

With Golden Wonder introducing the new weighing machinery into its factories in 1984/5, there has been a considerable expansion in national capacity for crisp production. Yet the investments coincided with the general economic recession and large-scale rationalisation seemed inevitable. Indeed, in February 1987 Golden Wonder announced the closure of two of its crisp factories. Underlining the problems facing the industry, one of these plants in Broxburn, Lothian, had received "£2 million worth of new machinery... in the past 18 months [prior to the announcement of closure] and [had] the most modern packing equipment in Britain" (The Guardian, 17.2.87. p.4).

However, although over-capacity remains a problem, the worst excesses of a 'crisis of over-production' have been averted temporarily by the rise in consumer expenditure over the last four years, the growth of the 'own-label' market and the introduction of successful new products such as KP's "Lower Fat" range and "McCoys" and Smiths "Jackets". Opportunities to increase exports to Europe may further alleviate the situation, but Billingham's location is less favourable than other sites both within the UB organisation and belonging to KP's competitors (see Section 4.3).

Meanwhile efforts to mechanise presently labour-intensive parts of the labour process look set to have an equally significant impact on crisp factories in the near future. For example, in the March 1988 issue of the magazine of the European Chips Snacks Association (ECSA), the U.S.-based

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company Key Technology advertised an automatic crisp sorter which it claims has:

eliminated the need for nearly all manual sorters. Its fully-automated, high speed solid-state cameras scan product at the rate of 1,600 scans a second and order banks of precision air jets to remove all designated defects (ECSA, 1988 p.20).

It is further claimed that the machine will pay for itself in less than a year as a result of the savings it generates.

Other significant changes in technology have been or are about to be introduced on the warehousing and distribution side of the business and are discussed below. The labour force implications of all these changes at the Billingham works are then discussed in Sections (iii) to (vii).

(c) Changing methods of marketing and distribution

When Nabisco took over Smiths Crisps in 1982:

it was not, in fact, the technological capabilities of Nabisco's competitors that worried Nabisco most - it was the rate at which major customers... were investing in and using electronics.

... Whereas a decade ago food salesmen would call at individual stores on Mondays taking orders for delivery during the Thursday of the same week, now the most advanced companies like Sainsburys and Tesco are moving towards 24-hour turnaround.

... Traditional paper-based systems of ordering and invoicing are on the way out. They are being replaced by electronic data networks that link supplier to manufacturer and manufacturer to retailer (Financial Times, 8.2.88. p.9).

At KP Foods, there is a sophisticated system for handling orders, stock levels and production requirements. Production managers are sent details of desired output, the dispatch departments are informed of the orders that have to be prepared and invoices are sent out to customers automatically. The 'Big Four' retailers (Sainsburys, Tesco, Asda and Argyl) each now account for over ten per cent of

the British food retailing market (Financial Times, 12.9.89. p.36). As they strive to maximise the rate of return from every inch of shelf space, again using the latest computer technology, so the frequency and quality of feedback to manufacturers have increased.

In KP's warehouses, radio links connecting computers on fork lift trucks with the factory offices now help to ensure better stock rotation. The scope for savings in this part of the business was substantial: in 1974, £700 million worth of goods passed through warehouses belonging to UB and losses resulting from goods passing the 'best before' date were in the order of £1 million (Financial Times, 28.9.84. p.17).

Thus, computers have not only created a demand for more flexible patterns of production (matching the day-to-day requirements of the leading retailers), they also have helped to overcome possible logistical problems associated with the assembly and dispatch of numerous, smaller production runs.

Finally, in an increasingly competitive snack foods market, advertising campaigns - now often running to millions of pounds - have a vital bearing on the demand for a particular factory's product lines (see Economist 27.2.88. p.58). This adds to the variability of sales, again requiring a flexible and rapid response from the manufacturers.

Attention now concentrates on the labour requirements of the production process at KP Billingham and the implications for the work-force of the changes discussed above.

(iii) Work patterns and practices at KP Billingham

Despite the advanced levels of technology involved in the crisp production process, a number of tasks have remained labour intensive. Once potatoes have been collected from the stores they are washed and peeled in a industrial peeler. They then pass along a conveyor where workers are required to

scan and sort the potatoes, removing any remaining peel and cutting out any marked or rotten pieces. After being fed through automatic slicers, the slithers of potato are fried in large cookers. They then pass along another conveyor where workers again are required to identify and remove burnt or otherwise unsightly crisps. (It is this stage for which Key Technology has developed its automatic sorter - see above).

After powdered flavourings have been added in a rotary drum, the crisps pass on to the highly mechanised and computer-controlled weighing and packing machines described above. However, there is still a need for labour to supervise the equipment and there has been a degree of 're-skilling' of the existing work-force to acquaint them with the new equipment. There is also a need for labour to add the required flavourings to the rotary drums through which the crisps pass. Finally on the shopfloor, although packets are formed, crimped and cut by automatic machines, there is a high level of demand for packers to take the packets as they come off the machines and load them into boxes. In addition to these 'direct' production line workers, there is a demand for 'indirect' labour (e.g. potato stores; warehouse; managers; clerks).

The ways in which the demand for labour has been met are examined in the following sub-sections:

- (a) main changes in employment and working patterns;
- (b) the switch from full-time to part-time employment;
- (c) the gender dimension of employment change at the factory.

(a) Main changes in employment and working patterns at KP Billingham 1969-86

Table 4.2 provides a chronology of significant events at the KP Billingham factory during the 1970s and early 1980s. A

'back' (evening) shift and a night shift were introduced shortly after the factory opened in order to raise the level of capacity utilisation and increase the return on the investment. However, the most significant change in working patterns came in 1980 when the KP group decided to replace the full-time day shift with two part-time shifts (morning and afternoon) at all its factories (Financial Times, 3.6.87. p.4). At KP Billingham this transformation is nearly complete following a steady run-down in the numbers on the full-time day shift (by non-replacement of leavers) and recruitment onto part-time day shifts that previously had involved only a minority of the workforce. A discussion of the rationale behind the change-over and a more precise account of the means by which it was achieved are contained in (b) below.

TABLE 4.2 Employment-related changes at KP Billingham 1969-86

DATE	EVENT	EMPLOYMENT	SHIFTS
Nov. 1969	First production line started	130	Ten hour day shift
Dec. 1969	Evening ('back') shift started	169	Full-time day shift and 4½hr evening shift
May 1970	Second production line commissioned	300	As above
1970/71	Night shift introduced on one line. Part-time day shifts (morn, aft + eve) in limited nos.	760 (incl. 100 men)	Full-time day shift, 3 part-time day shifts + a night shift
Summer 1972	Third production line (2 crisp; 1 snack)	960	Full-time day shift, 3 part-time day shifts + a night shift
1972-May 1973	A further 3 production lines added (5 crisp; 1 snack; 1 spare)	1,800	As above
Dec 1974-Jan 1975	158 job losses announced - mainly women on nights who declined alternative position on back shift	1,700 (incl. 200 men)	As above, but night shift taken off temporarily

(Contd.)

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Table 4.2 Contd..

DATE	EVENT	EMPLOYMENT	SHIFTS
Mar 1977	Ambitious job security/flexibility talks between UB and unions		Return to one full-time + 3 part-time day shifts + nights
1979/80	£2 million investment programme started to replace original two production lines and introduce filters to reduce pollution	1,500	As above
Mar 1980	Numbers increasing on part-time day shifts (morn and aft) while number of full-time day workers falling	1,400	As above
1983-6	£10 million refurbishment of packing area started: new cookers weighers and wrappers	1350	
Apr 1983	Extra 60 workers taken on following intro. of Worcester Sauce crisps		
Mar 1984	102 night shift staff (mainly women) left KP on voluntary severance terms after turning down alternative jobs on other shifts; few transfers from nights to part-time days		As above, but night shift taken off temporarily
Jan 1986	Dispute over cut in ratio of relief to production workers for toilet breaks etc.		Return to one full-time + 3 part-time day shifts + nights
Mar 1986	Lower fat crisps introduced: saved 132 part-time jobs at risk due to falling sales.	1200	As above plus 3 extra lines in use on nights

Source: Evening Gazette (various).

Of-especial interest in Table 4.2 are the events of December 1974 and March 1984. On both occasions, the company attempted to run-down the scale of operations on the (full-time) night shift in response to a slow-down in crisp sales. On both occasions the (mainly female) workers were offered alternative positions on the evening shift (17.15-19.45hrs) and, in the 1984 case, on the morning or afternoon shifts.

Whilst some workers accepted the offer, many declined. This raises two important points in the context of this thesis. First, any consideration of labour demand and supply should take into account not only the number of people employed but also the actual hours they work.

Second, the supply side of the labour market constrains the ability of the company to vary hours of work. The unpopularity of part-time shifts with some women (because of lower earnings), and the evening shift in particular with others (inconvenient hours for women with domestic and family responsibilities), prevented adjustments by a simple reallocation of the existing labour force. Instead, it was necessary to shed labour from the night shift and recruit "fresh" labour for the part-time shifts. For example, less than one month after 158 job losses from the night shift in December 1974, the company was advertising for 30 evening shift workers. Recognising the supply-side constraint, KP specifically stated that the jobs would suit women aged between 35 and 55 with a secure domestic background and older children (Evening Gazette, 30.1.75). Turnover has remained high on the evening shift which is known in the factory as the "carpet shift", (reflecting the tendency of women to take the job for as long as it takes to earn sufficient to purchase a household consumer durable).

Notwithstanding this supply-side constraint, the ability to "hire and fire" almost at will, illustrates the advantage to the company of locating in a "loose" labour market (i.e. one in which there is a lack of competition for available labour). The fact that some of the night shift would not have built up sufficient length of service to be entitled to redundancy pay, lowers the cost of adjustment for the company (although UB's redundancy terms for those who are eligible are better than Government-specified minimum levels).

(b) The switch from full-time to part-time employment

Some of the standard explanations for the rise of female part-time employment in the economy at large (10) do not help to explain the reasons for a shift to part-time working at the KP factory at Billingham. Firstly, as in most female part-time manufacturing work (Robinson, 1985), part-time employment at KP (25 hours a week) exceeds the 16 hours-a-week limit after which certain statutory worker entitlements apply. Secondly, KP's strategy for replacing full-timers with part-timers explicitly recognised that the protection of all rights and entitlements and maintenance of the same hourly wage rates were fundamental requirements if the plan was to gain acceptance with the work-force.

Thus, it is argued below in (d) that although the predominantly female composition of the KP Billingham workforce was an important factor enabling the transformation from full-time to part-time work at the factory, it did not explain why the change was implemented.

The decision followed a calculation by the KP group that it needed to reduce worker hours per tonne of product by a minimum of five per cent per annum over the 1980s to maintain its position in the snack food market (Financial Times, 3.6.87. p.14). Investment in new machinery was seen as an essential part of any strategy to achieve this rate of productivity increase, but there was a realisation that working practices would also have to be made more efficient.

In this context, the main reasons for the change-over can be summarised as follows:-

- the need to utilise capacity more fully by cutting out 'down-time' (e.g. meal breaks);
- the need to overcome problems created by the steady attrition of the length of the working week, which had led to plant shut-down (e.g. on Friday afternoons);

- the availability of, in effect, a public subsidy in the form of the Government's Job Splitting Scheme (11);
- a desire to reduce payments for over-time work on premium rates of pay and to substitute 'extra-time' - performed by part-timers at standard rates of pay;
- recognition of the potential to cut down absenteeism (12) and accidents related to the pressures of working full-time at a repetitive and boring job, and thus to increase productivity through faster work rates on shorter shifts;
- the ability to widen the effective supply of female labour by offering more convenient day-time hours of employment at a time when demand for female full-time labour from incoming employers is on the increase;
- the possibility that problems of turnover on the night shift might be reduced as it offered higher weekly earnings than the part-time day shifts.

Several of these points are developed in detail in subsequent sections. In closing this section it is of interest to note the comments of Alan Jones, the KP group's Personnel Director who masterminded the changeover:

There is nothing magical about a 40 hour, five day week. Our standard ideas of when and how long it is appropriate to work are undergoing tremendous change. Soon the full-time week will fall to 35 hours. There will be growing harmonisation between full-time and part-time hours. We are just a little ahead of the game
(Financial Times, 3.6.87. p.14).

(c) The gender dimension of employment and changes in labour demand at KP Billingham

'Men's work' and 'women's work' develop in relation to each other, to the structures of a local community and of wider society and to the pressure of patriarchal authority. [Thus] concrete demonstrations of the way in which the sexual division of labour is formed, at the same time as it is reified and made to

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seem 'natural', are a powerful reminder that behind questions of the social organisation of paid employment and its changes over time, lie significant questions about social structures of power and authority (Purcell et al, 1986 p.17).

From a gender perspective, two main questions surround the employment situation at KP Billingham:

- Why is it that over 90 per cent of the jobs are held by women?
- How significant was the sexual composition of the labour force in influencing the change-over from full-time to part-time working?

On the first question, there can be little doubt that the use of women in crisp factories is the result of a deliberate choice on the part of the manufacturers. The expansion in crisp production in the 1960s (see footnote 3) came at a time when 'male labour markets' were 'tight' (i.e. high levels of demand for male labour and low unemployment). Consequently, manufacturers of crisps and other products experiencing growth in demand (13) were forced to consider the use of female labour. The existence of large pools of untapped female labour in dominated 'male labour markets' in the Assisted Areas of G.B. added to the attraction of regional grants available at the time (Armstrong and Taylor, 1978).

Chapter Three highlighted the almost complete domination of the Billingham labour market in the 1960s by companies employing men. To recap, the town had a population of 35,000 at the time of the Teesplan (Wilson and Womersley, 1969) and ICI Billingham employed 17,400 - around 30 per cent of whom were Billingham residents (Pettigrew, 1985). Other major Billingham employers included Furness Shipbuilding (1,861 employees), British Titan Products (946) and Davy and United Roll (525). Only Paton and Baldwin (Knitwear) with 329 employees offered an alternative to the limited job options

for women in retailing, clerical, secretarial, and teaching posts (the last three of which required at least some form of pre-employment training and experience). The rapid expansion of demand for female labour, following the opening of the crisp factory at Billingham, generated what the local newspaper later described as "something of a social revolution" (Evening Gazette, 6.11.79.). Given what was for many women the first real opportunity of paid employment, there was a strong local response: 800 people (mainly women) applied for the first 130 jobs (Evening Gazette Industrial Review, 13.10.70.p.X).

The situation was in no way exclusive to Billingham. Smiths Crisps' Tudor Foods subsidiary at Peterlee, Co, Durham (opened in 1960), Golden Wonder's factories in Widnes, Cheshire (1961) and Corby, Northants. (1963) and Rileys in Scunthorpe, on Humberside (early 1970s) are all variants on the same theme - tapping pools of female labour in previously male-dominated labour markets.

The decision to use female labour, it could be argued, has shaped the path of technological development in the industry. For example, Cockburn (1983) claims that a masculine technological culture sustains and rewards men and constructs them as different and superior to women. Thus, social conventions which in the past have effectively excluded women from the research and design work associated with new technology, nevertheless accept them as operators of equipment. However, in performing routine ('deskilled') tasks, women learn few general or transferable skills and their jobs are always vulnerable to technological change (witness the threat of the automatic crisp sorters in the crisp industry). Thus, the women operators' exclusion from negotiations over the design of the equipment with which they work, has prevented them from establishing any control over the security of their jobs.

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As for the change-over from full-time to part-time working, a strong case can be made that the sexual composition of the workforce played an important role. KP was able to build on a household division of labour which still tends to load women with a disproportionate share of household and child-care activities (14). Thus, domestic pressures which restrict women's daily availability for work accorded with the company's goal of introducing part-time shifts. Locally high rates of unemployment and the fact that alternative opportunities for women locally are either ruled out (on grounds of inadequate skills or qualifications) or offer lower pay (e.g. retailing) have meant that part-time employment at the factory still represents an attractive proposition for local women (but see iv below on the recent growth in competition for female labour on the external labour market).

The gradual nature of the change-over, the maintenance of all employment rights and conditions and the apparent compliance of the work-force has averted union opposition to the changes. Lingering notions of work at the factory as being for 'pin money' may have reduced the outcry that could have been expected had the jobs been considered as 'men's work'. Indeed, in a report on the switch-over, KP's Director of Industrial Relations, Brian Parrish, admitted: "It would probably have been a lot more difficult had they been men" (Financial Times, 3.6.87. p.14).

(iv) Employment structure and monthly changes in labour demand at KP Billingham during the study period

(a) Employment structure

At the start of the study period (June/July 1986), total employment at KP Billingham stood at approximately 1,300 (see Table 4.3 below).

TABLE 4.3 Employment structure at KP Billingham June 1986

Operatives (a)	No.	Key:-
Full-time day workers	71	(a) Includes sorters and packers.
Full-time night workers	216	
Part-time day workers	721	
Sub-total	1,008	(b) Supervisors may be in charge of 1 or 2 prodn. lines, or could be in potato stores, dispatch or even financial accounting. Leading hands (see text) are not included.
Management and support staff		
Management	20	
Potato stores	19	
Cooker operators	23	
Work service (cleaners)	31	
Supervisors (b)	40	(c) Canteen, security, labs., linen, etc.
Clerical	20	
Sub-total	153	
Other support staff (c)	140	
GRAND TOTAL	1,301	
Source: Personnel Department, KP Billingham.		

A 'head-count' on a typical morning or afternoon at the start of the study period would have revealed around 300 operatives present. With five production lines running, about two-thirds of the work-force would have been engaged directly on a line, since each line requires between 30 and 40 people from start (raw potato input) to finish (dispatch of packaged boxes). The remaining 100 or so operatives would have been performing supporting roles (e.g. warehouse, stores). On a typical evening, there would have been a lower number of operatives as the number of lines in operation invariably would have been lower, with less still on nights (three or four lines). Production operatives are divided into five grades (in increasing status), following a job evaluation exercise in the early-1970s:

Grade 1 - packer (includes cleaner)

Grade 2 - examiner (and some machine operators)

Grade 3 - machine operators (includes potato stores)

Grade 4 - senior hands (and assistant leading hands)

Grade 5 - leading hands.

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The vast majority of operatives was employed for the labour-intensive tasks of examining and packing. Virtually all of these jobs were performed by women (mostly aged between 25 and 45), and this was the case even when full-time employment was dominant at the factory.

The management (bar one female production manager), cooker operators and workers in the potato stores were all male, full-time employees. With one or two exceptions, all of these worked on days rather than nights. Work service (cleaners), supervisors and clerical staff included a mixture of full-timers and part-timers, but were mostly female.

Unlike many other companies, KP had not 'externalised' any service functions like catering, cleaning or security, choosing instead to retain its own direct employees.

(b) Monthly changes in employment and labour demand

A straight count of the numbers on KP's payroll at the time of each visit would have been highly misleading. As the study period commenced at the start of the summer holiday season, the company was starting to recruit temporary holiday cover. At the peak of the holiday period up to 25 per cent of the work-force can be on leave and there may be over 100 temporary workers present. Since some holiday 'temps' are offered permanent posts to replace 'leavers', it is not possible to draw a distinction between the two sets of workers. Thus, Table 4.4 (below) presents figures for three of the visit-dates for indicative purposes only. (For example, the August 1987 figures are inflated by the fact that the last of the 'early' potatoes were being used up. Since these had a higher than usual number of blemishes, extra temporary workers had been taken on alongside the holiday cover).

TABLE 4.4 Employment change at KP Billingham 5.6.86.-11.8.87.

Shift	5.6.86.	27.11.86.	11.8.87.
Morning part-time (07.15-12.15hrs Mon-Fri)	245	251	263
Afternoon part-time (12.15-17.15hrs Mon-Fri)	236	238	254
Evening part-time ('back') (17.15-22.15hrs M-Th/M-F *)	240	240	256
Full-time days (07.15-17.15hrs M-T **)	71	68	62
Full-time nights (22.00-07.15/00.80hrs M-T ***)	216	176	178
Sub-total	1,008	973	978
* Approximately one quarter of the evening shift work M-Th.			
** Full-timers have an option to work one Friday in four.			
*** Around 80 per cent on nights finish at 07.15hrs.			

On a further cautionary note, the sub-total figure in Table 4.4 clearly does not add like with like, grouping together full-time and part-time workers (15). To reach the total employment figure, it is necessary to add managers and support staff shown in Table 4.3. whose numbers did not vary significantly during the study period.

A more accurate way of looking at changes in labour demand over the study period is to explain changes between visits with reference to the adjustment mechanisms listed in Table 2.1.. Mechanisms in operation included the on-going change-over to part-time working [B7 in Table 2.1], recruitment [A1], transfers between shifts [A15], the use of 'extra-time' and over-time [A10 and A16], the non-replacement of leavers to effect a reduction in labour [A17], the use of temporary workers [C4 and C5], stockpiling [A19], insistence on flexibility between tasks [C2], the use of Government-sponsored training schemes [A9] and the forging of links with local schools [A8]. These are now considered in the context of events during the study period.

As shown in Table 4.4 the number of full-time day workers is relatively small now (around seven per cent of all operatives) and this number continues to decline (from 71 to 62 over the year of this study). This non-dramatic rate of

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change has been achieved by the replacement of full-time leavers with two part-time workers. According to Brent Godfrey, Personnel Manager at KP Billingham, at the time of the study an average of about five or six people across all shifts were leaving the factory 'voluntarily' each week. Thus, around 20-24 leavers might be expected in any four-week period - the equivalent of approximately 2.2 per cent of all operatives. This compares favourably with national figures for labour turnover in the food, drink and tobacco industry over the same period of approximately 3.2 per cent for women (16). This is consistent with the observation that 'voluntary quits' are less common in a 'loose' labour market.

Indeed, pregnancy, out-migration and changes in personal/family circumstances are by far the most common reasons given by 'voluntary' leavers, with few leaving for alternative employment. This situation changed slightly during the course of the field-work with the arrival of Dunnes superstore near Billingham town centre and the opening of a video cassette factory by the Korean company, Samsung, on the same industrial estate. Both attracted away some labour from KP and there were a few examples of 'double job holding' (17).

Amongst the personal/family reasons frequently given for leaving, two relate to changes in the labour force status of the husbands of female employees. Thus, the Personnel Manager reported instances of women leaving the factory when their husbands became unemployed in order not to lose out on social security payments. Conversely, there were examples where previously-unemployed husbands found work - often away from home or on a contract overseas - and the wife resigned in order to look after the children. Significantly, the influence of Christmas showed through clearly, with leavers in the month before Christmas limited to a couple of retirements and pregnancies.

'Natural turnover', therefore, is very much a 'double-edged sword' as far as KP is concerned. Turnover can cause problems, especially on the evening shift where recruitment is difficult. However, it can also be beneficial, helping to usher in the new pattern of part-time working and, on other occasions, avoiding the need to lay off workers. Thus, to 'smooth over' a fall in product and labour demand during September (1986), leavers from the night shift were not replaced and four workers were transferred (with their agreement) from nights on to the part-time morning shift (18). In anticipation of an upturn in demand in the run-up to Christmas, a higher level of production (and labour demand) was maintained than was justified by the level of sales at the time.

However, by October sales had shown no signs of increasing and a less subtle form of adjustment was required. Thus, the number of lines operating on nights was reduced by one. This followed a cutback on the night shift in August, from four lines to three fully operational lines and one using crisps from a store-box instead of being fed directly from one of the cookers. (The store-box enables added flexibility in production, but does not hold a sufficient quantity to supply a line for the whole night shift). Forty operatives lost their jobs as a result of the line being taken out of action but these included the 'tail-end' of holiday cover and other temporary staff on a 'last in, first out' basis. (All new recruits start on a temporary contract - see v below). The previous cut-back on the night shift led to 18 holiday cover and six temporary workers being dismissed.

Small numbers were recruited to replace leavers on the morning shift in both September and October, in addition to the transfers from nights on to this shift. A more substantial recruitment campaign took place in March 1987, when 40 workers were taken on after a decision to use an

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extra line during the evening shift. However, it was later decided that there was insufficient demand for the additional line and therefore the new recruits were offered jobs on different shifts both to replace leavers and to meet a seasonal demand for extra labour to examine the final batch of 'early' potatoes.

The only other recruitment during the study period involved the employment of eight people, taken on to receive two weeks' training in fork-lift truck driving in preparation for six weeks' work at the factory during the annual potato intake in September/October. This is an annual event and the company receives money from the Manpower Services Commission (now Department of Employment Training Agency) on the condition that it recruits from the unemployed (19).

'Flexible labour' policies were in evidence in a number of different senses. 'Functional flexibility' was observed during the study period, deriving from a flexibility deal negotiated with the unions in the late 1970s (see Table 4.2). This provided that workers will agree to perform any work function that they are capable of doing. Thus, a packer would not be expected to work a machine on which she had not been trained but could be asked to help, for example, with stacking in the warehouse or tidying up on the shopfloor if her own work is slack. In October at the time of the potato intake, some workers from the factory were drafted into the potato stores to help pick out stones. This ensured that their labour time was used fully, while averting the need for additional recruitment.

The switch to part-time working, meanwhile, created the opportunity to extract additional hours out of the labour force at the standard rate of pay - achieving both numerical and financial flexibility for the company. With a full-time workforce, additional hours tended to be unpopular with the workers and had to be paid for on over-time rates. In

contrast, part-time workers are paid at the standard rate until their hours exceed 40 per week. Below that limit, they are classed as doing 'extra-time' as opposed to overtime. Use of extra-time has met an enthusiastic supply-side response ("it's relatively easy to persuade part-timers to carry on for a few extra hours if necessary") and is an especially attractive adjustment mechanism for KP given the trend towards more variable and shorter production runs. However, over-time has not been phased out completely and it remained an important adjustment mechanism in the period immediately before and after the Christmas break.

Further numerical flexibility has been achieved through the greater use of temporary workers. The Labour Force Survey distinguishes between those in seasonal, temporary or casual jobs (Type I) and those in jobs performed under contract for a fixed period of time (Type II) (20). Type I temporary labour is used at KP Billingham for two main reasons. Firstly, the factory does not close in the summer and therefore holiday cover is required. Secondly, crisp sales tend to follow a seasonal pattern with peaks around Easter and Christmas-time. However, the attraction of using temporary labour has grown in recent years along with the need to be able to respond swiftly to changing patterns of product demand, as discussed above. Consequently, there has been a blurring of the boundaries between Type I and Type II temporary contracts at KP Billingham.

Thus, the recruitment and dismissal of summer holiday temps is undertaken in a staged manner. Different 'categories' of people apply for holiday work at the factory and this presents an opportunity for the Personnel Manager. Some applicants are students who have fixed dates between which they can work and these are taken on for four or six weeks. However, they are told categorically at the time of recruitment that no length of employment is guaranteed. Other

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applicants are looking for temporary work only in order to raise money, say, for a holiday. Yet others apply in the hope that a temporary job may lead ultimately to an offer of a permanent job. Such applicants are likely to be offered a six-month contract initially. At the peak of the holiday season, the factory will draw on all these sources of temporary labour.

As the students leave for college or University, other temporary workers who are willing and able to stay on are retained and then gradually dismissed as permanent staff return. If the company finds that some jobs are left unfilled, because of turnover or an increase in sales, temps who performed well in the summer are offered a permanent post or, occasionally, another six month contract. Clearly, in such a situation, the differentiation between the use of temps for holiday cover and their use as a 'buffer' stock against sudden fluctuations in sales is slight or non-existent. Indeed, precise figures for the study period cannot be given because personnel records make no such differentiation. New starters now begin on temporary contracts and are liable to be 'axed' on a 'last in first out' basis along with the temps (as in August and October of the study period).

The continuing use of temps was highlighted early in 1988, when it was revealed that 150 temporary workers had been taken on for the Christmas rush and were being retained because of strong sales of "Lower Fat" crisps (Evening Gazette, 4.2.88. p.5).

(v) Recruitment methods and catchment area

Recruitment and personnel functions are a local-level responsibility within the KP organisation. However, certain standards are centrally imposed from the KP headquarters at

Ashby (e.g. a common 'house-style' which dictates different-coloured hats for different grades of worker) and Personnel Managers at the various KP factories are in almost daily contact.

The Billingham factory has few problems in recruitment. The night shift has increased in popularity since recruitment for full-time work during the day ceased and the only occasional problems are experienced with the evening shift. The Personnel Manager was unable to provide a breakdown of the backgrounds of job applicants but noted that "the chances are they're unemployed". Of those who are, or were, in jobs previously, the majority were in retailing or in factory work in a neighbouring town.

Decisions on the recruitment of operatives are taken jointly by the Personnel Manager, the Factory Director and the Works Manager. These three meet once a week to discuss "how many we've got, how many we need and how many, if any, we should be taking on". Vacancies up to supervisor level are advertised within the factory. 'Word of mouth' and networks of friends and relatives play an important part in introducing new recruits to the factory (21). The single most important source of new recruits at the start of the study period, however, was through people telephoning in search of work. A waiting list of such applicants was being kept and updated every six months.

Relations with the local Job Centre changed during the study period. The Billingham Job Centre Manageress at the time, Joan Cleary, indicated that KP had advertised in the Centre in previous years but that this had 'dried up' over the last year or two. Given the size of the KP factory and based on her own previous experience in the Personnel Department of Tudor Foods crisp factory at Peterlee, she estimated that this was 'costing' the Centre at least 150 to 200 vacancies a

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year. (This is roughly in line with KP's own stated turnover figure of around five a week).

However, in February 1987, UB's frozen food factory in Thame, Oxon. contacted the Billingham Job Centre in the hope of arranging a recruitment drive in the area for mechanical fitters and electricians, after experiencing labour shortages in its own local labour market. The Thame company was able to offer production jobs to the wives of some of the resulting applicants, helping to counter the problems caused by the vast differences in house prices in the two places. As a result of the successful co-operation, the Job Centre Manageress contacted KP Billingham in March, which coincided with a period of recruitment at the factory (see above). KP's Personnel Manager confirmed that the Job Centre conducted pre-interviews and had offered to maintain KP's waiting list. KP were quick to take up the offer: the success rate of applicants coming from the Job Centre was about 80 per cent, whereas, without 'pre-screening', a rate of 50 per cent was common.

No formal qualifications are required to obtain work as an operative - academic qualifications are seen as an advantage rather than a prerequisite. The main criteria relate to an individual's physique, manual dexterity, health and personal hygiene. If a person is too tall, too short or overweight, they will experience difficulty in working on the line due to the height of the machinery and the need to perform certain functions (e.g. bending). 'Nimble fingers' are an advantage for a number of tasks (e.g. packing) and sometimes a dexterity test is used at interviews. New recruits undergo an induction course for their first shift and then receive some off-the-job training before 'doubling-up' with experienced workers on the production line. Once fully trained, some operatives have moved 'up' to become machine operators and can make it to supervisory positions. At KP Billingham the

Works Manager was made up from a position as supervisor, so there are some limited possibilities for promotion.

Finally, the vast majority of operatives is drawn from and lives in Billingham, although some come from further afield (e.g. Stockton, Middlesbrough and Hartlepool). The Youth Training Scheme is not a potential recruitment channel due to opposition from the major union at the local level (GMB). The fact that other KP factories are actively involved in YTS illustrates again how local factors can influence the labour situation. KP Billingham, however, has established links with two local schools, reflecting both the wider trend towards schools-industry liaison and the involvement of KP in the local community (22) as part the parent organisation (UB)'s commitment to such activities (see, for example, Financial Times 12.12.86. p.18). As expected, skilled workers and management live at greater distances from the factory. (Furthermore, managers tend to be recruited on a national basis, rather than a local one. As a matter of group policy, management positions are advertised throughout the KP organisation before being offered on the external labour market, and then a recruitment agency is used).

(vi) Union position and pay determination

Operatives at KP Billingham are represented by the General, Municipal and Boilermakers Union (GMB). Electricians belong to either the Electrical, Electronic, Telecommunications and Plumbing Union (EETPU) or the Engineering Section of the Amalgamated Engineering Union (AEU). The Association of Scientific, Technical and Managerial Staffs (ASTMS) represent the office workers.

Negotiations are undertaken separately with the different unions. Labour relations have been through 'rough patches' in the past and back-dated newspaper articles revealed a number

of walk-outs - often over efforts to cut back on tea-breaks or relief cover (i.e. work intensification). However, since the introduction of part-time working, relations appear to have improved, although this could have been a partial result of the weakened position of unions generally in the 1980s.

During the study period (1986/7) the starting rate of pay for an operative was £2.3725 per hour. After six weeks' training (the probationary period) recruits should have attained 'experienced worker standard' and they are made up to Grade one. They then received £2.5625 per hour, or £64 a week for a 25 hour shift. (Slightly lower rates were earned by 16 and 17 year olds). In March 1987 a 5.8 per cent pay increase was introduced across the board. This was slightly above the annual rate of inflation of 4.0 per cent at the time. (The underlying increase in average weekly earnings in manufacturing, which covers over-time and bonuses, was 8 per cent). Over-time is paid at time-and-a-half or, exceptionally, at double time on Sundays.

The hourly rate is the same for full-timers and this rate applies throughout the KP organisation with the exception of Rotherham (23). It compared favourably with the 'going rate' for retailing jobs at the time which varied between £1.50 and £2.00 an hour in Billingham. The night shift receives the same basic rate plus a 25 per cent premium. Rates of pay and relativities were not changed when the change-over to part-time working was introduced. However, the earnings potential of the night shift became relatively more attractive and the scope for over-time has declined with the rise of extra-time.

(vii) Net impact on the local labour market and unemployment

The preceding sections showed that variable labour demand can be met in a variety of ways, only some of which involve an inflow of labour or an outflow from the factory. Nonetheless,

it is important to consider what the impact of these flows is likely to have been on the local unemployment count and on the wider labour market.

Although it is not possible to say what proportion of 'leavers' would have entered unemployment, it is clear that this is likely to have been small. Students intending to return to full-time education would not have been eligible for unemployment benefit (and therefore would not have been included in the monthly count). Similarly, workers leaving on the grounds of pregnancy, retirement, out-migration or for another job would not add to the official local unemployment total. Women leaving to look after children would not be considered 'available for work' and therefore would be denied access to unemployment benefit. Those leaving on the grounds of their partners' unemployment would be considered dependent and consequently would not be entitled to a separate claim. Even those leaving because they did not like the nature of the work may have been ruled ineligible for a period (currently six months) if it was considered that they left the job without good reason. At the end of this period they would have been expected to attend a 'Restart' interview (see Department of Employment, 1988b) which might have kept them out of the unemployment count (e.g. if they joined a training course or, less likely, if they decided to become self-employed under the Enterprise Allowance Schemes - see Chapter Seven).

The situation with regard to 'joiners' is slightly clearer. Under the terms of the Job Splitting Scheme (see footnote 11) if KP was to benefit financially from converting a full-time position into two part-time jobs, one of the part-time jobs had to be taken by an unemployed person. Thus, it was in KP's interests to ensure that it was recruiting from the unemployed. Similarly, in the case of the fork-lift truck drivers, the recruits had to be unemployed in order for the

company to gain financially. In the latter case, however, this would have been easier than in the former. Not only were the numbers involved relatively small but also, because of the workings of the benefits system, out of work males are more likely to be officially unemployed than females. Indeed, it is not clear whether KP was able to maximise the gains from the scheme by recruiting (suitable) women claimants, as opposed to those who were looking for work but were ineligible for benefits (see also Chapter Eight).

Since the changeover to part-time working had largely been accomplished by the time that the study period started, it was not possible to investigate this issue in detail. Indeed, with the exception of March 1987, recruitment was at a very low level throughout the period once holiday cover is discounted.

In general, the impact on the local labour market has been to increase the number of part-time opportunities for women in a substantial but 'one-off' fashion. The accompanying decline in full-time job opportunities for women has been offset to an extent by the arrival of Samsung and other, more recent incomers (e.g. Holmesworth International).

4.3 Concluding comments

The change-over from full-time to part-time working at KP Billingham falls clearly within the definition of labour restructuring offered in Chapter One. It has, in turn, enabled other adjustment mechanisms, such as the use of 'extra-time' working. These changes have put the factory in a better position to respond to the increasingly variable (and quickly relayed) patterns of sales in the leading retail outlets. It was argued that the employment of women as operatives was an important factor enabling the change-over - both from a technological and a labour supply perspective.

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An important element of the new pattern of working is the growing use of temporary labour. By concentrating changes in the level of employment among temporary workers, these changes are made to appear more acceptable: if someone is employed on a temporary contract, it comes as no great surprise if this suddenly terminates. By recruiting students to these temporary positions, again there is no outcry if they lose their jobs since they are expecting to return to full-time education in due course anyway. However, once the recruitment and dismissal of temporary workers becomes commonplace, it becomes a useful method of recruiting to the factory on an ongoing basis. Thus, all new recruits are now offered six month contracts initially, allowing management to 'screen' potential recruits to the 'permanent' labour force and, at the same time, maintaining a 'cushion' of labour at the margin that can be dismissed if sales drop.

Far from reflecting a cautious response to recruitment in the aftermath of recession, the new pattern of working has emerged as a clear strategy on the part of KP of labour utilisation in (female) local labour markets characterised by excess supply. In this way, KP Billingham is distinct from employers in 'tighter' local labour markets. For example Weetabix of Kettering, Northants., decided in 1988 that in order to attract labour it would have to recruit seasonal staff on permanent contracts, after five years of offering only temporary contacts (Financial Times, 30.4.88. p.5).

Given the trend towards greater productivity at KP, however, increasing competition in the external labour market is unlikely to be a major problem in the future. A decline in the level of employment can be expected in the long-run unless there is a sustained rise in the level of sales and/or there is substantial new investment at the factory. Certainly sales have been strong and the company has placed regular job advertisements in the local newspaper in 1989. However, as

competitors move into the 'lower-fat' market it is doubtful how long this position can be maintained. On the investment front, decisions will be made at KP Head Office and must be sanctioned by UB. It was argued above that KP Billingham may be at a relative disadvantage due to its over-dependence on products based on the whole potato and the absence of extrusion capacity. Furthermore, investment decisions are likely increasingly to be influenced by considerations of the opportunities for penetrating the Continental European market. This market for salty snacks is widely expected to exhibit strong growth (albeit from a much lower base than in G.B.) in the coming years (24).

In early 1989, United Biscuits placed KP Foods in direct control of its Westimex (crisps) business in Belgium and its Sepa company (nuts) in France. At the same time the Marketing Director of KP Foods joined the board of ICA (snacks) of Italy, in which UB has a 30 per cent stake. A common design is to be introduced for snack packets, using the KP banner in an attempt to establish a leading pan-European brand name (Financial Times, 9.1.89. p.6).

Earlier attempts by British food companies - which tend to be larger than their Continental competitors - to break in to other European markets met with little success (Financial Times, 4.3.82. p.21; Peck and Townsend, 1985). However, the latest round of takeovers in the food industry in Europe (Economist, 27.2.88. p.57) is based on twin pillars of optimism. The first is the belief that in recent years there has been a "cultural cross-fertilisation and increasing homogeneity of tastes" across European national boundaries (Financial Times, 27.4.88. p.27). The second results from the decision, as part of the drive towards '1992', to allow any food product lawfully produced and marketed in one of the twelve European member states entry into the markets of all other member states. This reinforces the attraction of

centralised production facilities, benefiting from economies of scale and serving the whole of Europe. The peripheral position of the Billingham factory places it at a distinct disadvantage compared, in particular, to Belgium. (Nestlé already produces cereals for Europe-wide distribution from a Belgian factory).

Competition is not limited to European companies either. The recent acquisition of Walkers and Smiths by Pepsico of the U.S. - already the largest producer of potato crisps in the world under the name "Frito-Lay" - represents a major threat to KP in the battle to establish brand leadership.

Clearly, in the long-run, it is decisions at the UB corporate level which will determine the fate of the Billingham factory and its workforce. A surprise decision to close or expand the works would attract popular attention because of the inevitably major implications for employment. What this chapter has shown is that in between such major events, the labour demand situation is far from static. Indeed, the transformation from full-time to part-time working was a form of restructuring achieved gradually over a number of years with little 'fanfare'. Yet management, by exploiting the local conditions of labour supply, has secured an increase in productivity which, other things remaining equal, will reduce the labour input required at the factory.

Obsession with aggregate employment and unemployment statistics would fail to capture the 'richness' and subtlety of the adjustment mechanisms used to cope with fluctuating levels of product and labour demand. Whilst these mechanisms at first may appear to play a relatively minor role in investment decisions affecting the fate of individual factories, it is clear upon closer examination that local level labour circumstances are fundamental to their successful day-to-day implementation.

Footnotes:

(1) For several years, one of United Biscuits' key corporate objectives has been to achieve a minimum return of 20 per cent on capital employed, with a target rate of 25 per cent (Annual Report and Accounts, various years). To achieve this target there is a continual pressure either to invest in new technology or to switch funds into sub-sectors offering more promising rates of return. In the early 1980s, for example, the closure of UB's and Nabisco's biscuit factories on Merseyside following a slump in sales, coincided with heavy investment by both companies in their growing snack food businesses.

(2) The origin of the United Biscuits group dates back to a merger in 1948 between McVitie and Price and Macfarlane Lang - two long established family businesses, both with their base in Scotland. In the early 1960's, two more Scottish companies - William Crawford and Sons and William Macdonald and Sons - joined the group and in 1965 they all started to trade under the United Biscuits (UB) name (United Biscuits Facts and Figures, 1986-7).

(3) Between 1959 and 1969 national crisp sales rose by an annual rate of 20 per cent from £10 million to £62 million (The Times, 5.8.70. p.19)

(4) Crisp production started in London in the early 1920's with the birth of Smiths Crisps (Leach and Shutt, 1984). The first significant change in production did not occur until the 1950's when large, continuous friers were introduced. Of greater impact, though, was the new film-packaging technology developed in the mid 1960's by Golden Wonder. The longer shelf life of crisps, sealed in the new cellulose film bags, widened the range of potential outlets (from pubs to grocery stores) and unleashed a dramatic increase in the size of the market.

(5) 'Own label' items are the generic products offered by the leading supermarkets. Most of the leading food chains now have established agreements with one or more of the major manufacturers. In 1986, KP secured a large share of Asda's order after this supermarket decided to make a late entry into the 'own-label' trade. KP also added Wm.Low, Hillards and Batley Cash and Carry to its customer base in the same year.

In 1981 own-label comprised around 17 per cent of national snack sales (15 per cent crisps; 19 per cent savoury snacks; 20 per cent nuts). The figure has risen considerably since that date. For example, in 1986, whereas KP's branded sales were £165 million, the Own Brands Division was not far behind with £128 million (KP Foods Annual Report to Employees, 1987).

(6) In 1981, the Monopolies and Mergers Commission (HMSO, 1982) placed KP in fourth place in terms of branded crisp

sales with 17 per cent of the market (after Smiths, 22 per cent; Golden Wonder, 22 per cent; Walkers, 21 per cent). Yet, when own-label crisps were included, KP led the field with a 27 per cent market share (Smiths, 21 per cent; Walkers, 21 per cent; Golden Wonder, 19 per cent). The situation changed significantly in 1982 when Smiths and Walkers were brought under the same corporate umbrella - first as part of Nabisco (U.S.), then as part of BSN (France) and most recently Pepsico (U.S. - the largest crisp manufacturer in the world). Best estimates place KP in second place in the current league of crisp producers (branded and 'own-label') after the Smiths-Walker group.

(7) "In the [extrusion] process, materials are cooked under pressure and then pushed out through a die at the end of a cylindrical barrel, much the same as toothpaste is squeezed out of a tube" (Financial Times, 15.2.85. p.27).

(8) The attractions of extrusion techniques to manufacturers are fivefold. First, pieces of a regular size and weight are produced, reducing the problem of overfilling with first-generation weigh-heads. Second, the use of powdered potato, maize or corn as a raw material overcomes the dependence on the quality of the potato crop. Third, extruded products are cooked rather than fried, thus eliminating the susceptibility to fluctuations in the price of cooking oil, which caused serious problems for producers in the 1970s. Fourth, the use of different dies offers greater versatility in terms of product shape, size and texture. Fifth, there is the emerging potential of producing 'half-products' which can be transported to their destination and then fried immediately prior to being placed on sale. This last factor considerably increases the spatial extent of markets by enabling bulk transport with little fear of damage or perishability.

Between 1981 and 1987, while (nominal) sales of crisps rose by 80 per cent (from £353 to £635 million), the value of extruded snack sales increased by 143 per cent (from £110 to £267 million) (Financial Times, 1.2.88. p. 16).

(9) Smiths used 'Ishidas' from Japan. KP has bought 'Woodman Commanders' made in the U.S.. Only Walkers have 'bought British', ('Wrights'), underlining the concern expressed by NEDO (1986) about the demise of the U.K. food machinery sector.

(10) Walby (1987) argues convincingly that U.K. employment legislation relating to equal opportunities and employment protection, combined with the workings of the National Insurance (NI) system have created a favourable climate for employment on a part-time basis. This reasoning is based on the fact that employees' statutory entitlements are dependent on weekly hours of work and length of service, while employer NI contributions are calculated on the basis of earnings (see Syrett, 1985 p. 72-73). On both counts, employment of part-timers is likely to produce savings, since earnings tend to

fall below NI contributions thresholds and because higher rates of turnover among part-timers reduce the likelihood of them accumulating sufficient length of service to be eligible for entitlements based on length of service. Walby (1987) goes on to claim that the climate generated by the legislation has encouraged employers purposely to devise jobs which are more likely to be filled by part-time women, thus providing "greater opportunities to women, at worse conditions of service" (p.10).

The rise of female part-time employment in the U.K. over the last 20 years has been discussed at length elsewhere (see Gershuny, 1983; Robinson, 1985; Townsend, 1986; Walby, 1987). Of relevance to this particular study is the fact that virtually all of the national increase in female part-time employment between 1971 and 1981 occurred in service industries and the number of female part-timers in manufacturing actually fell by 153,000. Assisted Areas of the country (including Billingham) accounted for almost a third of this fall (Townsend, 1986). Between 1981 and 1986 this fall continued and, based on survey and case study evidence, Rajan and Pearson (1986) predict that ongoing contraction in employment in manufacturing will continue adversely to affect both full and part-time employees up to 1990 and beyond.

Employment statistics for KP Billingham between 1980 and 1988 would show a decline in female full-time employment and an increase in female part-time employment. However, many of the 'new' part-time jobs are 'artificial' in the sense that they, in effect, have replaced the disappearing full-time jobs. Now that the change-over to part-time working is almost complete, the long-run employment prospects are likely to be more in line with the national downwards trend.

(11) The Job Splitting Scheme (Job Share scheme after April 1987) was a Government scheme administered by the M.S.C.. It provided financial assistance (£840 per case towards administration and training costs) when a full-time job or vacancy was split into two parts, one of which was given to an otherwise unemployed person. However, the scheme covered the recruitment only of people previously in receipt of unemployment benefit and therefore excluded many non-claimants, including many women. KP was one of the main users of the scheme and, significantly, the UB Chairman, Sir Hector Laing, had been one of the main proponents of such a scheme as an aid to reducing unemployment.

(12) Absenteeism was becoming a major problem for KP Billingham. In March 1980 it was running at nine to ten per cent of the workforce and the company was "carrying" 80-90 extra people to cover (Evening Gazette, 17.3.80.).

(13) A similar situation arose simultaneously in another part of the Stockton TTWA when Tetleys (now Lyons Tetley) opened a teabag factory in Eaglescliffe.

(14) Bradley (1986) argues that many women entering paid employment in the 1960s did not do so on a purely independent basis. Rather, their entry occurred in the context of a traditional 'family project' which shaped their expectations and attitudes to work. In the same vein, Walby (1986) notes that the requirements of both capitalism and patriarchy have been accommodated through the construction of the 'family wage' concept. Essentially, by segregating jobs on the basis of sex and paying men a wage sufficient to support a family, it became possible to perpetuate the notion of the male as chief 'breadwinner'. In contrast, women were paid 'pin money' (i.e. not sufficient to support a family, but an important supplementary source of income in an increasingly consumerist society). Accordingly, therefore, low status became attached to 'women's jobs'. In the case of crisp production 'traditional' associations of women and cooking helped to reinforce the notion that it was 'women's work'. In this way it was possible both to satisfy the capitalists' desire for cost minimisation (at least in 'women's jobs') and men's desire to preserve their position of power and authority in the family.

(15) Part-time workers have half hour breaks each day and work 20 or 25 hours a week, depending on whether they work on Fridays. Full-timers have a standard 40 hour week with one hour breaks each day. Another shift system operates at the factory for engineers, security guards, fork-lift truck drivers and cooker operators. Hours worked on this system are 06.00-14.00hrs, 14.00-22.00hrs and 22.00-06.00hrs.

(16) The Department of Employment publishes quarterly figures showing G.B. 'leaving rates' in different industrial sectors including food, drink and tobacco (Class 41/42, SIC 1980). Leaving rates are calculated as the number of leavers in a four week period as a percentage of the number employed at the beginning of the period. Table 4.5 shows that the food, drink and tobacco sector experiences a higher rate of turnover than manufacturing in general.

TABLE 4.5 Leaving rates in food, drink and tobacco and in all manufacturing industry (G.B.) Sept. and Dec. 1986.

Four weeks ending:-	FOOD, DRINK, TOBACCO			ALL MANUFACTURING		
	Male	Female	All	Male	Female	All
13.09.86.	2.5	3.2	2.8	1.4	2.3	1.7
13.12.86.	1.4	3.1	2.1	0.7	1.5	1.0
Source: Department of Employment <u>Employment Gazette</u> (1987) Vol.94 No.4 Table 1.6 p. S13.						

(17) Samsung moved into a factory previously used for the manufacture of printed circuit boards by Rediffusion. The latter moved onto Cowpen Lane in 1973 and at its peak employed around 400 workers - mostly women working full-time. Thus it provided the major source of competition for labour

for the KP factory, along with the knitwear factory owned by Patons and Baldwins (now closed). Since the switch to part-time working at KP commenced before Rediffusion closed (in 1985), the growing pressure of demand for full-time female labour may have had some influence on the decision (not only in Billingham but at other KP locations too).

However, the 'pool' of women available for work is still substantial. When Dunnes started to recruit in July 1986 for a new supermarket, between Cowpen Lane and Billingham town centre, the Job Centre dealt with over 1,000 applications and handled around 600 interviews for 220 jobs (ranging from 12 to 20 hours a week). Significantly, around 60 per cent of those selected by Dunnes (approximately 190 women and 30 men) were previously in employment - many were tempted away from other local stores by a wage rate of £2.06 per hour compared to £1.60 elsewhere.

When Samsung started production in August 1987 it had 30 full-time workers (20 female). The Job Centre issued 140 application forms for these jobs - again a ratio of almost five applicants to one job. Twelve of these initial 30 workers left other jobs to join Samsung and of the unemployed who were recruited, a number had worked previously for Rediffusion.

(18) These four workers had moved from part-time day shifts to the (better paid) night shift during the previous month.

(19) In 1988 the Government's North Central Middlesbrough Task Force reached agreement with KP that the number of trainee fork-lift truck drivers taken on should be increased to 20, with the Task Force meeting the additional costs. Each trainee who successfully completes the course receives a certificate from the Road Transport Industry Training Board. In 1989 it was reported that eleven of the previous year's trainees had secured employment with other companies and four had been retained by KP (British Business, Vol.33 No.4 28.4.89. p.22).

(20) The 1986 Labour Force Survey found that over half of those in Type II temporary jobs were male, while women accounted for two thirds of those in Type I jobs (Department of Employment, 1988c). Further details on the use of temporary labour in G.B. are contained in Meager (1985) and Casey (1987).

(21) In the case of family links, care is taken to avoid having two members of the same family working in the same part of the factory. All new recruits are now started on six month temporary contracts, which include a six week probationary period. During probation a worker who fails to meet required standards can be dismissed immediately.

(22) KP Billingham is actively involved in the local community and the Works Manager, Doug Swann, is a Director of the Cleveland Enterprise Agency. KP also seconds people to

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and provides other forms of assistance to Community Industry Ltd., Middlesbrough, which assists young disadvantaged people in their search for work.

(23) At Rotherham the union structure reflects the position before the company became part of the KP group. The Transport and General Workers Union (TGWU) represents that factory's operatives and a lower rate of pay is supplemented by 'service pay' (based on length of service).

(24) In addition, UB is already looking further ahead:

We must be laying the foundations for expansion in regions with faster growing economies where standards of living are likely to rise substantially. We aim to ensure that we are significantly represented in Latin America and in Asia and the Pacific Basin

(UB Annual Report and Accounts, 1987 p.3).

C H A P T E R F I V E : S A R E K J O I N E R Y

5.1 Introduction

Three main factors influenced the decision to include Sarek Joinery - manufacturer of doors, doorsets and cubicles - as one of the employers to be studied for this thesis. First, the company (originally F. Hills) has a long history in the town of Stockton (see Chapter Three). As in the case of ITM (see Chapter Nine) there was the opportunity to investigate how national and international economic trends and market developments have interacted over time with local factors to influence labour demand and working practices.

Second, the company had been subject to two takeovers - by the Bowater Corporation in 1969 and by Sarek Wood, a consortium of Swedish saw mills, in February 1986. (More recently, in March 1989, a management buy-out has meant another change in ownership at the factory (1)). Discussions with Stockton's Industrial Development Officer revealed that employment levels had dropped sharply in the 1980s at the factory. By including the joinery as a case study so soon after the Sarek takeover, it was felt that changes in the pattern and level of labour demand were likely to be in evidence during the study period.

Third, the company's post-war performance has been tied closely to developments in the construction industry. This industry, in the 1960s, was seen optimistically as "standing at the very centre of plans for economic growth in the Northern region" (Northern Economic Planning Council, 1966 p.38). The failure of the industry to perform such a role in the late 1970s and early 1980s (especially in the public sector) has been a major factor influencing changing levels

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of product (and hence labour) demand at Sarek Joinery in Stockton. Similarly, the upturn in the construction business in the later 1980s has been crucial to the company's survival.

Having chosen Sarek as one of the employers to be studied, the Personnel Assistant (and initial contact person at the company) pointed out the existence (since 1973) of a 'sister' company in Heddingham, Essex (producing windows and kitchen units). Not only was this 'sister' company of interest in a comparative ('North-South') sense, it also played a key role in decisions on the future of the Stockton works, with the transfer of certain operations to the Essex site identified as a very real possibility at one stage.

This Chapter demonstrates that the main factors to have influenced the level of labour demand and employment at Hills in the 1980s have been cutbacks in U.K. public sector construction programmes, increasing levels of 'cut-price' imports of doors and a failure by the company to respond to changing patterns of marketing and distribution in the late 1970s, leading to a declining market share. During the study period, changes in labour demand were not matched exactly by changes in the level of employment because of union opposition to changes proposed by the company.

Following the same structure as used in the previous chapter, the Sarek case study is reported below in the following sections:

- (i) background information;
- (ii) product market context;
- (iii) work patterns and practices;
- (iv) employment structure and monthly changes in labour demand during the study period;
- (v) recruitment methods and catchment area;

- (vi) unions, pay bargaining and wage levels;
- (vii) net impact on the local labour market and unemployment.

Concluding comments are made in Section 5.3, which draws out those points raised in the Chapter which are essential to the central arguments of this thesis.

5.2 The Sarek Case Study

(i) Background

The company under study in this Chapter had passed through three distinct phases by the time the fieldwork for this thesis started - as F.Hills & Sons, as part of the Bowater Corporation and as a subsidiary of Sarek Wood of Sweden.

(a) F. Hills & Sons

The origins of Sarek Joinery can be traced back to a wood-working company set up in Yarm (see Fig. 2) in 1849 by Francis Hills, a local wheelwright. The advent of the railway (see Chapter Three) reduced the demand for wheelwrights' services and so Hills diversified into other wooden products. According to a company publication (A Centenary in Retrospect):

At this time [late nineteenth century], the main products were bogies, pony limmers, hardwood packing chocks, sleepers and the like, most of which were absorbed by the Durham mining industry (p. 4).

Hills remained a family concern until after the First World War. Apart from the additional production of shell boxes during the war, the company's products largely remained unchanged, but the workforce expanded to 25 people. In 1921 F.Hills and Sons was incorporated as a limited company and local businessmen took control. New capital was injected and the character of the business started to change. For the

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first time softwoods were imported (through Hartlepool) and processed for the building trade. The joinery side of the business was expanded and in 1927 the hardwood sawmill was closed down. As demand for joinery products increased, more workers had to be employed and a new wing was added to the factory at Yarm. In 1928, Hills introduced its 'Stormproof' windows.

In the face of rapidly increasing demand, Hills' productive capacity at Yarm soon proved inadequate. In 1933, Hills moved to its present-day site in Stockton, left vacant by the closure of Blairs Engines in 1932 (see Chapter Three). On this well-connected site (2) Hills began production of its new 'Flush' door. Working on a production line basis and using the most up-to-date equipment, Hills was able to produce in large quantities at low prices, but also at a quality that established a good reputation for the company in the North East of England. In the late-1930s Hills leased the original Ford body works at Trafford Park in Manchester and manufactured doors and windows for the Lancashire market. During the Second World War, Hills' factories were requisitioned and the Stockton factory was diverted to the production of aircraft propeller blades and aeronautical plywood (3).

After the war, Hills concentrated on the production of doors and plywood. In 1946 the company built a new door factory on the same Stockton site to supply the post-war housing programme. In 1948 the Stockton plywood factory was modernised and re-equipped. In the 1950s and early 1960s, Hills was the leading manufacturer of doors in the country.

Additional capital was raised in 1949 to invest in a sawmill and plywood factory at a timber concession in Takoradi, Gold Coast (now Ghana). Large quantities of timber were imported to the Stockton door factory from this source, along with logs for the plywood works. With the expansion in capacity,

Hills was anxious in the 1950s to increase sales in other regions and exploited its geographic position to capture a share of the Scottish market. (Two Scottish companies, Robert Glenn and Sons and Irving and Londall Holdings were acquired in the process). Even at the time of fieldwork for this research, up to a quarter of the company's sales were still in Scotland and the North East of England (see ii below).

After the Ghanain timber works was sold in 1968 (4), Hills ceased its plywood operations and concentrated on the production of doors, doorsets and cubicles. By 1969, the company had achieved record pre-tax profits of £460,614 on sales of £4 million (1969 prices) (The Times, 25.7.69. p.24). Employment by this time had reached almost 900. This apparent success attracted the attention of the Bowater Corporation, which launched a £2 million takeover bid in the same year. Agreement eventually was reached in 1970 and Bowater Building Products was formed as a new group within the Bowater Corporation (5), including Hills' Scottish subsidiaries.

(b) Bowater Building Products/Bowater Joinery

For a number of reasons Hills actually was in need of a major reorganisation in the face of changes that were undermining its traditional market strengths. In particular, a decline in orders associated with public sector construction projects and growth of the 'do-it-yourself' and builders merchanting businesses both worked to the disadvantage of Hills (see details in ii below). However, Bowater itself was involved in a major rationalisation of its (then) main paper business (6) and was slow to recognise the underlying structural problems facing its new acquisition. In 1970 the Bowater Chairman dismissed a poor performance by Hills as the result of a downturn in the building industry.

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The takeover by Bowater of Ralli International in 1972 introduced the combined influence of the national figures of Malcolm Horsman (of Ralli) and Jim Slater (who built a twelve per cent interest in Bowater). Speculation, at this time, was that Bowater itself might be the target of a takeover bid as the Corporation was widely believed to be in need of an injection of new managerial talent (The Times, 2.11.72. p.23). Under such conditions, the need for a 'change in direction' at the Stockton factory went largely unrecognised. In 1973, though, Bowater continued its transition with the purchase of Rippers of Essex, specialists in the production of windows and kitchen units. The aim of the Corporation was "to develop and expand Rippers of Heddingham... in conjunction with F.Hills and Sons [of Stockton]" (The Times, 12.5.73. p.21). In 1975, Hills subsidiary in Irving (Robert Glenns) was closed and productive capacity was transferred to Stockton.

Belatedly, in 1978, Bowater recognised the the need to enter the builders' merchant business. In a £7.1 million deal it took over (Stockton-based) Crossley Building Products, which has a wide network of retail outlets. Following the acquisition, these shops became obliged to stock 'Hills doors' and 'Rippers windows' (7). In addition to the Crossley acquisition 'Bowater Joinery Centres' were set up as sales offices in various parts of the country. However, these centres were short-lived and attempts to secure outlets in other merchants' stores met with limited success in terms of either scale or duration.

The recession of the early 1980s compounded the underlying problems at Hills and led to several hundred redundancies. (Employment fell from 936 in 1979 to 394 by 1986 - see iv below). According to one of the company's managers the Stockton factory survived mainly because of the cost of redundancies that would have been incurred through total

closure and the fact that Bowater was receiving adverse publicity from the closure of its paper factory in Ellesmere Port on Merseyside (1,600 jobs lost; The Times 15.12.80.) its corrugated cardboard plant in Stevenage, Herts. (318 jobs) and its paper mill in Kemsley, Kent.

A series of cost-cutting measures was introduced (see subsequent sections) and sales offices in Scotland and London were closed. Production was concentrated into a few key buildings on the Stockton site in the hope of getting part of the land de-rated. In January 1985 Hills, Rippers and remaining subsidiaries were renamed 'Bowater Joinery' with the Head Office, significantly, located at Rippers site in Essex.

The opportunity finally to dispose of Hills presented itself to Bowater a year later. A consortium of Swedish saw mills under the name Sarek Wood approached Bowater with the aim of purchasing a Bowater subsidiary in Sweden - Hallnas SAG - which, amongst other things, produced componentry for doors. Bowater agreed to sell Hallnas on the condition that Sarek also bought Hills and Rippers. Sarek believed that Hills would be a good outlet for Hallnas' products, while both U.K. sites would generate demand for whitewood from the consortium's saw mills. Consequently, Sarek agreed to Bowater's terms and acquired total control of Hallnas and took a 75 per cent stake in Bowater Joinery (with the option of buying the remaining 25 per cent in 1988). The deal cost £8.5 million, consisting of £1.1 million in cash and the repayment of £7.4 million worth of loans (Financial Times, 25.2.86. p.28).

(c) Sarek Joinery

Sarek was soon to discover why Bowater had been keen to dispose of Hills. A stock check revealed a massive shortfall

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in the number of doors. Many of the doors that were in stock were 'obsolete' in that they were not finished in accordance with the company's advertised product range (8). Partly because of this and partly because of poor planning Hills had been unable to meet some orders and, consequently, had suffered a further loss of business.

Sarek's scrutiny of day-to-day events at Hills produced some positive results for the company. Old stock was sold off cheaply enabling the warehouses to be tidied and raising at least some cash. 'Spot checks' of lorries leaving the site were introduced and uncovered certain unofficial practices (9). (This included one worker who was dismissed for theft). Meanwhile wastage of materials was reduced through more cautious planning and tighter 'policing' of shopfloor procedures. These measures, however, generated suspicion and some hostility amongst a workforce where industrial relations had already been soured by the redundancies of the early 1980s.

One of the chief concerns of unions (see iv below) at the Stockton site was about Sarek's plans for rationalising production at Hills and Rippers. Transfers of finished goods were already passing regularly between the two sites, each acting as a distribution outlet for the other's products. However, Sarek considered concentrating production on to one site and, initially, favoured Stockton. There was an abundance of spare land compared to the site in Essex, where land values were considerably higher. Similarly house price differentials favoured Stockton in any consideration of relocating skilled employees. Furthermore, the Stockton site possessed a £1.5 million boiler house, producing steam for hot presses used in the production of doors at Hills (see iii below). Rippers had no boiler house since all presses for the production of windows are 'cold'. Also at the Stockton works but absent at Rippers was a comprehensive dust extraction

system. Finally, although direct comparisons are difficult, productivity was considered to be higher at the Stockton works.

However, Hills' trading losses and stock problems contrasted markedly with the situation at Rippers, where sales and profits were rising and employment was on the increase. Moreover, the unions at Stockton were more organised and had resisted attempts to erode job demarcations. At Rippers, in contrast, the unions had agreed to the introduction of a semi-skilled grade. Unions at Stockton also complained of a lack of solidarity on the part of unions at Rippers, who were not prepared to join in protests against the transfer of certain control functions (e.g. personnel) to Hedingham in December 1986 (during the study period).

A further attraction of the Rippers site was that basic wages were around £20 a week lower than in Stockton (see vi below). Whilst, at first, this might appear surprising, it must be considered in the context of the higher productivity at the Stockton works, the stronger unions at Hills and the fact that Rippers dominated their local labour market as a virtual monopoly buyer of labour (10).

By October 1986, Sarek decided on a selective transfer of operations from Stockton to Hedingham. Details of the transfers and of the implications for labour demand are given in (iv) below.

(ii) Product market context

(a) Doors

Hills produces a wide range of interior and exterior panel and flush doors. Flush doors are the company's speciality, but have also proved to be the main source of its problems and so attention here is focused upon them. Flush doors are available in a standard range of metric and imperial sizes

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and with one of two main types of core. 'Hollow core' doors consist of a paper 'honeycomb' while 'solid core' are made of solid timber. In addition a 'kreibord' core is offered in the 'Fireshield' range of fireproof doors.

Flush doors can be 'faced' variously with hardboard, interior or exterior plywood, or with veneer, and can be 'finished' with a paint primer or with 'lustra' (varnish). Despite the numerous possible combinations of core, facing and finish, of far more importance is the distinction between 'standard' and 'special' doors. The latter are purpose-built to an architect's specifications (dimensions, apertures, lock-block position etc.) and are produced only 'to order'. By contrast, 'standard' flush doors are carried in stock and forward planning based on sales is crucial.

During the study period, sales forecasts were prepared by the Managing Director, based on information supplied by the Marketing Department. The forecast covered expected sales, by quantity and type, for those doors which the companies held in stock. Based on the forecast, production targets were sent to the factory via the Planning Manager, whose job it was to ensure that productive capacity was used at maximum efficiency (e.g. by minimising the number of times machines had to be reset).

Traditionally, Hills' strength has been in the 'specials' market. The Market Intelligence Manager explained:

At one time there were detectable differences between [door] manufacturers. Hills were considered 'up market' and put more into their doors than was necessary.

In the 1950s and 1960s, therefore, Hills had an advantage over its two main competitors, Magnet and Crosby (11), which dealt only in 'standard' doors, based on high sales turnover at low margins. Hills' ability to manufacture to

specification won the company orders not only for 'specials' but also for 'standards' as part of an overall contract.

It was largely as a result of Hills' favoured position with respect to public sector contracts that the company was able to weather a number of problems resulting from the 'stop-go' pattern of national economic growth in the 1960s. The 1967 devaluation of sterling raised material costs, while the associated 1968-1970 import deposit scheme also hit company finances. The deposit scheme formed part of a deflationary package, including credit curbs, which indirectly affected the demand for doors. By concentrating on the public sector market, Hills was relatively insulated from the cyclical trends in product demand. Significantly, its two main geographic markets - the North East and Scotland - are 'over-represented' by public sector housing relative to the national average (see Regional Trends; HMSO, 1987 p. 11). A high percentage of sales from Hills in the post-war period was to Local Authorities in these two regions. Thus, as the Market Intelligence Manager at Hills pointed out:

The Local Authority housing architect was the number one man on Hills' rep's' measure of importance, so as to get exclusive listing in the bills of quantity.

However, changing market 'tastes', cutbacks in the public sector and cost constraints led to an erosion of the demand for 'specials' in the late 1970s and early 1980s. First, there was a shift in emphasis towards private sector housing demand for doors, especially in the fashion conscious 'do-it-yourself' market and for repair, maintenance and improvement work by 'jobbing' builders. (This trend has continued with, for example, the 'right to buy' legislation introduced by the Conservative Government for council tenants). Second, and related to this, there was a significant switch away from bulk orders, placed directly with manufacturers and with long lead times, towards smaller orders, through merchants at short notice. In this context, Hills' competitors - including

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Magnet, Crosby, Carrs, and Boulton & Paul - were more attractive to the merchants as they could offer a range of joinery products in addition to doors. Indeed, Magnet and Southern (now two separate companies) cut out the 'middleman' (i.e. the merchants) by opening its own salesrooms and selling at trade prices to the public (Financial Times, 27.11.86. p.31).

Third, even in the public sector, there has been a trend away from large scale developments to smaller projects. An internal company document in 1979 reported that only 47 per cent of Local Authority housing schemes involved over 100 houses compared with 61 per cent in 1972 and higher percentages in previous years. Fourth, the emphasis has swung towards provision for elderly, single and handicapped residents, requiring smaller houses and, therefore, less doors per dwelling. Between 1971 and 1988 the proportion of new construction funded by the public sector has fallen from more than 51 per cent to less than 30 per cent (Financial Times, 9.5.88. p.6). Although housing associations have taken over some of the schemes that the public sector would have undertaken in the past, a NEDO report in 1988 pointed out that:

It seems doubtful that the rate at which housing associations are able to increase their level of activity in the short term will offset the rate of contraction in local authority programmes (Financial Times, 14.12.88. p.8).

Fifth, competitive tendering by Local Authorities has removed Hills' favoured position in the securing of contracts.

Finally, Hills no longer has the advantage of a cheap source of raw materials from Ghana, yet increasingly has to compete against low cost imports from countries with not only cheap raw materials but also cheaper labour. Since the mid-1970s cheap doors have been imported into the U.K. in increasing quantities. Figures held by the company show the chief

sources to be Taiwan, Indonesia, Portugal and Malaysia. For example, in 1978, Taiwan exported 388,862 doors to the U.K.. In the first half alone of 1979, the figure stood at 401,668. Between 1981 and 1988, Britain's deficit in building materials increased from £400 million to £2.6 billion and now accounts for more than ten per cent of the total visible trade deficit. Timber products accounted for around a quarter of the 1988 deficit and, a NEDO report recently noted that:

What is worrying is the increasing deficit in manufactured goods... like wooden products made from imported timber

(Financial Times, 14.3.89. p.32).

Problems of quality and delivery hampered attempts by Hills to break into the French market through Iena, a Bowater associated company. (Towards the end of the study period, though, an export department was 'resurrected' as part of the effort to 'turn the company around', possibly with an eye on the opportunities associated with the advent of the 'Single European Market').

The words of two of the company's managers serve as a useful summary of the position facing Sarek at the time of the fieldwork in 1986/7. As the advantages of a strong position in the 'specials' market have come to count for less:

We've fallen between two stools. In the bulk [standard door] manufacture business, of which we've got relatively little experience, we're small fry against the big companies.

In the market for standard doors:

Now there's very little to choose between the doors [the different door manufacturers are producing]. Service is of the essence now. Merchants want orders in three days. If you don't perform or provide good service, there's no loyalty - you lose the business... We've landed some of the big ones and haven't been able to cope. You can't afford to alienate customers in this business. A few people control a large part of your orders and once you lose one it's hard to get it back.

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Consequently, the company suffered from a declining share of the standard doors market, from around 15 per cent in the early 1970s to nine per cent by 1979 and about six per cent by the time of the field work. (The situation is different for 'specials' where Hills has maintained its share of a shrinking market).

(b) Doorsets (i.e. doors plus frames, architraves and threshold) and cubicles.

Although aimed at the market of both private and public sector building projects, doorsets have been used almost exclusively in the latter. This is despite promotion of the concept in the private sector by the British Woodwork Federation.

Consequently, sales suffered following cutbacks in public sector spending in 1976. The numbers employed in the factory producing frames have consequently declined from 133 in 1976 to 52 in 1983 (although some of this reduction is accounted for by transfers to other factories on the site rather than redundancies). Sarek's performance has been considerably weaker than the situation nationally though, reflecting not only a declining market but also a declining market share.

As for cubicles, in the early 1970s, Hills was selling around 26,000 (toilet) cubicles a year. Around half was for public works including schools, hospitals and sports centres. In the private sector the main customers have been offices, clubs and motels. The production process is relatively simple and involves cutting and edging chipboard laminate. Lower dependence on the public sector has meant that this product has performed rather better than doors and doorsets and, during the study period, was the most profitable operation at the Stockton site.

(iii) Work patterns and practices(a) Production of 'standards' and 'specials'

Standard doors are manufactured on a semi-automated production line - the 'Atlas line' (No.1). A mechanical handling system was introduced on this line in 1985 and only approximately 30 workers are required for its operation. Doors pass onto rollers directly from a 'FAMA six by three daylight' hot press (i.e. six presses on a circular axis, each capable of taking three doors). As the doors pass along the line they are automatically 'widthed and ended' by cutters and are 'lipped' if appropriate.

Special doors are produced on 'Line No.2' which was modernised in 1984. This line requires a greater input of labour, and doors produced on it are consequently more expensive.

The finishing lines take doors from lines one and two and apply a coat of paint or varnish as required. These lines also were upgraded in 1985. Overall, between 1983 and 1987, new technology on the shopfloor reduced the number of workers required by approximately 40 (in gross terms).

The workforce can be broken down according to the nature of the work performed as in Table 5.1.

Table 5.1 Breakdown of Sarek workforce by trade (October 1986 and July 1987)

Category	Trade		Nos. employed		
			Oct 86	Jul 87	Change
Shopfloor	skilled	Wood machinists	67	56	-11
		Joiners	71	68	-3
		Painters	5	4	-1
		Fitters	10	10	-
		Electricians	8	7	-1
	unskilled	Labourers	150	127	-23
	Weekly paid sub-total		311	272	-39
Office staff		Staff	66	55	-11
		Head Offic	17	12	-5
Monthly paid sub-total		83	67	-16	
TOTAL (all full-time)		394	339	-55	
Source: Company figures					

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Of the 311 weekly paid workers, 259 were direct production workers and 52 were indirect workers - maintenance, fork-lift truck drivers etc.. (These figures include workers involved in the production of doorsets and cubicles). In general terms, the machinists work at the front end of the machines whilst labourers work at the rear, aiding the skilled workers by lifting doors on and off the production line, mixing glue, cleaning up and so on. Much of the 'technology-related' job loss has fallen on the unskilled labourers as increased automation has reduced the need to handle doors on the line. The labourers' jobs have disappeared also as a result of management's efforts to achieve greater 'flexibility', by requiring skilled workers to do their own tidying up for example. As shown in (iv) below, many of the labouring jobs in the factory have been performed by women, and it is female employment that has been hit hardest in proportionate terms. However, losses as a result of the introduction of new technology have been minor in comparison with those resulting from the company's weak position and performance in the market in the 1980s when many women opted for voluntary redundancy.

Total employment in 1978 stood at 1,014 before collapsing to the figure of 394 shown in Table 5.1.. Clearly, the 40 or so technology-related job losses experienced between 1983 and 1987 played only a small role in an overall reduction in the labour force of 620 (between two 'stock' counts).

(b) Hours and shifts

The usual working day was from 07.30hrs to 16.00hrs (15.00hrs on Friday). Thus, with a lunch break of half an hour each day, the standard working week was 39 hours. Occasionally, a shift system was used and operated from 06.00hrs to 14.00hrs and from 14.00hrs to 22.00hrs (12).

The use of shifts ([A15] in Table 2.1) was unpopular with the workforce but formed part of an agreement between the company and the unions. Under the terms of this agreement, management had to give three weeks' notice of a switch to - or from - shift work in order to allow workers the time to make necessary domestic arrangements. If such notice was not given, each worker received compensation equal to the basic weekly wage of £133 (see full details on wages in vi below). On shifts, workers were present for only 36 hours a week, but were paid for 39 hours and, in addition, a premium of one fifth was paid 'over basic' for the 36 hours.

According to the EETPU representative, Billy MacNamara, the use of shift work had not changed significantly over the years - "its where the order book is". However, in the past, management occasionally have used shift work as a prelude to redundancies. Having split the labour force and demonstrated that lines can be run using less labour, the company then called for voluntary redundancies upon reversion to 'normal' day shift operation. This ploy has sometimes backfired, though, with high levels of sickness during shift work resulting in undermanning and production hold-ups. On other occasions shift work has postponed the need for redundancies, as a result of the requirement for 'double manning' when two shifts are operated.

Whilst the reasons for changing the pattern of labour demand by moving to shift work were various, the switch appeared to facilitate desired changes in the level of employment. During the study period (in August 1986) a change-over to shifts was implemented at short notice (and thus incurring penalty payments for the company). In this instance the motive was to increase production in order to bring stocks up to their required levels. Since no extra labour was recruited for this purpose, the implication is that work was intensified and higher productivity achieved ([A14] in Table 2.1).

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In contrast, there was no use of overtime as an adjustment mechanism. This was the result of an overtime ban by unions. Every time redundancies were announced, the unions declared an overtime ban for a year and since there had not been a year without redundancies for some time, the ban was a long-standing one. However, senior management was largely opposed to the use of overtime, preferring instead a system of bonuses based on output. In contrast, at Rippers, overtime was used extensively as an alternative to recruitment.

(c) Training and moves to increase 'flexibility'

At one time there was an apprentice training school on the Stockton site. Six joiners and six fitters were taken on every year along with an occasional electrician (13). The introduction of new technology led to a steady erosion in the numbers recruited and, at the same time, altered the content of the courses. However, a dramatic deterioration occurred in the early 1980s as training became seen as a cost rather than an investment in the future. (The 'external control' aspect is important here, with Bowater struggling to protect its standing in the financial markets).

Only nine apprentices were taken on in 1981 and none started in 1982 or 1983. Four were recruited in 1984 and two electrical apprentices in 1985. Thus, in 1986, there was a total of six apprentices undergoing training (14). Significantly, a greater part of the training now occurs in external training centres instead of being performed 'in-house'. At these centres, experience is gained on a variety of machines, including programmable-logic controllers which were installed on the lines at Sarek as part of the modernisation process. In this way the company can circumvent the unions' opposition to 'flexibility training' and create a supply-side pressure for reduced job demarcations (as multi-

skilled workers are unlikely to agree to restrictions being imposed on the machines they are allowed to use).

Meanwhile, efforts to achieve greater 'functional flexibility' between labourers on the one hand and joiners and machinists on the other were reported by both management and unions. According to management this was necessary in order to bring the works in line with the competition (e.g. Southern (15) has a flexibility agreement with its unions). The Personnel assistant spoke enviously of Sarek's sister company in Heddingham, Essex, where management had been able to introduce a semi-skilled grade. A union representative at the Stockton factory complained:

They [the management] want semi-skilled work from an unskilled union - they'll get rid of a joiner and get the T&G [Transport and General Workers Union] to do [the job].

Finally, during 1986, there was an attempt to introduce 'quality circles' at the Stockton factory (see more details on the concept of quality circles in Chapter Eight). After attending the initial meetings the unions decided that quality circles (QCs) would not help to improve work organisation but rather would be used for "intimidation, undermining of unions and to achieve wage cuts" (see CAITS, 1986, for a similar argument).

The issue of QCs is raised again in (vi) below, because it was linked to an attempt to change bonus payments. The precise outcome of negotiations on the introduction of QCs is not known, but in March and September 1989 the company ran adverts for a Quality Assurance Technician for a "newly formed Q.A. Department" (Evening Gazette, 23.3.89. p.35 and 21.9.89. p.26).

(d) 'Externalisation' of service functions

Against a background of serious losses in the 1980s, a number of short-term measures were taken to cut costs. In addition to the cutback on training and the closure of sales offices in Scotland and London, a number of operations previously performed 'in-house' were put out to tender. Low wages and economies in purchasing, equipment and administration combine to enable external contractors to offer services at a lower price than is possible through internal provision.

Office cleaning was the first service to 'go out' to a firm of contract cleaners in 1980. Then all the company's drivers were made redundant and are now obtained on a contract basis. Catering 'went out' in 1983, first to Gardner Merchant and later to Crown Catering. This resulted in the loss of ten jobs and, according to union representatives, the quality of the food has suffered.

In 1984, security (at the gate and on night watch) was put out, first to Chubb and later to Escort Security. The fact that both catering and security contracts have changed within four years demonstrates the instability that tends to characterise contract working.

(iv) Employment structure and monthly changes in labour demand 17.7.86. to 15.7.87.

(a) Background

Before looking at changes in employment at Sarek during the period of fieldwork, it is useful to look at the pattern of change in earlier years. Table 5.2 shows how the total numbers of staff and operatives changed between 1976 and 1986. In 1965/6 at the time of Teesplan (see Chapter Three) there were 874 workers at the company.

Table 5.2 Employment change at Bowater Hills 1976-86

Year end	Staff		Operatives		Total	Change on previous year
	Male	Female	Male	Female		
1976	190	79	547	207	1,023	n.a.
1977	202	69	480	189	940	-83
1978	198	79	537	200	1,014	+74
1979	188	73	493	182	936	-78
1980	156	56	416	110	738	-198
1981	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1982	112	34	311	62	519	n.a.
1983	118	32	319	55	524	+5
1984	105		337		442	-82
1985	80		337		417	-25
1986	83		311		394	-23

Source: Company figures.

Note: No breakdown by sex available after 1984.

Table 5.2 reveals that between 1976 and 1986 total employment at the company fell by over 60 per cent. Over the period for which a breakdown by sex is available (1976-1983) it is clear that while the overall employment figure fell by roughly half, the decline was greatest in percentage terms amongst the female labour force (a 59 per cent decline in female staff and a 73 per cent drop in the number of women operatives). The decline in employment was common to all product areas with reductions (1976-83) in the door, doorsets and cubicles departments of 41, 61 and 41 per cent respectively. Over the same period the number of maintenance workers fell from 76 to just 33 - a decline of 56 per cent.

In July 1986, around the start of the study period, the 393 workers included just 56 women, 14 of whom were monthly paid staff. Of the 337 men, 51 were staff and the other 286 were hourly paid shopfloor workers. The age breakdown of employees is given in Table 5.3.

Table 5.3 Age structure of the Sarek workforce (July 1986)

Age	Number	%
16-35	138	41
36-45	80	24
46-55	78	23
55-65	41	12

Source: Company figures.

(b) Change in employment during study period

Changes in the numbers employed (as distinct from changes in labour demand) during the study period were so slight that it is not worth producing a table showing a month-by-month headcount as done in other Chapters. (Table 5.1 above provides a breakdown of the changes between October 1986 and July 1987). Instead it is easier to report the changes that occurred between visits.

In June 1986, ten staff were made redundant including one from each department (Personnel, Marketing, Accounts, Purchasing, Computing, Sales administration, Transport and Maintenance). On the shopfloor there was a reversion to 'normal' day working after a period of shift work.

During July 1986, ten labourers, eight machinists, and a painter were made redundant and a computer operator came to the end of a temporary contract. Of the 20 leavers, 17 were men (the three women all were labourers). Four of the leavers had been 'long-term sick' and would not be looking for other jobs. One was a woman approaching retirement and three went straight into other jobs (one as a 'saw doctor', one in a family wood machining business and the painter went to work full-time with the Spastics Society with whom he had been on secondment). Of the remaining twelve, the Personnel Assistant judged that eight would look for alternative employment while four would not on the grounds of ill-health. Thus, out of 20 potential entrants to the unemployment count, only eight looked likely to make a claim (see vii below).

There was only one 'starter' in July (compared to 25 new recruits at Rippers) - a relative of the switchboard operator was taken on during her holiday from University to assist as a computer punch operator. From the period 25.7.86. to 11.8.86. the factory was shut for the summer holiday, with only a skeleton staff and maintenance workers in attendance.

In August 1986, the Personnel Assistant left for a job in Sheffield. There were no other leavers nor any recruitment. Line One was placed on shifts again in an attempt to correct discrepancies in the levels of stocks. The following month, a YTS girl and a Wages clerk left. Two new YTS girls were recruited and a new Sales Director was brought in. He had been working for Rothavale Joinery until that company was taken over by John Carr. The whole factory (except for cubicles production) was placed on shifts.

In October 1986, apart from the temporary punch operator who returned to University, there were no starters or leavers. In November, two of the staff left and two replacements were recruited. More significantly, 72 redundancies were announced and became the subject of negotiation with the unions (details in c below).

In December 1986, a number of voluntary redundancies occurred as one of the first outcomes of these negotiations. In addition two workers died and a foreman was dismissed after being caught removing stock. However, he already had another job to go to and was due to leave anyway. A new Site Manager was recruited and the existing one was moved 'sideways' to become Manager in charge of production. The only change by January 1987 was that the new Sales Manager had been transferred to Rippers and the Managing Director at Stockton had taken on responsibility for sales.

In February 1987, eight hourly-paid workers took voluntary redundancy along with one staff member. In April a further 15 volunteers left the shopfloor. Between March and July a number of alterations were made with Line One up-graded and a new cold press line installed. Some workers were put on to a night shift and others were redeployed whilst Line One was out of action. The only other change to note was that the company was looking for four maintenance men to retire voluntarily at the time of the final visit to the company in

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July 1987. During the summer shut-down of 1987 the new cold press line was to be 'hooked up' to the dust extraction system.

(c) Redundancies - general policy and specific events during study period

Given the frequency of redundancy announcements at the factory in the 1980s, 'natural wastage' of shopfloor workers was limited to retirements and illness (or death). There were no 'voluntary quits' because any worker wishing to leave would wait for a call for voluntary redundancies and the appropriate redundancy payment.

There was no shortage of volunteers coming forward each time a redundancy situation was announced and both management and unions reported that morale was at an all-time low in 1986. According to the FTAT and EETPU representatives, over 95 per cent of redundancies since 1979 had been on a 'voluntary' basis. (FTAT experienced twelve compulsory redundancies and UCATT suffered two, but all affected TGWU workers left voluntarily).

The company operated a policy of "volunteers first, then last in, first out". However, negotiations over redundancies focused on reductions on a trade-by-trade basis rather than the absolute numbers. Consequently, an element of selectivity was built in to the redundancy process. Thus, if it was agreed that a fitter and four machinists had to be made redundant, it did not matter how many fitters offered themselves for voluntary redundancy, only one would be 'successful', even if there were insufficient volunteers among the machinists (see ACAS, 1986, for a discussion of different arrangements used in redundancy situations).

The union position was as follows:

If the jobs are no longer there, we must accept the fact, but if it's an avoidable redundancy we'll fight it. In the past they've cut back too far and this has caused problems. The unions will fight any further compulsory redundancies on the shopfloor from now on. Bowater Hills' redundancy terms were superior to legally specified minimum requirements and, for shopfloor workers, consisted of two weeks' pay for every year's service up to a maximum of 39 years. (Staff received three months' pay plus a fortnight's pay for every year in service). Following the Sarek takeover, the management announced its intention to withdraw from these enhanced terms but still had not carried out its threat by the time of the last visit to the company in July 1987. The unions complained that the enhanced terms were being used to attract workers to volunteer for redundancy:

They'll say: "This is the last time we'll offer Bowater terms" to get people to come forward for voluntary [redundancy], then say the same again next time.

The redundancy situation announced during the study period, in November 1986, was related to the possibility of transferring functions between Stockton and Heddingham, as raised in the Background section (above). Although Heddingham had no hot door press or dust extraction system, there were clear ways that these deficiencies could be overcome. Flush doors could be manufactured in cold (hydraulic) presses - the only disadvantages being that cold presses are slower and can take only standard doors. Thus, Hills would have had to drop out of the 'specials' market if it had decided to transfer completely to Heddingham. Meanwhile, however, a decision had been taken to start importing wooden components from Hallnas and to buy in veneer rather than cutting it on site. Thus the need for the componentry and veneer shops at Stockton - two of the main calls on the dust extraction system - was eliminated.

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By October 1986 Sarek had weighed up the options and decided against a total transfer to Rippers' site. Instead, a policy of selective transfer was introduced. Prime candidates for transfer were cubicles and panel doors - the former because of their similarity in production to kitchen units and the latter due to construction methods which have more in common with windows than flush doors.

The 72 redundancies that were announced broke down as follows. Some 45 jobs would be lost as a result of closing the componentry and veneer shops and the remainder was associated with the possible transfer of panel door production to Hedingham. The threat to panel door production may have been included as a bargaining ploy by management. It caused considerable alarm on the shopfloor, nonetheless. If panel door production was relocated, it was likely that cubicles would follow soon afterwards and Stockton would have lost what was, at that time, its only profitable business.

A meeting with the company was called by Stockton Borough Council after the redundancies had been announced. Councillor John Scott, Chairman of Stockton's Planning and Industrial Development Committee, arranged for a review of the company's rates and contacted the regional offices of the Department of Trade and Industry regarding the possibility of grants from Central Government to avoid the need for job losses. A process was set underway to concentrate production in a smaller number of factory buildings. The older buildings will be demolished and the land could be sold off for development.

By January 1987, Gordon McLean of the TGWU was able to announce that Sarek had scrapped its plans to transfer panel door production to Hedingham. Eventually agreement was reached on 36 redundancies - all voluntary. It was reported that the DTI offered an £80,000 grant "to set against investments in upgrading production methods" (Evening Gazette, 20.1.87. p.5). The company confirmed this situation

and planned to use the money to alter the Atlas line, so as to reduce hold-ups in production.

Discussions about the level of wages at the Stockton factory formed an integral part of the negotiations over the number of job losses (see vi below).

(v) Recruitment methods and catchment area

Recruitment, until August 1986, was the responsibility of the Personnel Assistant in consultation with the Manager of the relevant department. (Unions have no role in recruitment other than checking to ensure that a new recruit is or becomes a member of the relevant trade union). However, when this assistant left for another job in Sheffield the post was not refilled and the Personnel control function was transferred to Rippers. This, in itself, was further indication of the lack of potential for recruitment at Stockton. (It also caused problems in terms of the research for this thesis as the assistant was the contact person at the company - (16)).

Indeed, recruitment during the study period and in the preceding year (17) was negligible. However, it is still of interest briefly to consider the channels of recruitment used in earlier years.

Historically, families and friends of existing workers acted as a ready source of new recruits for the factory. A considerable proportion of the skilled labour force served their apprenticeships with the company, starting straight from school. However, the extent of family links at the workplace declined as older workers opted for early retirement or voluntary redundancy in the early 1980s and because there were no longer opportunities for the employment of younger workers. Nevertheless, many of the employees had built up a considerable length of service at the factory.

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Over half had been there for more than ten years, while 16 per cent had more than 20 years' service.

Traditionally, business was best, and recruitment highest, towards the end of the summer as major construction projects drew to a close ("doors are always the last thing to go into a building"). However, more sophisticated building techniques now enable all-year round construction and this has reduced seasonal fluctuations in the work-load. Thus, whereas in the past temporary workers were recruited for the summer, the numbers involved are now much smaller. Those recruited on temporary contracts in the 1980s have performed a different role to that of helping to meet seasonal demand. Instead they have acted as a 'safety valve' against a background of large-scale redundancies. Thus, if the number of workers declined too drastically, temporary workers could be taken on to smooth operations until their services were no longer in demand. (Union representatives referred to cases where 'temporary' workers had been kept on for four or five years).

The strong 'family and friends' connections can be explained in part as the result of an agreement negotiated with the unions whereby jobs must be advertised on the shopfloor before the company turns to the external market. When forced to recruit externally, jobs for labourers have been advertised in the Job Centre and the local press (Northern Echo and Evening Gazette).

Recruitment of labourers never caused any major problems but, according to the Personnel Assistant, "there is not a wealth of skilled labour out there". The main sources of skilled labour (after the company's own apprentices) were other local joinery and machining companies or the Job Centre. Around 80 per cent of the workforce was drawn from the Stockton/Thornaby area. The remainder came in from up to eight miles, taking in Middlesbrough and Hartlepool.

At times, Rippers of Heddingham advertised for skilled labour at the Stockton factory but there has been only a very limited amount of interest. Not only are the wages lower at Rippers, the unions also stress the strong ties of the Stockton workforce with the local community.

'Higher grade' jobs were advertised in the national press and, occasionally, private recruitment agencies have been used.

(vi) Unions, pay bargaining and wage levels

Not surprisingly, all of the ('closed shop') unions at Sarek suffered a decline in membership as a result of the drop in the workforce. However, it was the TGWU that suffered the greatest drop as the numbers of labourers were cut. Table 5.4 gives the union membership position at October 1986.

Table 5.4 Union membership at Sarek (October 1986)

Union	No. of members	No. of stewards
Furniture, Timber and Allied Trades (FTAT)	65	3
Union of Construction Allied Trades & Technicians (UCATT)	78	3
Transport and General Workers Union (TGWU)	150	3
Electrical, Electronic, Telecom & Plumbing (EETPU)	8	1
Amalgamated Union of Engineering Workers (AUEW)	10	1
TOTAL	311	11*
* Plus two staff representatives (18).		
Source: Union figures		

Wages at Sarek were higher than at most of the company's competitors. The national minimum weekly wage agreed by the Timber Trades Federation was £118 basic in 1987. At Sarek, a

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tradesman in 1987 received between £160 and £170 (basic) a week and a labourer was paid around £133. These rates were set in an attempt by the company to "bring the Stockton site back to a profitable base... securing its long term future" (Draft pay and productivity agreement, 24.7.87.). However, the company was bound by a National Trades Federation agreement which stipulated that a pay rise must be implemented each year. (Mirroring trends in other industries, a number of major door manufacturers, such as John Carrs, had pulled out of the national agreement and others, such as Crosby, were considering withdrawing).

In an attempt to overcome this situation, the rise in basic rates at Sarek had to be 'bought' by the workers at the expense of having their output bonus merged into their basic rate. Moreover, Sarek tried to reduce yield bonus payments (based on the percentage of doors meeting quality standards) and, thus, to achieve a flat rate reduction in earnings. The unions opposed the plans and added a work-to-rule to their overtime ban. An all-out strike was considered unlikely, however, as this could have precipitated large scale redundancies.

The final outcome is unknown as the dispute was unresolved at the time of the final visit to the company. The improved performance at the company over the last two years may have helped to defuse the situation. However, the events during the study period show that the notion of 'financial flexibility' is controversial and cannot be viewed in isolation from the industrial relations scene.

(vii) Net impact on the local labour market and unemployment.

The scale of employment decline at Bowater Hills/Sarek between 1976 and 1986 was substantial, with a drop of some 600 jobs between stock counts in these two years. Underlying

the decline has been a clear process of diminishing product demand feeding through to a reduced demand for labour. This, in turn, has led to falling levels of employment and, undeniably, a proportion of those losing their jobs would have joined the official unemployment count for Stockton - especially as over 80 per cent of the labour force was drawn from within the TTWA.

However, the proportion of job losers becoming officially unemployed is unclear. It is known that many of the workers taking voluntary redundancy in the early 1980s were coming up for retirement, had domestic responsibilities or were long-term sick. None of these categories would be likely to be included in the official unemployment count as now calculated (given that men over 60 years old are credited automatically with national insurance contributions and no longer feature in the monthly count and that people with domestic responsibilities may now be considered 'unavailable for work').

Evidence from during the study period (admittedly based on small numbers) suggested that under half of those taking redundancy were likely to be both looking for work and without a job to go to immediately (i.e. likely to claim and be eligible for unemployment benefit). Some of the skilled workers who lost jobs at Hills have been able to use their skills to find alternative work in the county. According to the FTAT representative, redundant joiners can pick up jobs on building sites, while machinists may find other jobs 'in the trade' (e.g. at Magnets or Bolton and Paul in Stockton or at IBC in Hartlepool). There is at least one example (in Stokesley, North Yorkshire) of a joinery firm being set up by ex-Hills employees and one person used his redundancy money to set up his own 'D-I-Y' shop in Stockton.

The people most likely to have become (and probably remained) unemployed were the unskilled operatives, thrown into a

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labour market with little to distinguish them (in the eyes of potential employers) from the thousands of other unskilled job searchers in the TTWA.

Meanwhile, recruitment during the study period was almost non-existent and was limited almost exclusively to a handful of professionals brought in (and sometimes moved out again) in an attempt to address identified weaknesses in the company's operations. As in the case of Head Wrightson (see Chapter Nine) Sarek provides an example of the way in which traditional points of entry into the labour market for young people - often following in the footsteps of a previous generation - have been eliminated.

5.3 Concluding comments

At Sarek, the relationship between changes in the demand for labour and changes in the level of employment can be understood only after due consideration is given to the deteriorating industrial relations climate at the factory. These both influenced the desired pattern of employment change and restricted the options open to management. Unable to reduce unit labour costs because of union resistance and faced with problems of ageing machinery, cutbacks at the company in the early 1980s were achieved at the expense of product quality - the company's 'trade mark' of earlier years. This, coupled with an outdated distribution system, poorly linked with merchanting outlets, cost the company some major orders. In the meantime workforce morale had followed employment on its downward trend, further exacerbating the problem of deteriorating quality. Greater scrutiny of workforce practices and attempts to introduce new arrangements (such as quality circles) only added to the build up of tension between management and the workforce.

In attempting to break out of this vicious circle of decline, Sarek was confronted by well-organised unions, anxious to defend their members' wages and jobs. The initial idea of transferring functions from Hedingham to Stockton was quickly reversed when the greater labour flexibility of the former and the stock discrepancies at the latter were taken into account. Instead of job gains at Stockton, therefore, negotiations started on the scale of job losses associated with the closure of some parts of the Stockton business and the transfer of others to Hedingham. In comparing the relative merits of the two sites, management emphasised the ways in which the weaknesses of the Hedingham site could be overcome, while down-playing the obvious attractions of the Stockton works.

Clearly, decisions regarding the demand for labour at Sarek of Stockton were influenced not only by the company's performance in the product market, but also by company's policy regarding the future of its two U.K. sites. Perhaps the most interesting observation, as far as this thesis is concerned, was the way in which mechanisms of labour adjustment differed between Hills and Rippers. At the former, the desired levels of labour input were achieved by the use of shifts and work intensification alongside a negotiated reduction in the number of employees. At Hedingham, in contrast, labour demand was met by increasing the numbers of employees, greater flexibility amongst existing employees and extensive use of overtime.

In conclusion, the introduction 'at the margin' of multi-skilled workers, the 'contracting out' of service functions and the attempt to introduce a pay cut through the renegotiation of bonuses were the most obvious attempts to alter employment relations at the Stockton factory. Whilst none of these measures appeared to be of sufficient magnitude to warrant the term 'restructuring', the situation over the

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longer term could be different. In many ways, the steps witnessed during the study period could be considered as part of a package designed to change people's expectations about the nature of employment and income at Sarek ([B9] in Table 2.1). A pay cut is the lesser of two evils when the other option is no job at all. Thus, as ground is given in the attempt to maintain employment at Stockton, so it becomes possible for management to renegotiate the terms of the employment relation.

The confrontational situation at Sarek was highlighted because of the poor market prospects during the study period. In such a climate a management gain could be achieved only at a cost to labour. The improvement in market conditions as a result of the construction boom from 1987 to 1989 started to have an impact towards the end of the fieldwork, with management and unions agreeing to try and win extra business to keep the workforce employed to the full. Rising product demand has helped to diminish the uncertainty surrounding the company's future and in March 1989 a management buy-out was announced in the face of interest in a takeover from a number of the firm's competitors (Evening Gazette, 8.3.89. p.4). Shortly afterwards the firm reported that invoiced sales were 25 per cent ahead of the previous year's figures and that trading profit had reached a twelve per cent target set by management as part of a three year business plan (Evening Gazette, 20.4.89. p.18). With investment in new capacity underway the security of jobs looks considerably greater than it did in 1987. It is not clear from press reports whether the buy-out includes Rippers' business, but this is likely given the joint management of the two sites.

The loss of around 600 jobs over ten years averages out at around 60 jobs per year - a figure similar to that witnessed during the study year. What this case study shows is that such an annual loss, when spread over twelve months and

dissipated across the TTWA, has no clear impact on the local unemployment statistics. The alternative of a complete close-down of an employer's operations ([B3] in Table 2.1) remains the most radical method of restructuring available, with a correspondingly greater chance of identifying of detecting change in the level of unemployment in the TTWA. Even then, as the study of the closure of Smiths Dock on the Tees has shown (Withington, 1989), it soon becomes impossible to separate the impact of closure from the whole variety of other flows affecting the statistics.

Footnotes:

(1) In March 1989 four Directors took control of the company from the Swedish owners who retained a minority share. The Managing Director announced that he hopes to take the company to a full listing on the London Stock Exchange (Evening Gazette, 8.3.89. p.4).

(2) The Stockton branch of the Clarence Railway used to cross Norton Road with sidings leading into the Blairs site on to which Hills moved in 1933.

(3) Hills took over Terry's chocolate factory in York around 1942 to make propeller blades used on Spitfires, Hurricanes and other fighters and bombers. In total, Hills made 480,000 Jablo blades, 812 Percival Proctor aircraft, over ten million square feet of aeronautical plywood and 13,500 trailing edges for Anson wings. At the peak of the war 26 separate organisations were functioning under Hills management (Evening Gazette, 26.9.89. 'My War' supplement p.3).

(4) The Ghanain works lost £165,000 in 1968 before being sold. As a result of the sale, more processing was done within Ghana and this prompted the closure of Hills' U.K. plywood factories.

(5) Bowater Paper Corporation was renamed Bowater Corporation in 1972 and now trades as Bowater Industries.

(6) Since the early 1970s the Bowater Corporation's objective has been to achieve a transformation from a low margin pulp and paper supplier into a packaging and builders' supplier organisation. The slowdown in the national economy in the late 1960s, coupled with the U.K.'s accession to the European Free Trade Association (EFTA) in 1967 caused serious over-

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capacity in the U.K. paper and board industry (through increased competition from Scandinavia and Austria - see Massey and Meegan, 1982, p. 117-8). The Hills acquisition was the Bowater Corporation's first entry into the building supply business. More recently, in May 1986, Bowater bought Roberts Adlard for £12.5 million with merchant depots in Kent, Surrey, Sussex and Hampshire. A year later it acquired Hooper and Ashby, based in Southampton. It now has 110 builders' merchant depots between Aberdeen and Dover (Financial Times, 22.4.87. p.26).

(7) Following the sale of Bowater Hills to Sarek, the link with Crossley was severed. Crossley remains part of the Bowater organisation and merged with Ferguson Foster, an established local supplier to the contract market, in January 1987. In September 1989, the business expanded further after Crossley bought the merchanting business of William Coulthard and Co. of Carlisle.

(8) For example, one batch of doors was given a paint finish instead of a varnish. Since a painted version of the door was not offered for sale in the company's catalogue it became 'white elephant' stock.

(9) For instance, badly manufactured doors were being sent out as 'protection' on the top and bottom of stacks loaded on to delivery lorries but these were being included in the count of doors leaving the works.

(10) More generally, figures from the Department of Employment's New Earnings Survey tend to show high male wages for Cleveland because of the capital intensive nature of much manufacturing activity in the county, leading to high productivity.

(11) The ownership structure of door companies has undergone some significant changes since the study period finished. Norcros has emerged in a leading role following its swap with Meyer at the end of 1988 - Norcros took over Crosby in exchange for the UBM network of builders' merchants (Financial Times, 1.12.1988. p.32). Meanwhile Magnet (known as Magnet and Southern until mid-1987) sold Southern-Evans to concentrate on kitchen and bedroom furniture. The purchasers, Harrisons and Crosfield, are in the process of renaming Southern-Evans outlets under the 'Harcros Timber and Building Supplies' banner.

(12) Three boilermen permanently work on this shift system, with an additional 22.00hrs to 06.00hrs shift to ensure 24 hour coverage.

(13) The company was covered by the Constuction Industry Training Board regulations.

(14) Apprentice training takes three years. The company no longer guarantees a job at the end of the period of training.

(15) Southernns was part of Magnet during the study period, but see footnote (11) above.

(16) Fortunately the Personnel Assistant was able to pass on the name of another manager prepared to continue the planned monthly meetings. Had this not been possible, the case study would have had to cease after two months.

(17) During the year to July 1986 the only recruitment was as follows:

- two electrical apprentices;
- a Product Development Manager brought in from Sweden on a three year contract;
- a draughtsman recruited in November 1985 to assist the Product Development Manager;
- a Commercial Manager with responsibilities for company administration (recruited from an engineering company in Middlesbrough);
- a turner to fill a post after a retirement (who left another job to join Sarek).

(18) Office workers first sought representation in 1978 and Bowater insisted that if they joined a union it would have to be the Association of Scientific, Technical and Manageerial Staffs (ASTMS). However, workers were dissatisfied with ASTMS and in 1984 joined the white collar section of FTAT amidst accusations of 'poaching' from ASTMS.

CHAPTER SIX: NORTH TEES GENERAL HOSPITAL

6.1 Introduction

Employment change at North Tees General Hospital was studied over the year to 31.3.87. (1). The hospital is a particularly interesting employer, covering a wide range of occupations from domestics through clerical workers, craftsmen and nurses to consultants and district management. With over 3,000 employees it is one of the largest employers in the TTWA (and the largest single employer of women). In order to meet its labour requirements, therefore, the hospital must recruit from a variety of labour markets - sometimes local, other times regional, national or even international. The central concern of this thesis is with recruitment in and from the local labour market, although the wider pull of certain occupations at the hospital is noted wherever relevant.

Unlike the employers in other Chapters, the hospital operates in the public sector and provides a service rather than a product. However, this does not mean that the theoretical comments in Chapter Two regarding restructuring and labour market adjustment are irrelevant. Indeed, the differences that do exist have been diminished as a result of measures taken by successive Conservative Governments to force the National Health Service (NHS) to function on a more commercial basis (see below). In any case, the NHS provides a vital role in underpinning relations of production in the wider economy. First, by safeguarding health and rectifying sickness and injury it helps to ensure the 'reproduction of the labour force' - present and future. Second, in cases where no direct economic return from the service can be anticipated (e.g. care for the elderly), the NHS performs an

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important legitimising role. It helps to secure the co-operation of workers by acting as a psychological 'safety net' and by preventing the worst manifestations of poverty and injustice.

The boundary between private and public sectors is becoming increasingly blurred as a result of the expansion of private health care in the 1980s, the introduction of compulsory competitive tendering, the encouragement of income generation and, most recently, the moves to create a 'market' by more clearly separating the purchase and provision of health care (see 'Health Care Survey' in Financial Times, 11.4.89.). The intention is for District Health Authorities such as North Tees to become 'purchasing agents', able to buy services in local 'demand' from a mixture of private and public (or self-governing) hospitals offering the best combination of price and quality (2).

Now more than ever, therefore, there is pressure on hospital managements to extract greater productivity from their labour forces. Thus, although the study of North Tees General Hospital was included in this thesis to enable comparisons to be made with the public service sector, the same general selection criteria applied. It was an employer faced by a changing environment and known to be under pressure to alter its patterns of labour utilisation. The prospect of identifying labour flows in a variety of occupations made the hospital a prime candidate for inclusion in the study. In addition, much useful information was known to be available as a result of a study of the South Tees District Health Authority (Townsend, 1987).

The results of the historical research and fieldwork are presented below in slightly different format to that used in other chapters in order to cope with the diversity of occupations under consideration. Thus, Section 6.2 covers:

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- (i) background information;
- (ii) pressures for change in health service provision and at North Tees Hospital 1982-7;
- (iii) aggregate employment change at North Tees Hospital;
- (iv) monthly employment change and recruitment at the staff group level from 1.4.86. to 31.3.87.;

Section 6.3 contains general comments on pay and the net impact of the Hospital's operations on unemployment and the local labour market. There is also an attempt to compare and contrast findings at the hospital with changes noted in the study of private sector employers, reported in other chapters.

The chief points to note from this chapter are that the call for numerical, functional and financial flexibility is in no way limited to the private sector. In spite of what may appear to be rigid national job evaluations, grading procedures and collective bargaining, considerable blurring of job boundaries and pay differentials was found at the local level, along with a notable shift towards part-time employment and some 'casualisation' of employment at the margin. Many of the pressures for change in employment and labour demand stemmed from 'institutional' changes introduced in an effort to force the NHS on to a more commercial basis of operation. Consequently, the desired level of labour demand was invariably found to exceed actual employment because of the impact - direct or indirect - of cost constraints.

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6.2 The North Tees Case Study

(i) Background to the North Tees General Hospital

Prior to the reorganisation of local government in 1974 there was a tripartite organisational structure in the health service, as instituted by the National Health Service Act of 1946. This comprised hospitals, local authorities and Executive Councils. Regional Hospital Boards were responsible for strategic planning and resource allocation amongst hospitals, while their day-to-day administration was left to Hospital Management Committees. Local authorities controlled health centres, district nursing, the schools health service the ambulance service and environmental and public health. The Executive Councils took charge of primary care services (general practitioners, dentists and so on).

The North Teesside Hospital Management Committee (HMC) in this period administered an area including the the rural districts of Stockton and Sedgefield and covering a group of six hospitals as shown in Table 6.1. (below).

Table 6.1 Hospitals administered by the North Teesside HMC 1946-1974

Hospital	No. of beds (1958)
Bowesfield Lane H'pl	130
St. Ann's Geriatric H'pl	145
Durham Rd. Children's H'pl	86
Winterton H'pl, (Sedgefield)	313
Robson Maternity H'pl	27
Hardwick Hall (maternity)	30
TOTAL	731
Source: Airth and Newell (1962).	

Due to different specialities at these hospitals there was considerable 'hospital traffic', with residents from Thornaby, Stockton and Billingham having to travel to Sedgefield and also to Middlesbrough (Airth and Newell, 1962). In common with other parts of the country, by the mid-1950s the hospitals were suffering from deteriorating standards of accommodation and lacked the space to expand. In 1958, a review committee was set up by the (Newcastle-based)

Regional Health Board and the HMCs of North and South Teesside. The decision to construct a 1,000 bed general hospital for North Teesside was one of the committee's recommendations, put forward in a Hospital Plan in 1962. Townsend (1987) stresses the link between the proposals of the review committee and the anticipated demands on the health service arising from planned industrial development on Teesside:

... it is indicative of the priority attached to the Teesside [industrial] developments that the Teesside HMCs were the only HMCs in the region for which new hospitals were to be provided (on new or previously undeveloped sites)
(ibid p.25).

After considerable debate about the best location (a site in Billingham was preferred initially by the RHB), Ministerial approval was granted in March 1963 and the first phase of the hospital was opened by September 1968. This phase concentrated on a four ward, 110 bed maternity block and a psychiatry block with provision for 25 men, 25 women and a 75 place day unit for both sexes (3). In addition, a laundry, boiler plant and staff accommodation were constructed. The location to the north-west of Stockton town centre allowed the Hospital to draw labour from the two surrounding housing estates of Hardwick and Roseworth.

The second main phase began in August 1969 and included 469 general beds, 32 beds in a child psychiatry unit, a geriatric day unit with 50 places and the expansion of the adult psychiatry block to a total of 150 beds. Construction of additional staff accommodation and a teaching centre began in 1971 along with a geriatric unit. The previous geriatric hospital, at St. Ann's in Stockton, was closed down. By 1975 the construction work was finished and the 998-bed hospital was fully operational.

By this time, the major 1974 reorganisation of local government had occurred (for details see Levitt, 1976;

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Greenwood and Wilson, 1984). The changes in the health service that are of interest to this case study were the introduction of Regional Health Authorities (in place of Regional Hospital Boards) and the redrawing of boundaries to facilitate co-operation with local government. Area Health Authorities, introduced as an intermediate tier of management (covering the county of Cleveland in this case), proved to be short-lived. They were abolished in 1982 and District Health Authorities (DHAs) were established to cover existing health districts as far as possible. North Tees District Health Authority (DHA) is somewhat unusual in that the whole DHA area - coterminous with the Stockton TTWA - is served by the one large general hospital (4).

Unlike the other employers studied in this thesis, where pressures for employment change were derived from conditions in the product and/or external labour market, the driving force encouraging new working practices in North Tees Hospital was 'institutional' and legislative in nature. On the one hand there has been a stream of initiatives and circulars from the Department of Health and Social Security (5) aimed at improving management and cost efficiency in the NHS. On the other, (and not entirely unrelated), the Northern region has its own Strategic Plan (NRHA, 1985). Although this Plan has now been modified and updated, the pattern of provision at North Tees during the study period was influenced by guidelines laid down in the plan. The importance of 'institutional' and policy-related changes as an influence on local labour demand is reflected in the following sections. Only one part deals directly with changes in the hospital's 'customer base' or 'market' (in the sense of local demographic change) as a pressure for change.

(ii) Pressures for change at North Tees Hospital 1982-7

(a) The move to single general management

Following the 1982 reorganisation of the Health Service, the direction of Government policy has been towards improving the efficiency of the NHS in financial terms (culminating in the proposals of the 1989 White Paper 'Caring for Patients' - see footnote 2). In 1983, (now Sir) Roy Griffiths, Managing Director of the J.Sainsbury supermarket chain, chaired an inquiry into the effective use and management of manpower and related resources in the NHS. The committee suggested that single general managers (preferably with private sector business experience) should be appointed at District and Regional Health Authority levels (on three year contracts) with executive powers and full responsibility for budgetary discipline in each unit or hospital (6).

Government acceptance and implementation of the Griffiths proposals signalled the end of consensus management that had characterised the NHS since 1948. Attempts to attract non-NHS personnel into management positions have been less than successful, though. By mid-1987, only two of the 14 English Regional General Managers were 'outsiders', along with 36 of the 191 District General Managers and 57 of the 611 Unit General Managers (Financial Times, 8.5.87. p.14). (The District General Manager at North Tees had previously been a unit manager at a Newcastle hospital).

Yet, despite the apparent inability of the NHS to attract large numbers of 'outside' managers, (or to keep those that do enter), considerable ground has been covered in terms of introducing commercial practices into the management of the NHS. Competitive tendering for a growing number of services is now commonplace (enabling the private sector to tender for work previously performed in-house by NHS employees), and the terms 'performance indicator' and 'cost improvement' have

entered the everyday language of hospital administrators at North Tees and other hospitals across the country.

(b) Compulsory competitive tendering

The main rules regarding competitive tendering were introduced by the DHSS in September 1983 and covered the provision of catering, cleaning and laundry services. Even before these services were put out to tender at North Tees, the cleaning of health centres and clinics (7), staff residences and windows had been exposed to competition from the private sector. Although each of these early cleaning contracts was won in-house, the District Manager at the time hinted that savings of approximately 20-30 per cent were realised as a result of the tendering process (Evening Gazette, 24.1.86. p.9). The National Audit Office has emphasised that any savings need to be calculated net of the administrative costs of the tendering process, which were particularly high while procedures were being established (Guardian, 29.4.87. p.3). Nevertheless, it is widely recognised that the threat of competition has produced 'savings' by forcing in-house providers to lower their costs. Unions have collected evidence to show that this has been achieved at the expense of an already low paid workforce, through reductions in bonuses, sickness allowances and paid holidays and in the number of hours' work available per week (Local Government Information Unit, 1986; TUC, 1986; NALGO/NUPE Privatisation Research Unit, 1989).

Cleaning (Domestics)

In the initial round of competitive tendering in 1986, cleaning was the first of the 'big three' services for which tenders were invited at North Tees (8). Five commercial contractors showed an interest in the £1 million contract but withdrew when they discovered the precise requirements. A

sixth contractor was encouraged to submit a 'last-minute' tender to avoid the process being declared void. However, the in-house tender of £957,766 was £120,000 lower and so was accepted. Existing employees retained their jobs but changes in work organisation were introduced and their contracts were switched on to a three year basis - the length of the service contract. (The significance of the latter point was realised in full when the contract came up for renewal in 1989 and was won by Mediclean, part of ISS of Denmark - see Table 6.2 below and footnote 9).

Table 6.2 Ownership of main contract cleaning companies, 1986
(9)

Company	Owner
Mediclean	Hawley
Initial	BET
Hospital Hygiene Services	Care Services Group
RCO Contract Servvices	RCO Holdings
OCS	OCS Group
County Cleaners	County Cleaners
Crothall	Pritchards
Exclusive	Brengreen Holdings
ICC Hospital Services	HAT Group
Reckitt Cleaning Services	Reckitt and Coleman
Source: Joint NHS Privatisation Research Unit, 1988.	

According to one domestic worker at the hospital, work schedules disappeared before the 1986 tender decision was taken and did not reappear "for a long time". When new lists were put up, they included details of what management considered should be achieved, on average, on a four hour shift. Several changes were introduced, requiring an intensification of work effort:

We never used to do [put away] linen or [clean] the landing. They expect us to do all this - and the towel holders - it's just built up and up after the tender.

Representing the domestics, the NUPE Assistant Divisional Officer, Ian McLoughlin, claimed that the union was successful in safeguarding workers' interests. There were no redundancies and an agreement with management ensured that there would be no reduction in hours or earnings.

Furthermore, he claimed that tasks had not been increased significantly as a direct result of tendering. Of greater importance, he argued, was the steady reduction in the number of ancillary staff since 1978 (see iv (a) below). This meant, inevitably, an intensification of the workload for remaining staff and some reduction in the quality of the service. It also generated conflicts between domestics on different shifts. Unfinished tasks had to be completed by the new shifts in addition to their set tasks. One domestic explained:

Sometimes it's inevitable - say you take a bag off and go to empty it and then you get called to mop something up, you may forget all about that bag until you get home that night.

In November 1987 hospital management admitted that the in-house domestic tender had been unrealistically low and, in January 1988, five night time domestic jobs were cut in an effort to save £30,000. Significantly, as a result of the cuts, pressure was put on night shift nurses to undertake cleaning duties in delivery rooms (Evening Gazette, 23.1.88. p.2). Further comments about the overlap of nursing and domestic functions are made in (iv) below (see also Labour Research, 1988b).

According to Operational Services Manager, Keith Palmer, the cost under-estimation for the domestic work arose because of high levels of sickness amongst staff and an inability to achieve cuts in earnings. The sickness, however, was related at least in part to the increased pressure of work and low morale. By the start of 1988, sickness among domestics was running at 9.5 per cent on average, but sometimes reached as high as 13.8 per cent according to the Personnel Department. This represented a shortfall of 288 hours' service a week on average.

Catering

Catering at North Tees hospital was put out to tender in October 1986 (i.e. during the study period). As a single unit district, the possibility of using a centralised 'cook-chill' system of catering (10) did not enter into calculations (unlike the case in neighbouring South Tees DHA (11)). These systems require substantial capital investment and their main advantage lies in unit cost savings that are possible when large, centralised kitchens supply a wide spatial spread of relatively small hospitals. Significantly, in December 1987, ACAS - the Advisory, Conciliatory and Arbitration Service - ruled that domestics in outlying hospitals should receive an extra payment for regenerating cook-chill food since the new duty represented a change in working practices.

As with cleaning, the in-house team won the catering contract and again staff switched to three year contracts with otherwise unchanged terms of employment and no redundancies. However, labour savings in catering are being achieved through the use of a relief 'pool', drawn upon 'as and when required' (see iv (a) below).

Nationally, there has been very little private sector interest in hospital catering contracts. Two of the leading companies - Allied & Medical and Spinneys - withdrew from the market after a short time and the largest, Gardner Merchant (part of Trusthouse Forte), publicly criticised the fixed price nature of the contracts and called for the opportunity to bid for district-wide contracts (covering not only hospitals but also schools etc.) in order to reap economies of management (Financial Times, 24.2.87. p.9).

Laundry

Laundries generally require higher levels of capital equipment than domestic and catering services. As a consequence, there have been complex negotiations to

determine whether private contractors can use existing in-house equipment and, if so, on what terms?

In November 1987, the NHS Management Board introduced minor changes in the terms on which contractors have to tender. These included arrangements for private companies to lease NHS laundries and enter into linen service contracts (Guardian, 5.11.87. p.3). The contractors responded in the following month in a letter to the Commons Public Accounts Committee. The Association of British Laundry, Cleaning and Rental Services called for more substantial assistance (12) and complained that contractors' market share was "little changed from the estimated ten to eleven per cent share before the onset of competitive tendering in 1983" (Financial Times, 14.12.87. p.7).

At North Tees hospital, the laundry contract was offered on a five-year basis in order to allow contractors to offset capital costs over a longer period. Although only one private company submitted a tender, the manageress responsible for preparing the in-house tender complained that "the goalposts keep moving". Initially, the contractor offered to provide the complete laundry service. However, later the offer changed such that the contractor would organise the labour but use the hospital's own equipment. This enabled the contractor to compete on a marginal cost basis. In order to secure the contract in-house it became necessary to cut some jobs in the laundry. In December 1986, it was announced that the in-house laundry tender had been accepted (Evening Gazette, 19.12.86. p.3).

After winning the contract, ward closures at the hospital (see c below) reduced the throughput of the laundry. Staffing is calculated on a 'piece' basis and as the number of pieces (pillow cases, sheets etc.) declined, so unit costs rose and increased pressure for further cuts in employment. At the end of the study period North Tees Hospital was bidding to

perform laundry services for Northallerton Health Authority (North Yorkshire) in an attempt to use capacity more effectively and avoid further staff reductions.

Future tenders

Although tendering so far has concentrated on the three services discussed above, the 1983 Health Circular made it clear that the scope of its provisions would be widened (13):

Although this circular concentrates on three support services, health authorities are asked to continue to develop the use of private contractors for the whole range of support services where by doing so savings can be made

(W. Midlands TUC Health Committee, 1984 p.18).

The West Midlands TUC Health Committee (1984) identified many other candidates for the tendering process and although none is likely to involve the same number of workers as the 'big three', the possibility (or the threat) of further encroachment of the private sector looks set to be a continuing influence on working patterns and practices.

Significantly, the Contract Cleaning and Maintenance Association (CCMA) has urged Health Authorities to widen the scope of its cleaning contracts (14). Any expansion in the range of services provided by contractors must be seen in the context of the CCMA's desire to reduce "overmanning and inflexibility". The argument supporting its case is essentially the same as that advanced in industry. That is, by breaking down demarcations, labour time can be used more productively. This in turn enables cost savings through reductions in the hours of employment and/or staff numbers. Depending on the number of hours worked, the employer may benefit from lower National Insurance contributions and stands also to benefit from the elimination of overtime (15) and reduced employee entitlements (holidays, eligibility for redundancy payments etc.).

(c) Cash limits and bed closures

After the 1983 U.K. General Election the returned Conservative Government imposed strict control on NHS manpower in association with a one per cent reduction in NHS revenue expenditure allocation (see Mohan, 1984). In July 1984, following the issue of an Outline Regional Strategy (NRHA, 1984), guidelines were distributed to all DHAs instructing them to summarise anticipated changes in their service workload, capital, revenue and manpower position up to 1994. The guidelines incorporated a 'base resource assumption' for the ten year period, assuming annual growth averaging 0.5 per cent. District Strategic Plans were produced and the NRHA used these to draw up its Regional Strategic Plan (RSP) 1985-1994 (NRHA, 1985) (see d below). In doing so, the NRHA's objective was "to reconcile the District Plans as necessary and make overall decisions about priorities where ambitions of District Health Authorities cannot all be accommodated" (NRHA, 1985 p.6). In the Foreword to the RSP the employment implications of this task were made clear:

The manpower requirements predicted by District Health Authorities need to be re-examined. In total, they look likely to exceed future manpower ceilings. Manpower growth is not as Ministers require it to be - at a lower rate than revenue growth (NRHA, 1985 p.1).

Notwithstanding the tendency to 'over-estimate' resource requirements as part of the bargaining process with the RHA, the implication is that the cash limits have caused employment within DHAs to be kept at levels lower than associated with their desired demand for labour.

The manpower ceilings were introduced in 1983 and are renewed every March. Given that labour forms a large part of total costs in the NHS, it is not surprising that efforts to realise savings have paid particular attention to labour inputs. The Outline Regional Strategy (NRHA, 1984) required

all DHAs to plan 'cost improvement programmes' as an integral element of their Strategic Plans. In October 1984, the Regional General Manager sent a letter to each DHA specifying a target level of cost improvement of 15 per cent by 1995. The cost improvement programmes have two elements. 'Cash savings' require economy in the provision of existing services, thus releasing cash to help fund an expansion of services. Districts were asked to identify up to five per cent costs in this way. North Tees DHA identified cash savings of 6.5 per cent, or £1.5 million between 1985/6 and 1994/5 (NRHA, 1985, Table 19/5).

The second element, 'productivity savings', involves improvements in services through increased efficiency and without the need for additional resources. North Tees was unable to find scope for any such savings.

The pressure to achieve cash savings has had a substantial impact on recruitment and labour utilisation at North Tees Hospital (as at most other NHS hospitals). Given the range of occupations at the Hospital it is not practical to present a detailed account of all labour-saving measures that have been introduced. However, in general terms, every time a post becomes vacant (usually through natural wastage) the relevant head of department contacts the Personnel Department. A decision must be taken as to whether it is necessary to refill the post and, if so, whether the same job could be done in less time (work intensification, [A14] in Table 2.1). Alternatively, a post may be down-graded ([A4] in Table 2.1). (An up-grading now has to go to the District Policy Group for approval). Allowance for sickness cover has been cut back (although sickness levels were rising during the study period) and staff are encouraged to be more flexible in covering for absent colleagues. Since DHAs are given 'development areas' (e.g. cervical cancer testing) there is constant competition for resources released by 'efficiency

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savings'. In the current cash-limited situation, an increase in any one part of the service implies cut-backs elsewhere.

It was in this climate in September 1986 that North Tees DHA announced that the cost of pay increases was to be met in part with money intended for the improvement of health services. Ironically, when the Government awarded an additional £1.7 million to the Northern Region in February 1987 to help reduce waiting lists, North Tees did not receive any of the funds because it had short waiting lists. Yet, by September of the same year, the District General Manager was predicting the closure of a ward in order to meet required cost savings, with a consequent increase in the length of the Hospital's waiting list. (As a single unit district, North Tees does not have the option of closing hospitals as a means of saving money).

In fact, the number of ward and bed closures was far greater. The official reason was given as a shortage of nurses. However, it was clear that financial difficulties were responsible, at least in part for the shortage. Fred Gibbins, an elderly care consultant, claimed that the DHA was receiving funding for only 89 per cent of the nurses it needed (Evening Gazette, 31.7.87. p.5). In September 1987, the District Nursing Officer, Joy Chapman, expressed concern at low levels of morale amongst nurses using out-dated equipment. High levels of sickness, and of maternity leave, were exacerbating the situation and resulted in an "extreme dependency" on student nurses. Furthermore, the number of student nurses was "exceptionally low" due to earlier budget cutbacks. Joy Chapman claimed: "If we fail to train first level nurses we will slowly shut down this hospital" (Evening Gazette, 16.10.87. p.5).

The first ward closure - a psychiatry ward - occurred in September 1987. The full extent of the nurse shortage was revealed by a charge nurse, Richard Dennis, who claimed that

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instead of ten or twelve nurses per ward, he was having to cope with two to three assisted by student nurses and a 'nurse bank' (see iv (c) below).

In November 1987, two elderly care wards (both full) were selected for closure. The patients were moved to other wards or into private nursing homes. By this time, there were insufficient funds to permit use of the nurse bank and, as the strain of work increased, sickness amongst nurses rose to 30 per cent (Evening Gazette, 20.11.87. p.5).

In December, 44 surgical beds were closed, along with a 28-bed maternity ward and 16 beds in gynaecology. This situation - with a fifth of the Hospital's beds closed - occurred against a background of mounting national concern about the state of the NHS. This came to a head in November 1987, with the death of a baby in Birmingham, where staff shortages had delayed vital surgery. Eventually the Government agreed to release extra resources for the NHS and the Northern Region was allocated £4.2 million towards 1987 budgets. North Tees DHA received £459,000 of this, enabling it to reopen certain beds. However, the DHA Chairman reminded:

This will still leave a £100,000 shortfall and we are attempting to minimise this. The additional funding will not enable us to reopen other services which have been closed
(Evening Gazette, 26.1.88. p.7).

The ward closures had implications for labour demand not only in a direct sense (i.e. the number of nurses required) but also, as already seen in the example (above) of the laundry, in an indirect sense. Thus, it is unrealistic to consider labour demand and employment levels at the Hospital without an appreciation of the pressures created by the cash limits imposed on the NHS.

(d) The Northern Regional Strategic Plan (RSP)

The RSP prepared by the NRHA in 1985 contained statements of policy intent which had general implications for health service provision in the region and specific suggestions concerning North Tees Hospital. The central aim of the Plan was to achieve a switch in emphasis from hospital-based care to care in the community. For hospital treatment, the aim was to rationalise the service and concentrate resources upon larger hospitals.

Decisions regarding bed rationalisation have been taken according to criteria laid down clearly in the RSP. These 'performance indicators' include:

- the number of beds per 1,000 population served;
- the throughput of patients as reflected in discharges and deaths per bed;
- the 'turnover interval' (i.e. the time between patients that a bed is, on average, left unoccupied).

Hospitals characterised by high numbers of beds per 1,000 population, a low throughput of patients or a long turnover interval have been prime candidates for rationalisation.

With a catchment population of 185,700 the 390 acute beds at North Tees represent 2.1 beds per 1,000 population. This satisfies the criteria in the RSP, based on a methodology devised by the London Health Planning Consortium, which specifies 2.2 acute beds per 1,000 population as an acceptable rate. Tables 6.3 and 6.4 compare North Tees Hospital with the Northern Region and England on the basis of other performance indicators for acute services.

It can be seen that the Northern region had a lower turnover time in every speciality compared with the figures for England. More significantly, in every case except General surgery North Tees performed 'worse' than the region as a whole. The 'worst' example was in paediatrics where the

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turnover interval was over twice the English figure - 7.1 days compared to 3.4 days between patients.

Table 6.3 Performance indicators for acute services - North Tees Hospital, the Northern Region and England in 1985

Speciality	No of beds at N. Tees	Discharges and deaths per bed per year			Turnover interval (days)		
		N. Tees	N'ern	England	N.Tees	N'ern	Engl
General medicine	127	31.0	29.9	29.1	3.9	2.8	2.1
Rheumat'y	15	19.7	15.0	15.1	6.1	7.7	5.6
Paediatric	38	34.9	41.9	48.8	7.1	4.8	3.4
Gen surg'y	75	43.5	34.3	38.6	1.9	3.1	2.1
Traumatic & orthap'c	75	21.3	21.1	24.7	4.5	4.5	3.0
Gynaecol'y	60	50.2	53.5	59.0	3.5	2.7	1.9

Source: NRHA (1985) Tables 10/1, 10/3, 10/5-10/10.

Table 6.4 More performance indicators for acute services - North Tees Hospital, the Northern Region and England in 1985

Speciality	Day cases (%)			Return:new out -patient ratio			Total patients per session		
	N.Tees	N'ern	Eng	N.Tees	N'ern	Eng	N.Tees	N'ern	Eng
General Medicine	15.9	8.2	10.9	3.8	5.9	5.2	16.2	18.0	20.5
Rheumat'y	3.8	1.6	5.1	4.6	4.4	4.1	14.4	15.1	17.5
Paediatric	1.8	4.6	5.3	6.2	4.7	4.9	14.1	12.7	13.8
Gen surg'y	23.5	25.1	19.2	2.0	2.3	2.4	18.5	25.1	27.9
Traumatic & orthap'c	17.8	13.5	14.1	2.9	2.7	2.8	35.8	28.7	33.9
Gynaecol'y	3.1	19.0	13.1	1.7	1.8	2.0	22.1	16.5	21.1

Source: As for Table 6.3.

However, in other areas the performance of North Tees was more satisfactory (according to the criteria being used). Thus, in general medicine - numerically the most important acute speciality - the percentage of day care cases was 15.9. This compared favourably with 8.2 per cent for the region and 10.9 per cent for all England. Day care cases exceeded the England figure in surgery too, but in gynaecology North Tees had (after West Cumbria) the lowest percentage of day cases in the Northern Region.

Increasingly, decisions about service provision are made on the basis of such performance indicators. Whilst they do provide some guidance, it is dangerous to rely solely upon them, as a study of Newcastle DHA has revealed. There

"worthwhile reductions in beds" were identified using performance indicators with:

no apparent control for the type of cases treated in all the other districts, or for the demographic profile or geographical or transport factors which affect patterns of in-patient bed usage, or for the quality of care received in those districts which conformed to the median performance levels. It is difficult to see why "the norm" should be regarded as "the best", especially as using PIs [performance indicators] as a "league table" is in direct contravention of the guidelines to users (TUSIU, 1986, p.27).

(e) Change in the 'customer base' of North Tees Hospital

According to estimates by Cleveland County Council's Research and Intelligence Unit, Stockton was the only borough in Cleveland to have a higher level of population in 1988 than at the Census in 1981 (see Chapter Three). (However, even Stockton experienced a decline in population between 1986 and 1988). Within the total population figure, the proportion of older people has risen in Stockton, mirroring trends in the county and the country as a whole (Table 6.5.).

Table 6.5. Changing proportion of population over retirement age - Stockton, Cleveland and England & Wales, 1981-88

Stockton		Cleveland		England & Wales	
1981	1988	1981	1988	1981	1988
13.1	14.9	13.9	15.9	17.7	18.5

Source: Cleveland County Council R&I Unit (1988c).

By the year 2001, it is expected that the number of people in Cleveland aged over normal retirement age will have increased by nine per cent, those aged over 75 by 31 per cent and over-85 year olds are forecast to increase in number by 62 per cent (Cleveland County Council R&I Unit, 1989b). This has major implications for the health service because of the care requirements of the elderly.

At the same time, studies have shown that the population of Cleveland suffers from higher than average rates of mortality (Townsend et al, 1986; Marsh and Channing, 1986). One study

reveals that the standard mortality rate of Cleveland's residents is 15 per cent above the average figure for England and Wales (Cleveland County Council R&I Unit, 1987). Related sickness and disease amongst the population create greater than average demands on the NHS and call into question the use of quantitative measures that assign equal weights to all individuals in relation to their health service requirements.

(iii) Aggregate employment change at North Tees Hospital, 1983-1987

In June 1986 there were 3,077 people employed at North Tees General Hospital, 84 per cent of whom were women (1,429 female full timers and 1,148 female part timers). The majority of male employees (438 out of 500) were employed on a full-time basis. (Occupational breakdowns by sex are provided in iv below).

These figures and the raw data for this Chapter were supplied by the Personnel Department at the hospital, drawn from the NHS's computerised information system 'STAMP' (Standard Manpower Planning and Personnel Information System). Data were available for the North Tees district (essentially North Tees General Hospital) from 1983, following the abolition of the Cleveland AHA in 1982. Although the total number employed at the hospital has been remarkably steady around the 3,000 mark, this apparent stability disguises large flows of 'starters' and 'leavers' (see Tables 6.6 and 6.7 below) and considerable changes in the structure of employment.

Year end employment totals at the hospital are recorded as 3,043, 3,023, 3,054 and 3,141 for 1984, 1985, 1986 and 1987 respectively. Unfortunately, the numbers in Tables 6.6 and 6.7 do not produce these totals. Thus, for example, in the year to March 1986, the 807 starters exceeded the 690 leavers by 117. Added to the March 1985 total of 3,023 the March 1986

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total should be 3,140. Instead the March 1986 figure is given as 3,054 - an under-reporting of 86 (or three per cent of the total figure). Such a degree of inaccuracy might be expected, based on a knowledge of the dynamics of employment and the time lags involved in recording information.

Table 6.6 'Starters' at North Tees Hospital 1983-7					
Period	Male		Female		TOTAL
	Full-time	Part-time	Full-time	Part-time	
1.4.83.-31.3.84	152 (20)	45 (6)	365 (47)	216 (28)	778 (100)
1.4.84.-31.3.85	136 (19)	25 (3)	323 (44)	242 (34)	726 (100)
1.4.85.-31.3.86	144 (18)	36 (4)	313 (39)	314 (39)	807 (100)
1.4.86.-31.3.87	132 (17)	45 (6)	290 (37)	324 (41)	791 (100)

Source: STAMP figures supplied by Personnel Department, North Tees Hospital.
(Figures in brackets give the percentage of starters in each category each year).

Table 6.7 'Leavers' at North Tees Hospital 1983-7					
Period	Male		Female		TOTAL
	Full-time	Part-time	Full-time	Part-time	
1.4.83.-31.3.84	131 (18)	46 (6)	335 (46)	214 (29)	726 (100)
1.4.84.-31.3.85	159 (24)	22 (3)	284 (42)	211 (31)	676 (100)
1.4.85.-31.3.86	140 (20)	28 (4)	300 (43)	222 (32)	690 (100)
1.4.86.-31.3.87	121 (18)	39 (6)	290 (44)	213 (32)	663 (100)

Source: As for Table 6.6.
(Figures in brackets give the percentage of leavers in each category each year).

The starters and leavers breakdown provides an indication of the direction of change in employment structure at the hospital (by sex and full-time/part-time divisions). Notably, as a percentage of all starters, female part-timers rose from 28 to 41 per cent between 1983 and 1987, while female full-time starters' share dropped from 47 to 37 per cent. Although the percentage of female part-time leavers also rose from 29 to 32 per cent, Table 6.8 (below) shows that, on average, this group has made the most significant net gains in employment.

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Table 6.8 Average annual net gains in employment at North Tees Hospital, 1983-7: Full and part-time comparisons by sex

Category		No.	% of totals*
(A)	Average no. of male full-time starters	141	32
	Average no. of male full-time leavers	138	31
	Difference	+3	1
(B)	Average no. of male part-time starters	38	58
	Average no. of male part-time leavers	34	52
	Difference	+4	6
(C)	Average no. of female full-time starters	323	23
	Average no. of female full-time leavers	302	21
	Difference	+21	2
(D)	Average no. of female part-time starters	274	22
	Average no. of female part-time leavers	215	17
	Difference	+59	5

* - Totals accord with the category in question and are averages - e.g. the 141 male full-time starters represented 32 per cent of the average stock of male full-timers.

Source: Calculated from Table 6.7.

Table 6.8 reinforces the point that behind the appearance of employment stability there have been substantial flows of labour to and from the hospital. On average, the annual intake of labour between 1983 and 1987 was 464 full-timers and 312 part-timers. Over the same period, an average of 440 full-timers and 249 part-timers left the hospital. These changes 'at the margin' (i.e. through flows) have had a recognisable impact on the stock of employment as can be seen in Table 6.9. which refers to the study period alone.

Table 6.9 Changes in total employment at North Tees Hospital by sex and part-time/full-time division 30.6.86-31.3.87.

In post total	Male FT	Male PT	Female FT	Female PT	Total *		Diff
					Calc	Actual	
30.6.86	438	62	1,429	1,148	3,077	3,079	-2
31.7.86	452	75	1,437	1,182	3,146	3,143	+3
31.8.86	458	67	1,415	1,183	3,123	3,117	+6
30.9.86.	451	55	1,392	1,167	3,065	3,056	+9
31.10.86	453	55	1,420	1,169	3,097	3,085	+12
30.11.86	456	54	1,412	1,174	3,096	3,082	+14
31.12.86	453	54	1,404	1,196	3,107	3,095	+12
31.3.87	439	65	1,416	1,231	3,151	3,141	+10

Source: Calculated from STAMP data.

* - Totals calculated using figures broken down by sex differ slightly from the 'actual' totals on STAMP for the dates shown.

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Concluding this section, Tables 6.10 and 6.11 provide details of 'starters and leavers' during the study period, on a month by month basis.

Table 6.10 'Starters' at North Tees Hospital 1.4.86.-31.3.87.					
Period	Male		Female		TOTAL
	F-time	Part-time	Full-time	Part-time	
1.4.86-30.6.86 *	30	9	72	74	185
30.6.86-31.7.86	16	14	26	49	105
31.7.86-31.8.86	37	0	20	19	76
31.8.86-30.9.86	8	0	16	18	42
30.9.86-31.10.86	9	1	48	16	74
31.10.86-30.11.86	6	0	16	20	42
30.11.86-31.12.86	3	0	6	34	44
31.12.86-31.3.87 **	23	20	86	94	223
TOTALS	132	45	290	324	791

Source: STAMP data from Personnel Department, N.Tees Hospital

* - covers a two month period.

** - covers a three month period.

Table 6.11 'Leavers' at North Tees Hospital 1.4.86.-31.3.87.					
Period	Male		Female		TOTAL
	F-time	Part-time	Full-time	Part-time	
1.4.86-30.6.86	26	6	59	46	137
30.6.86-31.7.86	2	1	18	15	36
31.7.86-31.8.86	31	8	42	18	99
31.8.86-30.9.86	15	12	39	34	100
30.9.86-31.10.86	7	1	20	14	42
31.10.86-30.11.86	3	1	24	15	43
30.11.86-31.12.86	6	1	14	12	33
31.12.86-31.3.87	37	9	74	59	179
TOTALS	127	39	290	213	669

Source: STAMP data from Personnel Department, N.Tees Hospital

* - covers a two month period.

** - covers a three month period.

From Tables 6.10 and 6.11 it is possible to show that, over the study period, employment increased by 122 in net terms. Remarkably, this increase was accounted for almost entirely by the female part-time category where a net increase of 111 was returned. Variation in flows over the course of the year was noticeable too. Allowing for the two periods which cover more than one month (and therefore have correspondingly higher flows), it can be seen that July 1986 was a significant month for starters and August/September 1986 for leavers.

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In order to move beyond the description of these patterns towards an understanding of the processes involved, the following section looks at the statistics for the study period disaggregated by broad occupational categories.

(iv) Monthly employment change and recruitment at the 'staff group' level - 1.4.86. to 31.3.87

Employees in the NHS are allocated to Whitley 'staff groups' (16) as follows:

- ASC - Ancillary workers;
- A&C - Administrative and clerical;
- N&M - Nurses and midwives;
- W - Works (covering P&T'B' - Professional and Technical 'B')
- M - Maintenance and craftsmen;
- P&T'A' - Professional and Technical 'A';
- M&D - Medical and dental.

Table 6.12 shows the monthly 'stock counts' for each of these groups during the study period.

Table 6.12 Monthly employment change at North Tees Hospital by staff group, 1.4.86. - 31.3.87.*

Staff gp	1986									1987
	1.4.	30.6.	31.7.	31.8.	30.9	31.10	30.11	31.12	31.3	
ASC	695 (474)	692 (472)	739 (497)	736 (496)	688 (466)	689 (466)	678 (459)	682 (459)	670 (457)	
A&C	414 (349)	407 (344)	412 (349)	410 (348)	410 (347)	418 (353)	419 (353)	412 (349)	436 (363)	
W	117 (106)	115 (104)	117 (106)	115 (104)	116 (105)	118 (108)	118 (108)	119 (109)	119 (108)	
M	84 (84)	85 (85)	85 (85)	86 (86)	86 (86)	85 (85)	88 (88)	87 (87)	87 (87)	
N&M	1459 (1251)	1478 (1268)	1481 (1269)	1461 (1249)	1450 (1239)	1468 (1258)	1465 (1252)	1476 (1246)	1499 (1263)	
M&D	142 (81)	147 (82)	150 (83)	144 (85)	145 (85)	146 (85)	148 (86)	148 (86)	150 (82)	
P&T	157 (132)	157 (132)	160 (139)	165 (136)	161 (134)	161 (135)	166 (139)	171 (143)	180 (150)	
TOTAL	3068 (2477)	3081 (2487)	3144 (2529)	3117 (2505)	3056 (2462)	3085 (2490)	3082 (2485)	3095 (2480)	3141 (2509)	

Source: STAMP data.

*Figures in brackets represent 'whole-time equivalents' (i.e. part-time jobs are counted as fractions of full-time jobs depending on the number of hours worked).

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Interestingly, although the number of nurses and midwives increased by 40 over the period, the increase in whole-time equivalent terms was just twelve, reflecting employment on less than full-time contracts (e.g. use of the nurse bank). The number of ancillary workers dropped by 25 in total and by 17 in whole-time equivalent terms.

During the study period, three of the groups - ASC, A&C and N&M - accounted for 70-90 per cent of all starters and leavers ('flows') in every month apart from August 1986. The flows in August were dominated by the M&D group, when just under a third of the group left and an almost equivalent number started. These M&D flows were the result of the staff moving between posts as part of their career development.

The dominance of the ASC, A&C and N&M groups reflected their overall importance as components of total employment. As shown in Table 6.12, at the end of March 1987 there were 670 workers (21 per cent of all employees) in the ASC group, 436 (or 14 per cent) in A&C and 1,499 (48 per cent) in N&M. Collectively, the three groups accounted for 83 per cent of all employment at the hospital.

A high percentage of nurses (put at around 80 per cent by the Personnel Department), most clerks and administrators and virtually all ancillary workers were drawn from the Stockton TTWA. In addition, many workers in other groups (e.g. maintenance workers and technicians) were recruited locally. Only, the medical, dental, professional and some technical staff tended to be recruited from labour markets of greater spatial extent.

Attention in the remainder of this Chapter is concentrated on those main three groups for which recruitment occurred locally (ASC, A&C and N&M).

(a) Ancillary workers (ASC)

The ancillary workers staff group covered a variety of jobs including catering, cleaning, laundry and porters and gardeners; see Table 6.13.

Table 6.13. Breakdown of ancillary employment at North Tees Hospital, 1.7.86.

Activity	Job	Number employed	Total
CATERING	Assistants	124	161
	Cooks	28	
	Other	9	
CLEANING	Cleaners/domestic assistants		335
LAUNDRY	Machine operators	7	32
	Workers	16	
	Linen room assistants	9	
OTHER	Porters	55	163
	Central sterile supplies	26	
	Telephonists	14	
	Miscellaneous	68	
GRAND TOTAL			691
Source: Compiled from figures supplied by North Tees Hospital.			

It was this staff group that was affected most by the competitive tendering process. However, the number of ancillary workers had been in decline even before tendering had an impact. According to NUPE there was a reduction of around 27 per cent (through non-replacement of leavers) in the number of workers in this group between 1978 and 1986. In the year to March 1987, the total figure fell by a further 25 workers (18 WTE). As noted above, though, competitive tendering affected working practices as much as the number employed - 'functional flexibility' was as important as 'numerical flexibility' in other words.

The workforce of 691 broke down into 101 male full-time employees, 106 female full-time, 474 female part-time and just three male part-time workers. Over half of the male jobs were in portering, with smaller proportions of men

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concentrated elsewhere in the laundry, gardening, stores and as cooks.

During the study period, the main recruitment was for holiday cover - involving eleven part-time males and 25 part-time females between July and September. These 'relief workers' were mostly students looking for holiday work and several had worked at the hospital in previous summers. Since they approached the hospital to ask about job opportunities, no advertisements of the temporary jobs was necessary. Table 6.14 gives a breakdown of 'starters and leavers' during the study period and although holiday cover dominated the fluctuations (at Christmas as well as summer), it is possible to detect the downward trend in total employment in the 'total change row'.

Table 6.14 Starters and leavers in ancillary posts at North Tees Hospital, 1.4.86. - 31.3.87.

Period	Starters				Leavers				Change					
	Male		Female		Male		Female		Male		Fem		Total	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT		
1.4.86-30.6.86	7	2	3	17	5	4	4	23	2	-2	-1	-6	-7	
30.6.86-31.7.86	3	11	10	33	0	0	0	9	3	11	10	24	48	
31.7.86-31.8.86	2	0	1	3	2	0	3	4	0	0	-2	-1	-3	
31.8.86-30.9.86	1	0	0	5	4	12	9	29	-3	-12	-9	-24	-48	
30.9.86-31.10.86	2	0	0	6	3	0	0	3	-1	0	0	+3	+2	
31.10.86-30.11.86	0	0	0	1	2	0	3	7	-2	0	-3	-6	-11	
30.11.86-31.12.86	0	0	0	6	0	0	1	1	0	0	-1	+5	+4	
31.12.86-31.3.87	0	8	3	26	3	8	4	34	-3	0	-1	-8	-12	
TOTAL	15	21	17	97	19	24	24	110	-4	-3	-7	-13	-27	
Source: Calculated from STAMP data.														

Source: Calculated from STAMP data.

In the year to 31.3.87., 97 out of 114 female starters were part-time. To an extent this reflects the replacement of other female part-timers who exhibit relatively high turnover. During the year, 110 female part-timers left, or almost a quarter of all female part-timers at the Hospital in this staff group. However, it also reflects a policy of, where possible, replacing full-timers with part-timers.

A central argument in this thesis is the need to look beyond employment statistics to uncover qualitative changes in working patterns and practices as apart of the restructuring

of labour demand. A clear example of this existed in this staff group. It concerned the introduction of 'as and when required' contracts of employment for domestics and catering assistants. Essentially, given the high level of female unemployment in the housing estates surrounding the Hospital, management was able to create a small pool of relief 'casuals'. This pool was seen as a cheap solution to the problem of covering for sickness, holidays and maternity leave. As such it represented an example of 'numerical flexibility', with peaks and troughs in labour demand dealt with at short notice. (There are parallels with the nurse bank described in (c) below).

Each time someone accepted the offer of casual employment they were recorded as a 'starter'. Only when they indicated that they no longer wanted to be considered as available were they entered as a 'leaver'. Consequently, total employment figures (but not WTEs) were marginally inflated, as only at certain times were the casuals present at work. NUPE officials argued that the pool is very small ("only a handful") and that reliefs have "first refusal" when permanent jobs become available. This was confirmed by management at the Hospital which claimed an absolute maximum of 20 in the pool. (In March 1988 there were only eight, or about one per cent of all ancillary workers). The potential for expansion in the size of the pool was limited, too. First, such a move would attract union opposition. Second, management admitted that use of the pool is "a difficult subject contractually":

We try to make sure the same people aren't called in too often - or else you'd have problems of people claiming regular employment [for the purposes of unfair dismissal etc.]. Also, that means the work's shared out better.

Third, there are some supply-side constraints. Women with unemployed partners are unprepared to work more than a certain number of hours a week in order not to affect their

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partners' benefit payments. Thus, rather than signalling a dramatic change in management-labour relations, the use of 'casuals' is better seen as one of many measures at the margin, taken by the DHA in an effort to trim costs.

The Personnel Department reported no difficulties when recruiting for ancillary jobs. The 'friends and relatives' network was by far the most important recruitment channel, with no need to advertise in the local press except for a few specialised posts (e.g. cooks). Despite the fact that recruitment for this group was conducted almost entirely at the local level and that there were no formal qualifications required, the prospects for job hunters were poor. The picture was one of excess labour supply with declining terms and conditions of employment.

(b) Administrative and clerical (A&C)

Table 6.15 provides a breakdown of employment in the administrative and clerical staff group.

Table 6.15 Breakdown of administrative and clerical employment at North Tees Hospital, 1.7.86.

Activity	Male		Female		Total		TOTAL
	F-Time	P-Time	F-Time	P-Time	F-Time	P-Time	
Clerical officer	6	3	87	84	93	87	180 (131)
Higher cler. off.	4	0	52	10	56	10	66 (61)
Gen. admin assistant	7	0	13	0	20	0	20 (20)
Senior admin asst	3	1	9	0	12	1	13 (13)
Copy typist	0	0	4	4	4	4	8 (7)
Other typists	0	0	21	8	21	8	29 (26)
Personal secretary	0	0	42	7	42	7	49 (46)
Other	22	0	20	0	42	0	42 (41)
TOTAL	42	4	248	113	290	117	407 (344)
Source: STAMP data (Numbers in brackets are whole time equivalents)							

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The lowest clerical grade is the clerical officer (CO). Slightly above COs are the copy typists, then short-hand and audio-typists, followed by personal secretaries. Next up the scale are the higher clerical officers (HCOs), general administrative assistants (Scale 1), and senior administrative assistants (Scale 4) in increasing order of importance. Above senior administrative assistants are managers on Scale 9 posts. (North Tees Hospital did not have any Scale 2,3, or 5-8 posts). It is not appropriate here to outline the duties of all these employees (for a useful guide, see M.S.C., 1983) (17). Rather, attention is focused on employment changes during the study period. Table 6.16 gives details of starters and leavers in this staff group during the study period.

Table 6.16 Starters and leavers in administrative and clerical posts at North Tees Hospital, 1.4.86. - 31.3.87.

Period	Starters				Leavers				Change				
	Male		Female		Male		Female		Male		Fem	Total	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	
1.4.86-30.6.86	2	1	7	14	2	2	6	11	0	-1	1	3	3
30.6.86-31.7.86	3	2	3	5	0	1	5	3	3	1	-2	2	4
31.7.86-31.8.86	0	0	2	7	1	1	3	5	-1	-1	-1	2	-1
31.8.86-30.9.86	0	0	2	6	1	0	4	2	-1	0	-2	4	1
30.9.86-31.10.86	2	1	5	6	0	1	2	3	2	0	3	3	8
31.10.86-30.11.86	1	0	1	6	0	0	3	4	1	0	-2	2	1
30.11.86-31.12.86	0	0	1	4	4	0	1	7	-4	0	0	-3	-7
31.12.86-31.3.87	1	4	22	31	1	0	13	10	1	3	9	21	34
TOTAL	9	8	43	79	9	5	37	45	1	2	6	34	43

Source: Calculated from STAMP data.

Even allowing for the fact that the period from 31.12.86. to 31.3.87. covers three months rather than one, it is clear from Table 6.16 that the most significant employment change occurred in the first three months of 1987. The net increase of 34 employees accounted for 80 per cent of the total increase of 43 for the whole study period. The bulk of the increase in this three month period was amongst clerical and higher clerical officers with employment gains of 20 and nine respectively. Of the 29 CO and HCO posts, 15 were part-time and taken by women.

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By looking at disaggregated STAMP data, it was possible to look in greater detail at the posts where 'starting' and 'leaving' occurred. Recruitment appeared to be predominantly for replacement of leavers, since the 'starters' tended to follow the pattern of 'leavers' quite closely.

The most obvious exception was the recruitment of Community Programme (CP) trainees (18), involving seven female and four males (all part-time COs). In July 1986 a male, full-time S.A.A was appointed with responsibility for CP, followed in September by an HCO and in October by another HCO and a GAA (all female part-time). The first CO started in September, but the majority started between January and March 1987, accounting for much of the increase in A&C staff registered during this period.

The Hospital had no set policy regarding recruitment of administrative and clerical workers. It attempted to fill posts at all levels by a mixture of advertising, transfers from other hospitals and internal promotion. The selectivity of the recruitment process has risen, though, in response to the situation of high unemployment ([A2] in Table 2.1) and a clerk now is expected to have the equivalent of five 'GCSE' O levels. HCOs need qualifications and experience while SAAs usually were required to have a post-graduate qualification in their area of operation.

The choice of recruitment channel varied according to the post in question. Transfers tended to be more common (and occur over longer distances) among higher level administrators. SAA posts and above were advertised in in specialist magazines such as the weekly Health Service Journal. Medical secretaries were recruited from Stockton

and Billingham Technical College and the recruits invariably had been on a placement at the Hospital already.

The fact that the total number of hospital clerks and administrators scarcely rose at all during the study period disguises the fact that recruitment and turnover did occur. However, as people left, some posts were abolished, others were down-graded or reduced to part-time status. Expenditure constraints were a fundamental influence in this process, and where the allocation of posts or hours was reduced for a job, it inevitably meant work intensification ([A14] in Table 2.1) for those remaining in employment.

Although A&C staff inevitably picked up Hospital-specific knowledge, their skills were also of a general nature, of use to other employers in the TTWA. However, there is little information on flows of labour between NHS and non-NHS employers. One study, by Walsh and McGill (1982), looked at the origins of 83 typists and personal secretaries recruited by the Newcastle AHA in the year to September 1980 and found that 45 per cent came from other parts of the NHS, 30 per cent were from employers outside the NHS, 13 per cent were labour market re-entrants and twelve per cent were drawn directly from colleges of education. (Notably absent was any recruitment of officially unemployed people). No information was available on the outflow of NHS staff to the private sector (including private hospitals (19)). This is a concern, however, especially as pressure to limit wage increases in the NHS has led to greater differentials with non-NHS employees.

The prospects for local job hunters appeared bleak as far as this staff group was concerned. The only likely area of expansion was associated with the introduction of new computer systems. In this area in particular, even if local residents have the relevant skills, the NHS will be

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constrained in terms of what salaries it can offer relative to the private sector.

(c) Nurses and midwives (N&M)

This staff group constituted the largest single component of the workforce at North Tees Hospital and the trend in employment of nurses and midwives was steadily upwards. In WTE terms, in the year to March 1987 the number rose from 1,251 to 1,263. By March 1988, the total had risen to 1,289 (WTE). This is in line with the regional trend in the 1980s, with the NRHA citing the 1981 reduction in nursing hours from 40 to 37.5 per week as one factor responsible for an increased demand for nurses in the early part of the decade (NRHA, 1985).

There were three main categories of nurse - Registered General Nurses (RGNs), State Enrolled Nurses (SENs) and nursing auxiliaries (20). During pre-registration training nurses were called student nurses. Once qualified they became staff nurses, working under the direction of a ward sister (female) or charge nurse (male). State Enrolled Nurses (SENs) had to complete a two year training course, during which they were known as 'pupil' nurses. Nursing auxiliaries received elementary training in routine tasks such as bed making and correct lifting procedures.

Nationally, around one million employees work in the NHS and approximately half of these are nurses. Qualified nurses account for 56 per cent of all nurses, a quarter are nursing auxiliaries and 20 per cent are student or pupil nurses (RCN, 1986). The proportions at North Tees Hospital were 60, 19 and 21 per cent respectively.

Table 6.17 (below) provides details of nurse employment broken down into these various categories.

Table 6.17 Nurse employment at North Tees Hospital 30.6.86.

Category	Male		Female		Total	
	F-Time	P-Time	F-Time	P-Time		
Pupil nurses	6	0	57	0	63	(63)
Student nurses	23	0	204	1	228	(228)
Nursing auxil.	8	4	92	156	260	(201)
Nursery	0	0	11	7	18	(13)
Enrolled nurses	8	0	155	116	279	(232)
Regist'd nurses	9	0	153	168	330	(243)
Sister/charge	24	0	161	7	192	(189)
Senior nurses	7	0	14	1	22	(22)
Other	6	0	70	10	86	(78)
TOTAL	91	4	917	466	1,478	(1,268)

Source: STAMP data.

Work patterns and practices - nurses

Responsibilities of nurses varied according to status and speciality. However, it is possible to provide an outline of working arrangements. RGNs received daily reports from the sister/charge nurse on their ward. The sister/charge nurse, in turn, received daily reports from the staff going off duty. Nurses were allocated a number of patients to look after and it was their duty to attend to them during the shift. This included bed-bathing (where necessary), bed-making, application of dressings as required and administering of drugs. The nurses also took frequent readings of blood pressure and temperature. In addition, all grades of nurses had an important social role, talking to patients and offering reassurance.

'Numerical flexibility' amongst nurses was achieved through the use of a 'nurse bank' which had been in existence since 1979. It worked as follows. On Wednesdays, nurse managers put in requests for staff cover. On Thursday mornings members of the bank telephoned the Hospital (which had a separate line dedicated to the 'bank') to see what jobs were available in the coming week. In emergencies, the Hospital telephoned members of the bank. However, by the end of the study period the bank was almost non-existent as the financial crisis at the Hospital had prevented use of its members. In December 1987, nurses in the bank (then around

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50 in number) complained publicly about the lack of work and there were reports of members being forced into 'moonlighting' (Evening Gazette, 1.12.87. p.1).

At the same time, the increasing intensity of nursing required - as a result of the faster 'throughput' (21) of patients - generated demands for 'functional flexibility' in two senses. On the one hand there was the need for flexibility between different grades of nurses. The situation is explained clearly in the following extract from an article written by an RCN member:

At ward level, so tight are staffing levels that the distinctions between student nurse, enrolled nurse, registered nurse and even the unqualified nursing auxiliary are blurred. Students, as part of the workforce, shoulder burdens with which they are ill-equipped to deal, and the two-year trained enrolled nurses work alongside three-year trained registered nurses, unequal in status but doing what is the same work
(Guardian, 24.9.87. p.23).

On the other hand, there were calls for greater 'flexibility' with other occupations - involving both increased responsibility for cleaning on the wards and the taking over of more routine functions carried out by doctors with patients. The relations between doctors, RGNs, SENs, auxiliaries and domestics were all in a state of flux at the time of the research because of plans to abolish the SEN grade and possibly introduce 'helpers' (see below). Contract cleaning companies, meanwhile, have been making a case for an extension of the scope of contracts to include 'helping' functions (Financial Times, 21.1.88. p.6). The Senior Nurse in Personnel at North Tees reported a growing resistance amongst nurses to any attempts to impose 'non-nursing' duties on to nurses - especially because of the increased workload associated with existing responsibilities as the 'throughput' of patients increased.

Training

On the training side, there has been concern nationally and locally that efforts to reduce the length of patients' stay in hospital have created a need for continuous 'high intensity' nursing care with less opportunity for 'on-the-job' training. Nevertheless, because of staff shortages, student nurses have had to spend many hours on the wards, detracting from the educational content of their training, placing them under great pressure and leading to high drop-out rates. Amongst qualified nurses there have been demands for a reassessment of a pattern of remuneration that encourages advancement into 'managerial' posts instead of building on clinical expertise.

Adding to the perpetual concern about negative signals given to school-leavers by poor pay and conditions in nursing, there has been mounting unease about the decline in the size of the school-leaving population (NEDO/TC, 1988). RGN trainees, traditionally, have been drawn from school-leavers with the equivalent of at least five 'O' levels - one of which must be English language. The entry age for nurse training is 18, and so recruitment is concentrated upon those who stayed on for 'A' levels and, historically, the career has attracted girls rather than boys. It has been predicted that (unless examination performances improve markedly) the output of English school-leavers with a minimum of five 'O' levels and one 'A' level will drop nationally from 192,000 in 1986/7 to 157,000 by 1995 as a result of demographic change. Amongst girl school-leavers the equivalent figures are 96,000 and 78,500. At present, nursing attracts around 25 per cent of suitably qualified school leavers:

All other things being equal [the nursing profession] would need to recruit almost 50 per cent of that same group by the year 1995 to keep the National Health Service staffed at a very modestly expanding level to deal with an ageing population
(Guardian, 24.3.87. p.13).

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However, the problem goes beyond simply attracting people to the nursing profession - it is also a question of how to retain them. Over 1,000 student nurses in England and Wales who passed all their exams in 1985 never registered or practiced as nurses (RCN, 1986). The Independent (5.1.87.) reported that :

Already the number [of nurses] entering training has fallen [nationally] from 30,000 a year to 22,000, not enough to replace the 25,000 nurses who leave the National Health Service each year... About 20 per cent of student nurses drop out of training or fail to qualify. Many of the trained staff who leave nursing do so after only a few years and most never return
(p.6).

Amongst trainee nurses (students and pupils) the Royal College of Nursing claims there is a combined failure and drop-out rate of 35 per cent nationally - twice as high as for other forms of post-school education (RCN, 1986).

Table 6.18 shows the drop out or 'wastage' rates amongst student nurses at North Tees between 1982 and 1987.

Table 6.18 Wastage rates among student nurses at North Tees Hospital, 1982-7

Year	Average number in post (WTE)	Number leaving (WTE)	Wastage (%)
1982/3	200	14	7.0
1983/4	210	10	4.8
1984/5	230	11	4.8
1985/6	226	5	2.2
1986/7	207	12	5.8
Apr-Sep '87	204	3	1.5

Source: Figures supplied by North Tees Hospital

Although these wastage rates are low relative to the national picture (perhaps reflecting a relative lack of alternative sources of comparable employment in the TTWA), they do not include trainees who failed their intermediate nursing examination and transferred to Pupil nurse training. This option is no longer available since no more pupil nurses are being taken on at North Tees. This follows national plans to phase out the SEN role as part of a major reorganisation of

the profession. The reorganisation plans have been influenced by 'Project 2000' drawn up by the UK Central Council for Nursing, Midwifery and Health Visiting (22) and published in January 1987 after a six month consultation period.

Essentially, Project 2000 recommends the abolition of SENs and the introduction of a new grade of 'helper' for practical work on the wards. All trainee nurses would receive a common two year foundation course followed by one year courses ('branch programmes') in various specialisms. Emphasis would be on 'care' rather than 'cure'. Student nurses would be treated as supernumerary to hospitals' workforces and would receive a means-tested grant instead of a wage.

Nurse recruitment

Student nurses

During the study period, applications for student training were sent directly to individual schools of nursing. However, in September 1987 a Central Clearing House was established in Bristol and works in a similar way to the clearing system for University entrance.

At North Tees Hospital there was an intake of students every 16 weeks. The average number of students between 1982 and 1987 was 214. Since the training course lasts for three years, the average annual intake was approximately 70. Given that there is an intake every 16 weeks, it follows that the students are recruited in batches of about 20. This is broadly confirmed by Table 6.19 (below) which shows starters and leavers amongst the various nurse groups during the study period. Student nurse 'starters' are concentrated into particular months such as October when there were 25 starters. Almost all of the student 'starters' were female (63 out of 69).

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Lists showing names and addresses of successful applicants for recent intakes revealed that virtually all were 'local' (including Middlesbrough and parts of South East Durham as well as Stockton TTWA).

Table 6.19 Starters and leavers amongst nurse groups at North Tees Hospital, 1.4.86. - 31.3.87.

Nurse	1986												1987			
	1.4-30.6		-31.7		-31.8		-30.9		-31.10		-30.11		-31.12		-31.3	
	St.	Lv.	St.	Lv.	St.	Lv.	St.	Lv.	St.	Lv.	St.	Lv.	St.	Lv.	St.	Lv.
Pupil	0	2	0	1	0	0	0	3	0	1	0	1	0	0	0	3
Student	18	4	0	1	0	13	0	3	25	3	1	7	0	3	25	9
Auxil'y	23	7	10	1	1	1	5	7	8	3	4	2	1	3	14	7
Nursery	3	3	0	0	0	0	0	0	0	1	2	1	4	1	0	0
En. Nse	17	8	3	1	2	5	4	3	3	3	3	3	3	1	11	3
RGNs	31	24	5	5	5	6	10	8	2	8	10	7	15	3	27	22
Sisters	7	6	1	1	1	0	1	2	3	1	2	1	0	0	4	5
Snr Nse	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
TOTAL	99	54	19	10	9	25	20	26	41	21	22	22	23	11	81	49
Source: STAMP data.																

Source: STAMP data.

Registered General Nurses (RGNs)

RGNs were predominantly female and were drawn from the School of Nursing at North Tees Hospital, along with some transfers between hospitals. During the study period there was growth in part-time RGN employment of 17 per cent alongside a fall in the numbers of full-time RGNs by seven per cent. If more mature students and re-entrants are encouraged to seek employment at the Hospital it is likely that the shift towards part-time employment will continue, at the margin.

It is among RGNs that North Tees Hospital experienced its most severe nursing shortages (23). Although few RGNs left nursing for careers outside the NHS, there were instances of nurses leaving to work in hospitals and nursing homes in the private sector. Some nurses looked overseas and anecdotal evidence existed of nurses who left North Tees to work in Australia, U.S.A. or the Middle East in search of better pay, higher prestige and working conditions with less stress.

6.3 Concluding comments

In this final section, three issues are addressed - pay in the NHS, the impact of the North Tees Hospital on the local labour market and local unemployment, and the similarities and differences between the Hospital and other employers studied in this thesis.

(i) Pay in the NHS

Pay for workers in the NHS is determined by a process of centralised bargaining and there are set pay scales for most of the Whitley staff groups. Annual Pay Review Bodies now set the level of pay for nurses in the same way as has been done for doctors since the 1960s. In 1988, health service managers introduced a new clinical grading structure for nurses and this is shown in Table 6.20.

Table 6.20 Nurses' Pay scales 1988

Grade A	Non-qualified, supervised, nursing auxiliaries and support workers	£5,000- 6,300
Grade B	Non-qualified, unsupervised, nursing auxiliaries and support workers	£5,850- 6,975
Grade C	Enrolled nurses, supervised nursing staff with assessment of care duties	£6,975- 8,300
Grade D	Staff nurses. Responsibilities include assessing, planning and implementing care without supervision	£8,025- 9,200
Grade E	Nurses who regularly take temporary charge of a ward; teach junior staff	£9,200-10,650
Grade F	Ward sisters, community nurses, health visitors, nurse specialists. community midwives. Nurses with a responsibility for a ward requiring limited nursing intervention	£10,200-12,500
Grade G	Nursing staff who manage a ward, deploy staff, supervise teaching	£12,025-13,925
Grade H	Experienced nurses with continuing responsibility for managing more than one ward area. Normally hold clinical teaching qualification	£13,450-15,350
Grade I	Extended continuing management, clinical expert or teaching responsibilities. Duties cover more than one ward area.	£14,875-16,850
Source: COHSE figures in <u>Guardian</u> , 16.11.88. p.6.		

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Implementation of the new grading structure forced managers to define exactly the duties of the whole range of nurses. Interestingly, this process highlighted the fact that many nursing auxiliaries were left in charge of wards (especially at nights and in psychiatric hospitals) and raised important questions about the definition of 'supervision'. Verbal guidance was given to one RHA that auxiliaries should be placed on Grade A unless the RGN supervising the ward could not be summoned - including the use of a telephone or radio pager (Financial Times, 15.11.88., p.18).

It is not practical here to give details of pay for all the various jobs at the Hospital. A few general points can be made however. First, the impact of competitive tendering on earnings was noted above, with bonuses and other entitlements under pressure as services are opened to competition. Second, performance-related pay has already been introduced for management. As more sophisticated databases are developed, enabling management to monitor the costs of treatment, similar incentives may be introduced for other staff groups. Finally, there is mounting pressure to dismantle the national wage bargaining machinery in the NHS in order to facilitate local negotiations. In other words, wages could be kept down in areas where competition for labour is slack and supply is plentiful, and extra resources would be freed to attract labour in relatively short supply - to overcome competition on the external labour market or to reward high skills, or both. Limited forms of regional pay variation have been proposed both for nurses and for administrative and clerical workers. Little formal 'progress' has been towards the goal of local negotiations. However, ways have been found around the rigidity of national pay structures. Thus, it was revealed that a common way of attracting labour in hospitals in Southern England has been to upgrade posts so that someone doing essentially the same job in a less competitive labour market is paid at a lower rate. At North Tees, this process

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worked in reverse during the study period so that as people left, their posts were reviewed, and down-graded if possible, before readvertisement.

(ii) Net impact on the local labour market and unemployment

With over 3,000 jobs, North Tees Hospital is a major source of wage labour in the Stockton TTWA. For many local residents, especially women, it offers perhaps their only realistic chance of obtaining employment. In July 1989, Hardwick had the third highest rate of unemployment of the 31 wards in Stockton TTWA and Roseworth ranked as the sixth highest. After three years of falling unemployment in the TTWA, the two wards together still contained 811 people who were officially unemployed in July 1989 (649 men and 162 women) (Cleveland County Council, 1989b).

It was shown above that whilst the total number of employees at the Hospital has remained relatively unchanged since 1983, there are substantial flows of labour into and out of employment at the Hospital - amounting to 3-400 people or over ten per cent of the total stock in any one year. It is sobering to reflect, then, that even in the extreme case of all new recruits in a year being from Hardwick and Roseworth and none of the leavers being from these two wards, unemployment would no more than halve (other things remaining equal). In fact, during the year of study, the increase in Hospital employment of 73 shown in Table 6.12 (above) included 23 from the P&T staff group and eight M&D - thus, just under half of the 'additional' jobs were in occupations less likely to be open to local unemployed residents. In the ASC, A&C and N&M staff groups an important qualitative shift was noticeable in the jobs on offer, with a growing percentage of part-time employment in each of these categories. A mixture of abolition and down-grading of posts

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further contributed to a decline in the number and quality of opportunities thrown up by 'natural wastage' from the Hospital's labour force. In the A&C group, an apparent increase in numbers was largely the result of the Hospital's CP scheme.

It remains to be seen how the Hospital copes with the reduction in SENs that inevitably will occur through wastage and non-replacement of the existing SEN stock (as a result of ending the pupil intake). If it leads to an increase in the student nurse intake, this would have repercussions in the local labour market. The greater degree of selectivity (as a result of abolishing SENs), combined with the introduction of the centralised clearing system for applicants, could lead to increasing numbers of non-local recruits with consequently reduced opportunities for local school leavers. However, competition for school leavers is not as intense in Stockton as in some other parts of the country with 'tighter' labour markets and this may work to the advantage of Stockton residents with appropriate qualifications. Furthermore, if the 'entry gate' for students is widened and/or if the 'helper' grade is merely a renamed nursing auxiliary position, there are likely to be continuing job opportunities for local residents in the N&M group.

Nevertheless, in the absence of both increased resources and a move to less commercially-oriented management, pressures to cut labour costs will persist and the pattern of actual (as opposed to desired) labour demand is more likely to add to local unemployment than to reduce it. However, given the strict eligibility criteria for unemployment benefits (and the bias against women in the eligibility system) there is a strong possibility that many of the people 'flowing' into and out of jobs at the Hospital in certain staff groups will not feature in the official unemployment statistics at all.

(iii) Changes in labour demand at North Tees Hospital compared with private sector employers

There is little to distinguish labour market adjustment mechanisms in the NHS from mechanisms used by private sector employers. In this Chapter, the shift towards female part-time employment, the intensification of work, and the attempts to achieve numerical, functional and financial flexibility are outcomes similar to those discussed elsewhere in this thesis. Similarly, the competitive tendering process mirrors the steps taken by private sector employers to sub-contract services to specialist suppliers.

Rather, the chief difference in this Chapter was the source of pressure for changing patterns of labour demand. Instead of conditions in the employer's product or labour markets being the primary influence, it was the new 'institutional' framework of operation being introduced by the Government in the case of North Tees Hospital. This new framework, which has been developed further since the end of the study period, has produced cost-savings in the short-run, but leaves many long-run questions unanswered. The growth of health care in the private sector and the almost enforced increase in dependence on charities for funding has led to fears of a 'two-tier' health service.

It would probably be wrong to claim that a restructuring of the labour force at North Tees Hospital has occurred. The process appears to be a more long-term one, with changes being introduced at the margin. However, as the NHS is run on increasingly commercial lines there must be a genuine concern about the prospects for training and the long-term stability of employment at general hospitals such as North Tees. As Hospitals are encouraged to 'sell' their specialities, the most efficient hospitals will be able to offer higher wages and attract the best staff. In a competitive situation, training is often a 'casualty' as it increases overheads in

the short-term. Overall, there could be pressure for Hospitals to reduce the scope of services they offer and concentrate on their strengths.

The implications for the local working population of the move towards a more commercial framework of operation are a matter of much concern. The clear message from several of the other Chapters in this thesis is that 'for profit' commercial operations cannot afford (beyond certain limits) to take the needs of the workforce into account when making investment decisions. This Chapter has shown how the needs of the Hospital's client base already have been placed second to the dictates of 'sound' financial management.

Footnotes:

(1) For reasons of data availability, the year under study is the financial year from 1.4.86. to 31.3.87.. This differs from other chapters where the year to July 1987 was studied.

(2) The Government's White Paper 'Working for Patients' (HMSO, 1989) was published too long after the end of the study period to warrant detailed consideration in this chapter. However, the impact of the measures proposed in the paper will be great. First, in September 1989, 40 of North Tees Hospital's 50 consultants discussed the Government's proposals and 70 per cent voted in favour of 'expressing an interest' in 'opting out' as a self-governing hospital (Evening Gazette, 8.9.89. p.17). Second, a new system of funding for the regions is likely to be introduced and will replace the RAWP (resource allocation working party) formula that has been used since 1977.

(3) North Tees Hospital was a pioneer in the concept of placing psychiatric beds on a general hospital site.

(4) Partly because demand for certain services did not meet expectations and partly because of changing conditions, the pattern of utilisation of the buildings has altered over time. For example, because of a declining birth rate, one of the original maternity wards is now used as part of the district's headquarters operations. The child psychiatry ward was underutilised and beds have been halved since it was opened. The laundry has suffered from gross over-capacity.

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This last condition has been exacerbated by ward closures in recent years as a result of cutbacks and staff shortages

(5) The Department of Health and Social Security was split into two separate departments - one for Health and one for Social Security - in July 1988.

(6) In addition a central NHS Management Board was established, responsible to a Supervisory Board chaired by the Secretary of State.

(7) Community health care in the North Tees District was provided in thirteen locations, five of which were rented properties, for infant welfare. General practices were run from six of the health centres.

(8) Interestingly, in all England and Wales, the private sector has had its greatest success in tendering for cleaning contracts (80 per cent of successful private sector tenders), followed by laundries (15 per cent) and very few in catering (only five per cent) (National Union of Public Employees figures in Financial Times, 23.3.87. p.8).

Significantly, trade union research has revealed that 70 per cent of successful private tenders for domestic work (cleaning) have been won by just seven firms. One of these companies, the Hawley group (ADT since 1988) of which Mediclean was a part (see footnote 9), won almost a third of successful tenders (Guardian, 30.9.86. p.2).

(9) The ownership structure in the contract cleaning industry has become notably more concentrated since 1986. BET (already owners of the Initial chain) has acquired HAT, Brengreen and Reckitts. Hawley purchased Pritchards in 1987, but later sold this (and its European cleaning operations) to BET (Financial Times, 22.12.88. p.22). In 1989, Hawley (by then known as ADT), sold its last U.K. cleaning business to ISS of Denmark (Financial Times, 26.1.89. p.28).

(10) Essentially, food is chilled shortly after cooking, and is then kept cool for several days during storage and distribution to be reheated prior to being served. The temperature has to be controlled carefully to prevent the growth of harmful bacteria.

(11) An £825,000 cook-chill system was installed in Middlesbrough's South Cleveland Hospital to serve the whole South Tees District.

(12) The demands of the Association of British Laundry, Cleaning and Rental Services were listed as follows:

- (i) a compensatory mechanism for NHS capital accounting procedures;
- (ii) clearer guidelines on the permitted stringency of contract conditions;
- (iii) the opportunity to tender for full linen management (linen hire) for all contracts;
- (iv) full disclosure of health authorities' tender

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evaluation criteria;

(v) an appeals mechanism against contract awards

(Financial Times, 14.12.87. p.7)

Included among the main contractors bidding for NHS laundry work have been the Co-op Laundry (includes Sweetclean and Westcott), BET's Initial, Kneels (part of the Johnson Group) and Royal Jersey laundry.

(13) In October 1987, East Yorkshire became the first DHA to privatise hospital portering at all of its seven sites, in a move designed to save £64,000 net per year (Financial Times, 27.10.87. p.11). Mersey RHA instructed its districts to consider contracting sterile supplies, hospital transport, gardening, building and maintenance work (COHSE, 1987).

(14) As the tenders from the first round come up for renewal, The Contract Cleaning and Maintenance Association (CCMA) is anxious to widen the coverage of the contracts by offering more 'added value' services. John Hall, General Secretary of the CCMA, wrote to John Moore, the then Minister for Health and Social Security:

Many hospital support services are naturally complementary, but historically have been managed and funded separately. Frequently this has resulted in overmanning and inflexibility

(Financial Times, 16.12.87. p.38).

In January 1988, Mediclean moved a step towards this goal when it won the first 'dual contract' in the NHS, for both cleaning and catering at the National Hospital for Nervous Diseases in Maida Vale, London. The Financial Times reported:

The contract is expected to set a pattern in the NHS. Cleaning contractors are pressing to extend their roles in hospitals to embrace not only catering but a whole range of "hotel" services

(8.1.88. p.6).

(15) Part-timers who work more than their usual hours are classified as working 'plain time' as opposed to overtime. Consequently, they are not paid a higher wage rate unless they work more than the standard full-time working week. (The same was seen in Chapter Four where part-time workers at KP were said to be working 'extra-time').

(16) After the First World War J.H. Whitley (Deputy Speaker of the House of Commons) chaired a committee which looked into ways of improving industrial relations. A three-tiered organisation was recommended comprising a national joint industrial council, district councils and local works committees. Although the scheme met with little success in industry it was introduced in the Civil Service and, after the formation of the NHS, 'Whitley Councils' took over from an existing mixture of committees which had emerged to negotiate pay and conditions in the health service (full details in Levitt, 1976).

(17) By 1988 the whole administrative structure was under review and a major reorganisation was likely.

(18) The Community Programme (CP) scheme was introduced at North Tees Hospital in association with the (then) Manpower Services Commission. It was established to provide 'community benefits' (as opposed to direct hospital work). The original intention was to have 120 places on the scheme, but by March 1988 there were only 60 places filled (an increase of around 40 on the March 1987 figure). Many of the jobs were not at the Hospital itself but involved work, for example, at a Woman's Advice Centre in Stockton. When the Government replaced CP with Employment Training in 1988, North Tees indicated that it would not participate in the new scheme unless a consortium could be arranged with other health authorities in Cleveland. On its own, the Hospital would have had to fill 85 per cent of seats on a 150 place scheme just to break even (Evening Gazette, 28.7.88. p.5).

(19) There is one private hospital (a Nuffield Hospital) within Stockton TTWA and a rapidly growing number of private nursing homes.

(20) Registered nurses must undergo a minimum period of three year's training. In addition to Registered General Nurses (RGNs), nurses can follow any of 17 specialities (e.g. Registered Mental Nurses, Registered Nurses for the Mentally Handicapped).

Clinical Managers and Clinical Nursing Officers supervise groups of wards and departments, while Directors of Nursing Services are in charge of all aspects of nursing in a Hospital. The District Nursing Officer has responsibility for all nursing services in a district.

(21) An increase in the number of patients treated on a day basis has meant that in some cases a bed is used by more than one person each day (a process known as 'hot bedding').

(22) Ironically, in the short term, implementing in full the recommendations of Project 2000 would exacerbate the nursing shortage by reducing the time spent by student nurses on the wards. In recognition of this, a 'widening of the entry gate' to nursing (i.e. less qualifications required - [A2] in Table 2.1) is under consideration in order not to exclude those who previously might have become SENs. In addition, other objectives are to reduce turnover amongst student and qualified nurses, attract back nurses who have left the profession and encourage more men and mature students to apply for training.

Whilst the Royal College of Nursing is broadly supportive of Project 2000, the other two main nursing unions (NUPE and COHSE) - who represent many of the lower paid nurses - have criticised the phasing out of SENs as 'elitist'. The Government, meanwhile, has welcomed the report but made no commitments. The Department of Health and Social Security

commissioned reports from Price Waterhouse, the management consultants, on the subject. In one report, Price Waterhouse recommended the creation of up to 7,000 Youth Training Scheme (YTS) places in the NHS to provide a "high quality training for support workers" (Financial Times, 23.12.87. p.8). Any such scheme would be designed for the new 'helper' grade (essentially the same as nursing auxiliaries but, according to some sources, one that would remove the 'nurse' association from the job title). The report admitted though that "it is unlikely that a programme of the scope envisaged could produce more than 2,000 entrants to nurse training a year, and this is an optimistic estimate" (Financial Times, 23.12.87. p.8). NUPE has voiced concerns that YTS trainees may be used to replace existing jobs and/or to reduce wage levels. Certainly, for YTS to contribute to the nurse shortages in a positive and direct way, it would be necessary to introduce alternative entry requirements at the age of 18, with YTS acting as a 'bridge' between 'O' levels and entry to NHS employment.

More recently, the Government indicated that implementation of Project 2000's recommendations will be partial and spread over five to seven years (Financial Times, 5.1.89. p.14).

(23) The problem of nursing shortages is not new, however. In the early 1970s, shortages of midwives created problems for the new maternity wards. Then difficulties were encountered when attempting to recruit for the new psychiatry ward, opened in February 1972. From 1976 onwards, efforts to restrain nurses' pay were made as part of the effort to contain public expenditure. This culminated in strikes and protests in 1982 which eventually forced the Government - in a pre-election move - to concede to pressure to establish a Nurses Pay Review Body (similar to that established for doctors in the 1960s). The image of overworked and underpaid nurses has not helped in the effort to attract more people to consider nursing as a career.

CHAPTER SEVEN: GLAMAL ENGINEERING

7.1 Introduction

Glamal Engineering of Cowpen Lane Industrial Estate, Billingham (see No. 30 in Fig. 2, Chapter Two) is a manufacturer and stockholder of steel flanges and pipe fittings. Independent and employing 26 people at the start of the field-work, it was included in the study as a 'small firm' (1). It was not considered 'typical' in any sense - indeed, the conception that 'small firms' constitute a coherent group is in many senses a "chaotic" one (Sayer, 1984 p.126-7) (2). However, given the increasing importance attached (in rhetoric at least) by the European Commission, central and local government (3) to 'small firms' as job creators in the fight against unemployment (4), it was considered essential to cover one such firm in the study. The choice of Glamal was made after careful consideration of research on small firms available prior to the field-work.

Reliable information on small firms is in short supply, however, not least because the Government has waived the collection of much statistical data, in an attempt to reduce the administrative burdens upon them. Registrations for VAT purposes provide one of the best indicators of new firm formation (though the two are not synonymous - Department of Employment, 1987). From this source, one of the most widely quoted Government statistics is that between 1979 and 1987 the number of new (and invariably small) businesses nationally increased on average by more than 500 per week. In 1987 nearly 900 additional businesses were created each week (Department of Employment, 1988d p.512). However, it is also well-known that the Northern region (and Cleveland in

particular), with a tradition of employment in large establishments (see Table 7.1), lags behind other regions in both its stock and its net inflow of new, small businesses (Department of Employment, 1987 Chart 2 p.179; see also Storey et al, 1988) (5).

TABLE 7.1 Size distribution of manufacturing firms in Cleveland, the Northern region and G.B. (%)

	Employment size bands							
	1-9*	10-19	20-49	50-99	100-199	200-499	500-999	1000
CLEVELAND (1985)**	59.2	14.2	11.1	5.6	4.0	3.9	1.3	0.7
NORTHERN REGION (1986)	62.6	10.9	11.6	5.1	4.7	3.3	1.3	0.6
U.K. (1986)	67.7	11.0	10.6	4.7	3.0	2.1	0.6	0.3

Source: Calculated from Business Statistics Office (DTI) Business Monitor PA1003 Size analysis of UK businesses Table 9 1987 and 1988 editions (HMSO, London).

* Businesses below the VAT threshold are recorded only if they have chosen to register voluntarily or not to de-register. Information relating to employment in the 1-19 sizebands is unreliable.

**1986 figures for Cleveland are incomplete due to suppression to avoid disclosure and therefore 1985 figures are used. For the Northern region and U.K., 1986 figures - the most recent - are used.

The reasons for the large numbers of new businesses being formed in the 1980s have been the subject of much debate (6). In interpreting the evidence put forward though, it is important to ensure that like is being compared with like. As Hakim (1989) recently noted:

Studies which appear to be talking about the same thing, but yield conflicting results, may actually be talking about firms of quite different size, in different industries and different parts of the country, identified through very different mechanisms (p.30).

Clearly, any chosen 'small firm' had to be located conceptually within the wider process(es) of production to which it contributed (see Chapter Two).

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Hakim (1989) also criticises the common tendency to assume that small manufacturing establishments are 'representative' of all small firms. In recognition of this problem, a contract cleaning company (small and independent) was also chosen initially to be included in the study (see Chapter Two). Unfortunately, however, it refused to take part (possibly related to the high incidence of employment 'off the books' in this line of business, as witnessed by numerous newspaper articles throughout the study period). Nevertheless, Glamal is actually engaged in both manufacturing (the machining of flanges to desired specifications) and service activities (stockholding of standard flanges). Discussions with staff at Billingham Job Centre revealed further that the company was set up in 1971 initially to supply local chemicals companies, but had successfully diversified to supply the offshore construction industry (see Chapter Nine). Thus, although the reasons for the company's formation shed little light on the debate regarding new firm formation in the 1980s, it was responding to pressures from a number of different sources and there was a prospect of relating findings to other case studies.

Following the structure adopted in previous chapters, Glamal is investigated below under the following headings:

- (i) background;
- (ii) product market context;
- (iii) work patterns and practices;
- (iv) monthly changes in employment levels;
- (v) recruitment - methods and catchment area;
- (vi) union position and pay determination;
- (vii) net impact on local labour market and unemployment.

This case study reveals how the prospects of even a well-run small businesses are dependent on factors largely beyond its

control including the performance of its major customers and the state of the national economy. (Whilst this point appears obvious, it is surprising how many studies account for growth or failure solely in terms of company characteristics and the founders' personal attributes e.g. Hakim, 1989). It also demonstrates the importance of certain 'key workers' and the company's limited role as a job creator, with minimal impact on the unemployment count.

7.2 The Glamal Case Study

(i) Background

Glamal Engineering was established in 1971 and started manufacturing operations in a rented unit on the Cowpen Lane Industrial Estate in Billingham (7). As a private limited company, the two initial shareholders were the Managing Director, Alan Hardy, and his wife (non-active). He had previously been employed as the manager of another company, also in the flange business but, "decided that the future lay in doing the work for himself rather than someone else" according to the contact at this company. (Flanges are used to join pipe work together (8) and demand comes not only from new developments but also from repair and maintenance).

It was through his former employment that the Managing Director made contact with the present Sales Director and the Company Accountant, (both of whom have taken shares in the company). The latter, Paul Veitch, (also a Director) was the contact person during the field-work. Before joining the company he was helping other people to set up new businesses as part of his training to become a Chartered Accountant. Whilst he never completed the course - leaving his 'articles' to join Glamal - this experience was invaluable preparation for the task ahead. The Sales Director, meanwhile, had the necessary technical background, having trained with a

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national company selling flanges, fittings and heating systems.

The average age of the three acting Directors was 34 at the start of the study period, with the founder's age and background fitting the stereotype described in Storey et al (1988). Together they carried out all the preparatory work necessary for the establishment of the new company without assistance (financial or advisory) from any Government body or agency. Since the company was formed back in 1971 - the year of the Bolton Report (1971) enquiry on small firms - there was not the plethora of bodies that now exists to assist individuals and groups to set up new businesses.

In December 1975 the business moved into a purpose built factory on the same industrial estate. This move was associated with an expansion of the stockholding side of the business which required a greater amount of storage space. The initial choice of Billingham as a location was influenced primarily by the proximity to ICI Billingham. The decision to remain there at the time of the expansion was partially due to inertia but also because of the demand created by the massive developments on nearby Seal Sands, associated with the oil industry, in the mid-1970s (for details see Cleveland County Council Planning Department, 1975).

Increasing dependence on the oil industry as a market for Glamal's products and services almost caused the closure of the company in 1983 when demand from this source dropped sharply. However, by mid-1984 conditions started to improve and although some redundancies occurred (see iv below) the company survived.

At times during the 1980s, a move to Hartlepool or Darlington has been considered. The former has an Enterprise Zone (rate-free until 1993) and the latter is in County Durham (with slightly lower rates and a more suitable location for the Directors from a travel to work perspective). However,

virtually all the manual and clerical workers live in Stockton or Billingham (see v below) and, since their firm-specific knowledge is highly valuable to the company, such a move is unlikely.

Finally, in 1983 the company opened a distribution depot in Birmingham, employing four people. Again dealing in flanges, it has found a 'niche' in the local market serving small engineering companies.

(ii) Product market context

A review of steel stockholding in the U.K. was reported in the Financial Times (10.2.88.) in the wake of the announcement by British Steel that it would move to expand its 15 per cent share of the business after its privatisation. This revealed that:

about three million tonnes of U.K. made steel and a further two million tonnes of imported steel form a £2 billion business annually for the stockholders which handle it. These companies range from tiny specialist outfits employing five or ten people to companies with a broad range of steel products distributed through a national network of depots (ibid p.8).

Glamal would be classified as a specialist, dealing only in flanges and pipe fittings but with 26 employees and a distribution depot in the West Midlands it is some way from the bottom end of the size scale for the approximately 180 independent steel stockists in the country.

The 1980s have seen a series of acquisitions alongside the withdrawal of a number of the large engineering concerns from the business. Thus, C. Walker has bought about ten businesses since 1983, including the purchase of Steelstock from GKN in 1986. With 35 depots around the country and 22 per cent of the market, it is the largest of the independents. ASD of Leeds is third largest after Walker and British Steel and in

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1986 bought the stockholding business of the Davy Corporation. This included a store and plate profiling operation in Stockton, employing 36 people (bought by Davy in 1984 as part of the Head Wrightson take-over - see Chapter Nine).

In addition to improving geographic coverage and widening product ranges, one of the main motives for acquisition has been to increase the companies' power in negotiations with steel makers and customers. Indeed, the withdrawal of the major engineering concerns such as Davy and GKN is a reflection of the fact that fierce price competition between stockholders currently keeps prices down. A European price list sets the 'going price' for standard products and stockholders add to or discount from this list according to their position. Competition in terms of quality of service is equally severe, ensuring that supplies can be obtained usually at very short notice. Hence, the service of the stockholders has been identified as one of those activities that can be sourced externally with little or no loss of efficiency. Quality of product is becoming increasingly important and Glamal was taking steps to obtain British Standards quality assurance approval (BS5750) during the period of the field-work. However, reflecting the high level of competition, the Company Accountant confessed that the company would be at a disadvantage without it rather than it giving Glamal an edge over other suppliers.

In this environment, stockholders must either specialise or be able to carry a wide range of stock at all times in-order to attract regular customers. Even for Glamal, specialising in one or two main products, a range of sizes from half an inch to twelve inches (1.3-30.5cm) is offered and, consequently, much of the company's capital is tied up in its stock. Thus, in Paul Veitch's words:

Purchasing power is the big god. The company's got to to buy enough enough [from the steel mills and

forges] to prove its worth as a supplier [to potential customers]... We've got to source cheaply, carry a hefty stock, must give the companies a price on demand - then deliver the goods.

Virtually all of the forgings come from Germany and France, since lower prices abroad forced the company to abandon its policy of buying British. In the past there was a ready supply from local foundries, but they became uncompetitive. (As shown in Chapter Nine, this was due in no small part to unfair competition resulting from subsidies to European foundries, but was exacerbated by a strong pound in the early 1980s). Some larger forgings are still sourced in the U.K. (Sheffield) since transport costs rule out European suppliers. Around 20 tonnes are ordered at a time, which is a large amount for Glamal but a small amount for the suppliers, placing Glamal in a relatively weak negotiating position. Materials are imported via the Tees and through Dover and Immingham.

Apart from its Birmingham depot, Glamal serves primarily a local market on Teesside, although it has its own delivery lorry which makes weekly journeys to Tyneside and Humberside. Deliveries further afield are arranged through contract hauliers on the same industrial estate. Due to the high bulk to weight ratio of the product, however, the business is geographically restricted and the major competition comes from local specialist firms, including Flanges Ltd. in Stockton and Weldfit Pipeline Services at nearby Haverton Hill (both employing around 20 people). Other geographic concentrations of demand for flanges include the North West (again ICI-related) and the Midlands (hence the Birmingham depot).

The chief advantage of Glamal over other merchants is its in-house machining capacity. This enables the company to deal with special orders as well as standard products. It is the special orders which are the most lucrative and these account

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for roughly 40 per cent of sales, although this figure varies over time. The manufacturing side of the business provides the majority of employment and the greatest 'value added' in Glamal's operations.

Glamal has a total register of around 700 customers, although only around 300 of these are likely to be 'live' at any one time and a dozen large customers (chemicals and oil companies) account for the majority of sales. Glamal has established a name for reliability and now dominates the flange supply business on Teesside, either through direct sales (approximately 60 per cent of the company's business) or via merchants (the remaining 40 per cent). Some products are exported to Sweden and Norway and there used to be exports to the Arabian Gulf until problems were experienced with payments. Exports are consequently lower than in previous years and account for less than ten per cent of total sales.

In summary, Glamal operates in a local market 'sandwiched' between major suppliers and major customers. It avoids the need for customers to tie up their capital in stock and is, in many senses, a classic example of a service that has been subject to 'distancing' (Atkinson, 1986).

The Directors believe the company now has enough experience, and is sufficiently large and well-respected locally, that it is unlikely to fail because of problems commonly associated with small firms (e.g. late payment and cash flow difficulties; shortages of capital). However, the structure of the industry is changing and the pace of this change is likely to accelerate as a result of both the privatisation of British Steel and the measures being undertaken to create a 'Single European Market'. Thus, not only U.K. but also European companies are looking to widen their range of coverage in geographic and product terms. For example, Clarks is one U.K. firm "keen to buy more steel stockists'

businesses" (Evening Gazette, 19.7.89. p.8). This company, (part of the acquisitive G.M. Firth Holdings), has eight depots including one in the north-west of the Stockton TTWA (in Stillington). Meanwhile, just as British Steel is increasing its representation in Continental Europe, so other European companies are making acquisitions in the U.K. (see, for example Financial Times, 28.1.89. p.5). Although interest is primarily in businesses with well-developed, national distribution networks, the independence of a company like Glamal cannot be taken for granted at a time of such widespread industrial reorganisation.

(iii) Work patterns and practices

(Table 7.2 gives a breakdown of the employment structure at Glamal).

The main distinction in terms of work practices at Glamal is between the tasks associated with 'standard' orders and 'special' orders. The vast majority of sales is conducted over the telephone and sales staff need a high level of technical knowledge in order to comprehend customers' requirements. Details of all products are held on the company's computer and a check is made to see if the required product is standard stock or will require modification to specification in the machine room.

The office side of the business is well-equipped with computer terminals to enable immediate 'on-line' checks regarding product availability, prices and other details. A standard order simply requires that the appropriate products are withdrawn from stock for delivery, with stock records amended accordingly. (Also in the office there are four female clerks, one of whom is part-time).

A special order is more complicated. A job sheet with details of the customer's requirements is passed to the Works

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Manager. This manager produces a technical drawing, collects the appropriate materials from stock and records the numbers of the castings used. Work is then allocated on the shopfloor in accordance with the individuals' skills:

... the best man for the job is chosen... for each job that needs some drilling, one person does all the drilling down to his experience, not because of demarcation or anything.

The nature of the work ('one-offs') rules out the use of computer-assisted design and manufacturing. A variety of machinery (vertical and horizontal borers, centre and capstan lathes) was purchased from a second-hand dealer and is perfectly adequate given the level of precision required in flange manufacturing. The Works Manager maintains the machines and is capable of stripping each one down and rebuilding them. His knowledge is a vital asset for the Company and he has a key role in the successful day-to-day operations of the company (see v below).

All seven 'turners' (machine operators) employed by the company are 'time-served' and had received their training previously with one of the large local employers (e.g. ICI, Head Wrightson, Whessoe). Thus, no formal apprentice training takes place although during the study period one labourer was receiving tuition in the use of certain machines and would be classified as semi-skilled. Due to the increasing importance attached to quality, two of the turners have been given responsibilities for quality assurance and a full-time inspector is employed.

The working day at Glamal is from 08.00-16.30hrs. When there is a heavy work-load over-time ([A16] in Table 2.1) is freely available in the machine room. In earlier years this used to involve an additional two hours on a Tuesday or Thursday night. However, more recently over-time has more often taken the form of a week-end's work - "its a famine or feast situation" according to one of the Directors.

The company closes down for two weeks over Christmas since most of their major customers are on holiday. In addition to this and statutory holidays, employees are entitled to 15 days' leave.

Finally, there is the question of the use of external contractors. Glamal has switched between 'in-house' and external contractors for office cleaning. After a period using an agency, the company reverted to employing its own cleaners for a two-year period. However, it now uses an agency again because "it allows more control". In addition Initial Services provide a washroom supplies and laundry service. On the manufacturing side, a small amount of work is contracted to other small companies on the same industrial estate.

(iv) Monthly changes in employment levels at Glamal 2.7.86. to 7.7.87

Table 7.2 shows the employment structure at Glamal and provides a 'head-count' account of employment at the time of visits to the company (9).

TABLE 7.2 Monthly changes in employment at Glamal 2.7.86.- 7.7.87.

Position	Sex *	Visit dates:-							
		1986						1987	
		2.7.	4.8	27.8	1.10.	3.11.	9.12.	16.1.	7.7.
Director	3m;1f+	4	4	4	4	4	4	4	4
Sales	3m	3	3	3	3	5	6	6	6
Managers	2m	2	2	2	2	2	2	2	2
Clerks	0m;4f	4	4	4	4	4	4	4	5
Driver	1m	1	1	1	1	1	1	1	1
Labourers	4m	4	4	4	4	4	4	4	3
Turners	7m	7	7	7	7	7	7	7	7
Inspector	1m	1	1	1	1	1	1	1	1
TOTAL	21m;5f	26	26	26	26	28	29	29	29
Source : Company records									
+ - The female Director is non-active in the company.									
* - Sex breakdown refers to figures at start date.									

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Again, to some extent, the appearance of employment stability disguises a situation of labour turnover. The main change to note is the doubling in the size of the sales force. This is discussed in detail below. However, first, the history of employment at Glamal prior to the study period is considered briefly.

The workforce was built up gradually between 1971 and 1983. However, in 1983, there was a slump in orders from the major oil companies upon which Glamal had become increasingly dependent. In September 1983, two managers, one labourer and five turners were made redundant. As business recovered, two of the turners were re-employed (in July 1984 and August 1986). In March 1984, the company decided to expand its stockholding activities and two young temporary labourers were taken on until June 1985. In February 1985 one of the company's managers resigned to help a friend trying to set up a small business of his own. However, within half a year he was back at Glamal and had been 'made up' to Works Manager (further details in v below). For a period in 1985 the company experienced considerable labour turnover in the machine shop.

Meanwhile, there was a steady turnover of sales and clerical staff. In June 1984 a fourth salesman was recruited but he was dissatisfied with the job and left the following month. In August 1984 another salesman started and has remained with the company. However, one of the original salesmen left to move to another part of the country and so the number of sales people at the start of the study period was still three. Sales staff are highly valued for their specialist knowledge and the company is anxious to avoid turnover both because of training requirements and fear of losing personnel to competitors (see v below). To a lesser extent, turnover amongst clerical staff is undesirable, because they too acquire specialist knowledge and "its good to have people who

know how we operate as a company". One clerk has been with the company for ten years and is in charge of the office. However, there has been turnover amongst other clerks due to pregnancies and 'voluntary' quits to take other jobs.

Finally, the employment of an inspector was part of Glamal's drive to attain British Standards approval. The first inspector was 'made up' from the post of warehouse supervisor. Subsequently, he was promoted to take control of Quality Assurance and Glamal 'poached' an inspector from "a large, local company".

At the start of the study period, the company's aim was reported as being to "consolidate and expand our market share - progress by becoming better at what we do". To these ends the company had decided to expand its sales team. This can be regarded as a bold step in many ways, since 'small firms' tend to be reluctant to employ people not engaged in direct production (see 'Building in the ability to grow' in Financial Times, 7.3.89. p.15; also, White et al, 1989). Thus, in October 1986, Glamal advertised for a sales person in the Teesside Times (a free local newspaper) and the Evening Gazette. The company received 40-50 applicants - approximately two-thirds of whom were female. Of these, 24 were interviewed and a short-list of ten was drawn up. In the event, the Directors decided to take on two of the applicants, one male and one female (further details in v below). In December 1986 a London-based sales representative was recruited. He now travels around the country, making new contacts and conducting businesses on a car telephone.

In January 1987 Glamal was contemplating taking on yet another sales person. Someone who had joined the company straight from school in the 1970s, and been trained as a salesman, moved away when his father obtained a job in the South of England. Now he was hoping once more to follow his

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father (who was returning to the North-East upon his retirement). In the meantime, he had been employed with an aluminium stockist, picking up further valuable experience. The decision whether to offer him a post was made easier when an existing salesman left for a job selling photocopier machines. Thus, by the time of the 'year-on' visit in July 1987 the 'returning' salesman was employed by the company. (Note that even in this case the stock figures in Table 7.2 disguise the pattern of labour flows).

Also by the time of the final visit, the Company Accountant had taken on an assistant (recorded as a clerk in Table 7.2). Increasing levels of paperwork had convinced the company of the need for such assistance (further details about this recruitment are given in v below). The Accountant noted the ironical contrast between the Government's claims to be helping small businesses to expand by cutting 'red-tape' (H.M.S.O., 1986) and the need to take on additional labour to cope with extra paperwork: "we are unpaid tax collectors and sickness benefit payers".

Finally, four days before the final visit, the company had 'lost' its registered disabled worker - a labourer - who left of his own accord to work in a garage. The company had contacted the Job Centre to see if it had anyone on their disabled persons register who could replace him (10).

Thus, over the year of the field-work, five people were recruited (including one in London) and two people left. Consequently, employment rose from 26 to 29. (An assessment of the impact of these 'flows' on the unemployment count is made in vii below).

Looking into the future, if the enlarged sales team has the desired impact and new orders are obtained, there is likely to be a need to recruit additional workers in the machine room. However, the sales team's success depends not only on its own performance but also on the performance of existing

and potential customers. As the events of 1983 demonstrated, success or failure of a small firm cannot entirely be explained without reference to the firm's external operating environment.

(v) Recruitment - methods and catchment area

An individual's personality can be as important as their work capabilities in a small firm where people are working in close, everyday contact. Selectivity in the recruitment process operates in two ways. In the case of jobs that are advertised (e.g. the sales posts during the study period) local labour market conditions virtually guarantee a high response rate and the company can choose from a wide variety of applicants. For example, the girl who took up one of the two new sales posts had been on a Youth Training Scheme where she had gained experience using computers and had taken courses in business studies. She was studying for 'A' levels in Maths and Economics at night school and, in addition, speaks German - an obvious advantage given Glamal's German suppliers.

The second form of selectivity works through informal networks and contacts, without the need for advertisements. Several examples of this can be given:

- two of the turners made redundant in 1983 were subsequently re-employed by the company;
- a salesman (again a former company employee) returning to the North East with his family was employed as a "known quantity", of clear value to the company given his experience;
- the person taken on to assist the Company Accountant was recommended by Glamal's auditors - he was an experienced book-keeper but was about to be made redundant;

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- one worker who left to help a friend set up a new business maintained contact with Glamal and subsequently returned to work for them again as Works Manager;
- a turner who left at the same time as the Works Manager went to work on a higher wage at another company on the industrial estate: later he too was enticed back by Glamal with an enhanced wage.

The company prefers to use personal contacts wherever possible, as it ensures quality and tends to result in greater stability in the workforce. For example, in the early 1980s there was a rapid changeover of personnel amongst turners. This was put down to the recruitment of "unknowns" who came forward in response to advertisements. A couple of workers joined the company but stayed for only a month or two before moving on to jobs with offshore companies (see Chapter Nine for details of the transient nature of employment in the offshore industry). In a sense, the new patterns of demand for certain trades on Teesside has generated a new pattern of supply which is not suited to operations such as Glamal's. Consequently, the company's 'policy' when recruiting turners is now as follows:

Realistically, when we need someone we ask : "Who do we know?" and "how much do we have to pay?". It's hard to find people with the right skills.

The Works Manager, John Brown, has an influential role in the recruitment of turners and he is asked to assess their capabilities. Indeed, John is a classic example of the 'key employee' identified in many studies of small firms (see for example 'What price the key man?' in The Guardian 18.5.87. p.24). Before joining Glamal he had held jobs with a wide variety of companies including Flanges Ltd. and Vauldale Engineering Services of Stockton, at which he served his time as an apprentice. His ability to maintain and repair equipment and to supervise work on the shopfloor is vital to

the firm's day-to-day operations. He joined Glamal in mid-1974 as a turner/fitter and was made up to charge-hand in 1978. He resigned in 1985 to help establish Special Tubular Fittings (STF) - a new, small business specialising in pipe-cutting, based in Hartlepool. His story is revealing, both in terms of the pressures faced by small firms and the way informal recruitment can operate when key personnel are involved:

As far as STF was concerned there were three people trying to do eight people's jobs. I was doing 60 to 80 hours a week... After a month, I started to have second thoughts. After a bad day I rang Alan [Managing Director] and said "Make me an offer". The next day I was back helping out getting a big order done for ICI.

Unsurprisingly, STF failed soon after John's departure. He frequently receives job offers from other small engineering companies, suggesting that informal recruitment is by no means peculiar to Glamal. His strong working relationship with the Managing Director and the friendly working environment at Glamal, however, have encouraged him to decline such offers.

In the case of the inspector (recruited after promotion of the existing post-holder to a Quality Assurance role) the company admitted that it 'poached' a worker from a larger company. This illustrates the point made in Chapter Two that an employment contract is an ongoing one: employing on the basis of the lowest cost at the point of recruitment can prove costly in the long-term. Consequently, relevant experience and personal 'acceptability' are important considerations.

Recruitment for other positions would ideally be conducted in a similar fashion, since even the clerks need to have, or accumulate, a working knowledge of the firm's business. However, wage rates are less negotiable in office and labouring occupations. This can cause some problems in

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recruitment, exacerbated by the fact that the firm's location is rather remote. Consequently, as revealed by Table 7.3, the catchment area for such jobs is spatially restricted to the Billingham area - travelling from further afield would not be worthwhile. One potential source of recruitment was under a scheme organised for school-leavers by the chemicals company, ICI. Known as SET (School leavers into Employment Training), the scheme involved three months' work placement. However, although the company would have considered the participants for full-time employment, they were unimpressed with the standard of people they received: 'They arrived with the attitude: "I'm only here for the three months because ICI sent me"'.

TABLE 7.3 Recruitment catchment areas and rates of pay at Glamal (mid-1986)

Position	Residence of present post-holders	Wages/salaries
Directors	Barnard Castle (2) Eaglescliffe (2)	£15-25,000p.a.
Sales	Norton; Middlesbrough; Thornaby	£7-8,000p.a.
Managers	Stockton (2)	£3.25-£4.30p.hr
Clerks	Billingham (3); Ingleby Barwick	£2.28+ p.hr.
Driver	Billingham	£2.98 p.hr.
Labourers	Billingham (4)	£1.50-£2.15p.hr
Turners	Billingham (3); Stockton (2); Eaglescliffe; Hartlepool	£3.44 p.hr.
Inspector	Billingham	£2.50 p.hr.
TOTALS	Billingham (12); Stockton (4); Eaglescliffe (3); Barnard Castle (2); Thornaby (1); Middlesbrough (1); Norton(1); Ingleby Barwick (1)	
Source: Company records (Numbers of employees in brackets)		

(vi) Union position and pay determination

Glamal is a non-union company, although all of the turners are members of the Engineering section of the AEU. A union official visits the works once a year, but there appears to be little demand for formal recognition from the workforce. The company is sufficiently small that any grievances can be

taken up directly with one of the Directors. Similarly, there is little pressure from the office workers for union representation. The trainee recruited for the sales post revealed that unions were not discussed on her YTS course. Reflecting the failure of unions to capture the imagination of new entrants to the labour market, she commented:

I'll be honest, I don't really know much about them [trade unions]. I suppose they are good for nurses, but don't really know much what they do.

The company's pay structure (see Table 7.3 above) is the result of an accumulation of annual increases over the original rates which were set slightly above minimum union rates. Wage increases have arisen "because of inflation and complaints over the years. Increases are made "across the board depending on what the company can afford".

Hourly rates for shopfloor workers are paid at time-and-a-half for over-time and at double time on Sundays. Reflecting his key position, the Works Manager is paid over-time, even though he is a member of staff. Consequently, in 1986 his earnings were around £15-16,000.

(vi) Net impact on the local labour market and unemployment

Recruitment and turnover at Glamal during the period of study had no direct impact on the unemployment count. The trainee recruited for the sales post was an 'inflow' from a YTS course. Since this was a college-based course, she would have been considered as "in employment but not at work" according to the new definitions relating to employment (see Table 2.3 above). The other sales person, recruited at the same time, left another sales job in a related line of work and 'flowed' from one job straight into the next.

The London-based sales representative was recruited through contacts in London and, even if this person had been unemployed beforehand (which he was not), this would have had

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no impact on the unemployment figures for Stockton TTWA due to the residential basis of the count. Similarly, the 'returning' salesman would have 'signed off' in another TTWA had he been unemployed, but he too was leaving one job and 'flowing' straight into another.

The assistant to the Company Accountant may have entered the unemployment count since he was about to become redundant. However, by joining Glamal he avoided a spell of unemployment and his 'job loss' was not equated with an increase in the unemployment count.

As for the 'leavers', both left 'voluntarily' and both went straight into new jobs (one as a photocopier salesman and the other in a garage).

Even in an indirect 'knock-on' sense, the employment changes at Glamal are unlikely to have affected the unemployment count for Stockton TTWA. Of the four people leaving jobs to join Glamal, three potential 'job openings' in their wake were way beyond the Stockton TTWA and the redundancy, by definition, meant that the former job no longer existed. Only in one case - the salesman recruited through the newspaper advert - was there a potential job opening created by his former employer. However, given the high response rate to the Glamal advert, the probability that an unemployed person would have been offered such a job is not high.

Beyond the study period, Glamal will have recruited a disabled labourer in order to comply with employment legislation (see footnote 10). Since some disabled are included in the unemployment count and the company was intending to recruit through the Job Centre, there is a chance that an unemployed person will have benefited. Meanwhile, if the sales staff are starting to attract new orders, pressure may start to mount to take on additional workers in the machine shop and the warehouse. However, not only is their success largely dependent on factors beyond

their control (e.g. performance of their major customers, level of interest rates), but also the preferred channels of recruitment (as shown over time and during the study period) tend to minimise the likelihood of recruiting amongst the unemployed.

7.3 Concluding comments

No real evidence of 'new' patterns or practices of work was detected in the Glamal case study. Apart from one part-time employee in the office, all of the workforce works a fairly standard 08.00-16.30hrs day. The company did use temporary labour ([C4] in Table 2.1) in the mid-1980s (to take in increased loads of steel when the stock-holding side of the business was expanded). However, this was for a specific purpose during a controlled period of change in the company's operations.

Viewed in a holistic sense, though, the company's business fits Atkinson (1986)'s description of 'distancing'. Increasingly in the 1970s and 1980s companies have attempted to reduce the amount of capital tied up in stocks (see the discussion in Chapter Eight on the move towards 'Just-in-time' systems of production). This has created 'niches' for companies prepared to specialise in the stockholding function. Significantly, the two main expansions of the company in 1975 and 1985 were associated with the stockholding side of the business.

The company's clients are assured of rapid and reasonably-priced deliveries because of the competition in the field. Furthermore, they are spared the costs of either 'hoarding' stock-keepers through a down-turn or of laying them off and then having to re-recruit in an up-turn. In this way, the

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customers can cut to a minimum the amount of stock-keeping labour time for which they pay.

Whilst companies offering a stock-keeping service can, to an extent, spread their risks by seeking a diverse range of customers, the possibilities clearly are constrained in the case of a company like Glamal which specialises in two main products.

Glamal is undoubtedly a well-managed company, run by experienced professionals. The Company Accountant's financial background and the product market knowledge of the other two Directors, combined with the skills of the work-force, have provided a sound base for the company's survival. Moreover, they have had sufficient capital to invest in stock along with an efficient computer system and office equipment. However, having the 'correct' backgrounds and taking the 'right' steps in a small business are merely necessary conditions for small firm success: they can never be sufficient. The company's fate remains dependent on an external trading environment which, due to its size, it is virtually powerless to influence.

Footnotes:

(1) The most widely used definition of a 'small' firm is still that used by the Bolton Committee of Inquiry in 1971 - i.e. 200 employees or less for a manufacturing establishment. In addition, the Bolton Report added that the establishment should be independent, with a relatively small share of its market and managed by its owners in a personalised way.

(2) Certain factors, however, do clearly lend credence to the notion that 'small firms' constitute a legitimate group for study: e.g. some legislation imposes a different set of requirements on employers below a certain size. Thus, in Belgium, a requirement that firms must recognise a union as soon its payroll reaches 50 employees has led to many firms holding employment at 49 (Financial Times, 19.4.88. p.20). See also Footnote 10 below.

(3) At the U.K. national level, Storey and Johnson (1987) detect a shift away from direct financial assistance for

small firms towards a deregulatory approach by Central Government, designed to reduce the administrative burdens on these firms. Also, more recently, there has been a change in emphasis away from new firm formation towards a strategy based on 'picking winners'. One manifestation of this is the new 'Business Growth Training' package designed to help established small firms (see Department of Employment, 1989c).

Meanwhile the European Commission has set up a new Directorate-General with responsibilities for small firms, which has succeeded the Small and Medium Establishments (SME) Task Force. Local Government continues to place great faith in the job-creating role of small firms through participation in local Enterprise Agencies and various financial incentives (see Smith, 1983, for an overview of initiatives in Cleveland).

(4) Job creation was not mentioned in the Bolton Report as one of the advantages of small firms. Instead it was the work of Birch (1979) in the U.S. that made claims regarding the role of small firms as generators of employment. According to Storey and Johnson (1987): "It is no exaggeration to say that the Birch report provided the statistical underpinning for the recent profusion of policies to help small firms which have occurred in Europe and North America" (p.6).

A more recent study in the U.K. by Doyle and Gallagher (1986) appears to corroborate Birch's study. The authors found a consistent pattern whereby between 1982 and 1984 the only size band which was a net creator of jobs was that with less than 20 employees. For every 100 jobs held at the beginning of each year in firms with less than 20 employees, at least three extra jobs had been created by the end of the year. All other size bands at best remained static, while in firms employing over 1,000 workers, for every 100 jobs at the start of the year six had been lost by the end. However, these findings have been questioned on the grounds that the data sets used - from the credit-rating agency, Dun and Bradstreet - over-represent fast-growing firms. Moreover, Doyle and Gallagher admit that only about twelve per cent of firms with less than 20 employees are included in the Dun and Bradstreet files and they use a 'scaling-up' technique to reach their conclusions. Storey and Johnson (1987) argue that the technique over-estimates the contribution of small firms to job creation (see also Bluestone and Harrison, 1982, for a critique of the Birch study).

(5) The Northern region has also lagged behind all other regions in G.B. in the proportion of its labour force that has entered self-employment (see Department of Employment, 1988e Table 4 p. 163).

(6) Whilst the figures are presented by Government as a sign of economic recovery, others have reached less optimistic conclusions. Firstly, it has been demonstrated that 'new'

small firms are often the result of 'fragmentation strategies' by larger companies, often deriving from the introduction of new technology (Shutt and Whittington, 1987). Similarly, many small companies have been established to undertake, on a contract basis, work that was previously performed 'in-house' (Rajan and Pearson, 1986).

Secondly, Storey and Johnson (1987) argue that much of the new firm formation in G.B. has been in response to job-shedding by larger companies and the lack of alternatives for those losing jobs. Furthermore, there is evidence to suggest that the motivation for small firm formation (and self-employment) tends to be different in an area like Cleveland as opposed to more prosperous areas. Thus, in a comparison between Teesside and Reading, Johnson (1987) found that 23.3 per cent of those setting up new firms on Teesside gave unemployment or fear of unemployment as their motivation, compared to only 9.8 per cent in Reading. In contrast 31.7 per cent of Reading respondents had identified a market need, had a good idea or saw a chance to make a profit. The figure for Cleveland was just 9.3 per cent.

The buoyancy of the local economy is another crucial factor helping to determine the success rate of new companies (Storey and Johnson, 1987). According to research conducted by the development capital company '3i', about ten per cent of new businesses fail within the first twelve months and a further 30 per cent during the next two years. After ten years, only 40 per cent could be expected still to be trading (Financial Times, 10.11.87. p.18). However, such figures obviously will vary according to the type of businesses and the state of their markets and competition. Thus, an investigation of the self-employed and firms established under the Government's Enterprise Allowance Scheme in Hartlepool revealed the following depressing picture:

An unskilled, unemployed person finally turns to the EAS in desperation, sets up in a locally saturated market of window cleaners, semi-skilled plumbers, odd-jobbers, hairdressers or the like, and uses the £40 [Government allowance under EAS] a week to undercut and knock out some of the opposition, usually last year's EAS hopefuls.

A year later, a new wave of subsidised self-employed will be wiping him or her out in turn - if they have lasted that long

(Financial Times, 15.3.88. p.15)

From a national viewpoint, the problem of 'displacement' is greater amongst small firms, given that they are less likely to export (Pratten, 1986; see also 'new jobs for old no the idea' The Guardian, 24.11.86. p.21).

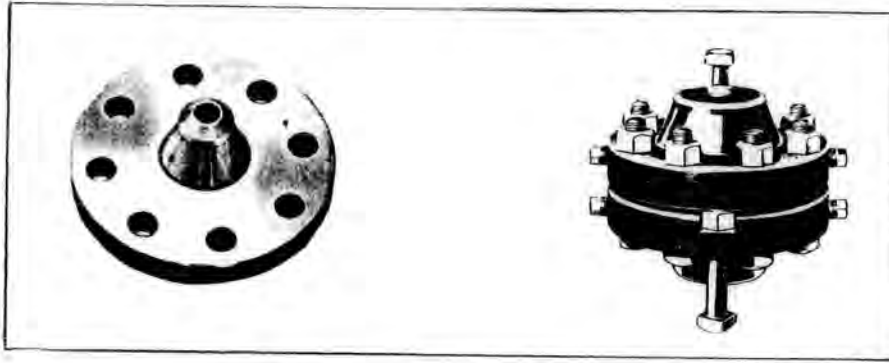
Finally, a national survey in 1987 of 6,792 'successful' small firms (defined as those with 15 per cent or higher growth in turnover) found that those in the Northern region experienced the highest number of takeovers, thus reducing

the indigenous population of successful small businesses (Trends Business Research, 1987).

(7) The Cowpen Lane Industrial Estate houses a total of around 45 factories and 50 units. Of companies on the Estate, 18 (including Glamal) are listed in a directory of companies involved in the offshore industry in Cleveland County.

(8) 'Single random' and 'double random' welds are made between the end of each pipe and a flange, and the flanges are then 'married' together and bolted with a gasket in between. A diagram of a flange is shown in Fig. 5.

Fig 5. Diagrams of flanges - Glamal Engineering



(9) Although telephone contact was made with the company every month during the study period, visits were not always made (e.g. if there had been no changes in the labour force nor any other significant developments to report).

(10) Companies above a certain size are required to employ disabled persons according to a quota specified in legislation.

CHAPTER EIGHT: TABUCHI ELECTRIC

8.1 Introduction

The decision by Tabuchi Electric (U.K.) Ltd. to move on to the Teesside Industrial Estate (see Fig. 2) in 1985 marked the first investment by a Japanese company in a manufacturing operation in the county of Cleveland. Given the interest in the 'Japanisation' of British industry (Ackroyd et al, 1988; Dickens and Savage, 1988; Oliver and Wilkinson, 1988; Hague, 1989) Tabuchi was an obvious candidate for inclusion in the research for this thesis.

Amongst the pressures forcing Japanese companies to look for overseas production sites, a Financial Times survey cites:

the change in the international yen value..., undercutting [of prices] by Koreans and other lower cost producers and the continuing political rows in Europe and the U.S. about dumping (1) (13.11.86. p.1).

In fact, by the start of 1986, Europe (13 per cent) had attracted less of Japan's overseas investment than the U.S.A. (32 per cent), Asia (23 per cent) and Latin America (19 per cent) and Europe's share of employment in Japanese-owned factories is even smaller (Dicken, 1983; Morris, 1988). By May 1989, there were 97 Japanese manufacturers located in Britain employing about 25,000 people. Britain attracts more than six times the level of Japanese investment in West Germany, eight times that in France and nearly ten times that in Spain (Economist Survey of business in Britain 20.5.89. p.22). However, this investment includes non-manufacturing activities. Half of Japanese foreign direct investment in 1986 went into finance, insurance and property and only 17 per cent went into manufacturing (Economist 20.2.88. p.73).

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Concentrating on manufacturing, at the end of 1985 (i.e. just prior to the fieldwork) there were over two hundred Japanese wholly-owned or joint ventures assembling goods or manufacturing in Europe. Half of these were divided almost equally between the U.K., France and Germany (Financial Times, 27.8.86. p.10). The attractions of the U.K. are "not entirely complimentary" as a recent survey by the Economist has pointed out:

Britain offers the best combination of low labour costs (the lowest in Europe except Spain) and relevant skills. Spanish workers are thought to be less skilled and less predictable than British ones. This is not much of a benchmark: by and large British skills are relevant because the workforce is less well-educated and less well-trained than in France or West Germany, for instance. In other words, at present wage levels, Britons are better suited to fairly humdrum tasks - like assembling Japanese cars (20.5.89. p.23)

This raises questions about the long-term stability of such employment:

... if these skill and labour cost advantages move against Britain, then Japanese investment will move pragmatically elsewhere... The low-cost Japanese assembly plants in Britain are valuable ... and are stimulating British productivity. Taiwan once played this role. When it got too expensive for Japanese manufacturers, they moved on (Economist, 26.8.89. p.70).

This must be of special concern to the North East region of Britain which, along with South Wales and Scotland, has proved particularly popular with Japanese investors - the most notable being Nissan, which decided in 1984 to locate its European operations in Washington, Tyne and Wear (see Crowther and Garrahan, 1988). The competition amongst local authorities to attract Japanese companies stands in contrast to the opposition that surrounded the arrival of such pioneer Japanese inward investors as bearing manufactureres NSK, which set up in Peterlee, Co. Durham in 1974. By the end of 1988 there were 20 Japanese companies operating in the area

between the Rivers Tees and Tweed and 14 of these were manufacturing establishments (Hague, 1989).

The arrival of Tabuchi, as in the case of other Japanese inward investment in the U.K., has attracted much media attention. As well as frequent appearances in industrial reviews in the Evening Gazette, the company features in the publicity material of the councils of Stockton and Cleveland, the Northern Development Company (the inward investment body for the Northern Region (2)) and even the Department of Trade and Industry's Invest in Britain Bureau. An official opening by H.R.H. Prince Charles and Lady Diana attracted high profile coverage both on regional television news programmes and in the regional press. The company also was singled out for attention in a Panorama programme on Stockton, following the death the town's former M.P., Sir Harold Macmillan (screened on B.B.C. on 9.2.87.).

Such attention is out of proportion to the physical impact of Japanese inward investment. For example, in 1985, according to the Invest in Britain Bureau, Japanese-owned companies made only thirteen separate decisions on new production capacity in the U.K., compared to 158 for U.S.-owned companies and 46 by companies from West Germany. Yet American and German inward investment tends not to attract the same degree of attention as Japanese inward investment.

Tabuchi's non-union, single-status factory, employs mainly female operatives in the production of transformers and power supplies for microwaves and other consumer electronics goods. It stands in stark contrast to the heavy, skilled engineering establishments which characterised the town throughout the early twentieth century (see Chapter Three). It is also novel in two other respects. First, most of the previous major investments by Japanese companies in the North East had been in engineering and/or tended to employ male workers (e.g. Nissan, Komatsu, Sumitomo). Second, as a supplier of

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components, Tabuchi is part of the 'second wave' of inward investors from Japan, set up to supply 'first wave' Japanese consumer electronics companies, amidst concern over the possible extension of European Commission 'dumping' controls to the import of components.

In this Chapter it is asked whether Japanese ownership has made any difference to the pattern of work and labour flows at Tabuchi (relative, say, to other factories employing predominantly women in the North East). The evidence supports the view that 'Japanisation' is another example of a 'chaotic conception' (Dickens and Savage, 1988). The popular belief about 'a job for life' is (once again) shown to be illusory. (This is true even in Japan - see Kamata, 1983; George and Levie, 1984). However, it is argued that although there is little to distinguish work content and the pattern of production line assembly from experience in non-Japanese factories, employment at Tabuchi does carry some additional meaning for employees, (though the extent to which this is a temporary phenomenon is open to question).

The case study is reported below in sections as follows:

- (i) background information;
- (ii) product market context;
- (iii) work patterns and practices;
- (iv) employment structure, shift patterns and monthly changes in labour demand during the study period;
- (v) recruitment policy and methods;
- (vi) union position, wage bargaining and levels of pay;
- (vii) net impact on the local labour market and unemployment.

Section 8.3 draws together the findings of central significance to this thesis.

8.2 The Tabuchi Case Study

(i) Background

Tabuchi Electric has twelve factories in four countries (Japan, Korea, U.S.A. and U.K.). The factory studied in this Chapter is the company's sole U.K. establishment at the time of writing. (The Appendix at the end of this Chapter provides a chronological account of Tabuchi's growth and expansion from its base in Osaka, Japan, where it originated in 1925). World-wide, Tabuchi had annual sales of around £135 million and employed approximately 2,400 in 1986/7.

The decision to locate within Stockton TTWA was the final part of a multi-stage decision making process. First, there was the desire to establish production facilities within the European Community for reasons discussed above. Within the E.E.C., the choice of the U.K. was the result of a number of factors. First, as a 'second generation' Japanese inward investor, the company was to some extent a 'follower' - the U.K. having proved popular with the 'first generation' of Japanese investors. Second, a reason given by Tabuchi, and often cited by other Japanese companies, is that the English language is both easier to learn and of wider international utility, especially in the U.S.A. where, of course, Tabuchi already had a manufacturing facility. Indeed, the Thornaby factory is a joint project between Tabuchi Electric of Japan with a 75 per cent stake, and the U.S. company which holds the remainder. The Managing Director of the Thornaby factory, Itaru Nakagawa, had been in charge of the Tennessee plant for the previous five years.

A third possible factor was that sales of microwave ovens - (one of the most lucrative markets for Tabuchi, with the company claiming 40 per cent of the world market) - are higher in the U.K. than on the Continent (3). Nevertheless, Tabuchi plans in the long term to export half of its Thornaby output to the Continent and the east coast location in the

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U.K., with ready access to Tees Dock, was important in this context.

Furthermore, within the U.K., Teesside Industrial Estate (4) is well-placed for access to the main local North-South highway (the A19). This was an important consideration given the spread of Tabuchi's customers from Mitsubishi and Sharp in Edinburgh to Toshiba in Plymouth and from Sharp in Wrexham to Sanyo in Lowestoft. Last, but certainly not least (as suggested in the introduction above), the existence of a large pool of available labour was a major attraction of the Thornaby site. By locating on the Teesside Industrial Estate, Tabuchi avoided the main sources of competition for female workers in other parts of the borough (see Fig. 2) - from North Tees General Hospital (2,500 workers - see Chapter Six), KP Billingham (over 1,000 workers - see Chapter Four), Lyons Tetley at Eaglescliffe (260 workers) and from retailers in the town centre.

Tabuchi draws around 80 per cent of its workforce from housing estates in Thornaby, in the Mandale ward of Stockton. This was the fourth most densely populated of the 30 wards in Stockton TTWA at the 1981 Census. In February 1986, the number of unemployed in Mandale as a proportion of the number economically active (at 1981) stood at 23 per cent.

This does not mean, however, that the choice of Thornaby was a quick or straightforward one. First contact with the North of England Development Council was made as far back as 1978. Before choosing its present site, Tabuchi considered 25 other potential locations in the U.K. alone (NEDC, undated). As in the more highly publicised case of Nissan (see Crowther and Garrahan, 1988), the prospect of attracting a Japanese company led to rivalry between authorities in different parts of the E.E.C. in an attempt to produce the most attractive package of financial and other assistance.

Table 8.1 summarises the principal agents responsible for the package which attracted Tabuchi to Cleveland (a designated 'Development Area', eligible for regional assistance from Central Government). Total investment (including grants) was reported to be around £7 million (Evening Gazette, 16.6.87.).

Table 8.1 Package of assistance attracting Tabuchi to Cleveland

Body	Assistance
Cleveland County Council (and E.E.C.)	up to £233,000 for:- - a feasibility study to determine the best site in Cleveland; - a wage subsidy covering the employment of 150 unemployed Cleveland residents (including £70,000 from the European Social Fund for training) - an offer of free training for 15 people at its CAD/CAM centre.
Department of Trade and Industry (Regional Office)	£699,000 - Regional Development Grants provided at 'old' rate of 22 per cent of costs, despite switch to 15 per cent during negotiations.
English Estates (North)	£890,000 * - 44,000 sq.ft. (4,000 sq.m.) factory purpose-built on a 2.8 acre (1.1 ha) plot.
North of England Development Council **	Practical advice and assistance in establishing contact with funding bodies.
Yarmside Holdings (property company)	- promise of a housing deal for key workers.
* - this sum may include part of the DTI assistance and so adding the figures to achieve 'total assistance' might involve double-counting. Also, English Estates retain ownership of the factory, so the money is not a grant as such.	
** - the NEDC was superseded by the Northern Development Co. as the region's inward investment body in September 1986.	
Sources: <u>Evening Gazette</u> (various dates); <u>British Business</u> (17.2.89. p.35);	

As early as October 1986 plans for a 37,000 sq.ft. (3,367 sq.m.) extension - and a further 150 jobs - were announced

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and builders started work for English Estates in January 1987. Following the official opening ceremony in March 1987, the extension was due for completion on 10.7.87. - the day after the final research visit to the company.

(ii) Product market context

Electronic components are divided into 'passive' and 'active' components. The latter include the integrated circuit which has been central to most of the recent developments in micro-electronics (Freeman, Clarke and Soete, 1982). Tabuchi's products (small bobbin transformers, transformers for microwave ovens and power supplies) are passive components. Table 8.2 shows how the various markets changed (in terms of the value of output) between 1983 and 1986.

Table 8.2 Changes in the output of electronic components produced in the U.K. 1983-6

Product	Output (£m-current prices)		
	1983	1986	% change
Active components			
Integrated circuits	272	431	+58
Valves and tubes	176	219	+24
Discrete semi-conductors	121	140	+16
Sub-total	569	790	+39
Passive components			
Printed circuit boards	148	275	+86
Connectors	128	184	+44
Capacitors	71	102	+44
Switches	50	104*	+108
Resistors	42	44	+5
Other passive components **	69	56	-23
Sub-total	508	765	+51
GRAND TOTAL	1,077	1,555	+44
Source : NEDO (1984; 1987).			
* - 1986 figure includes relays			
** - includes circuit protection devices, filters, microwave components, solenoids, transformers, chokes and coils.			

These figures should be interpreted with great caution. Rapid changes in design characterise the business and make it

impossible to provide accurate indices (NEDO, 1984). However, two points can be made. First, with one exception, output of all categories of electronic components has been on the increase. The real increase is greater than suggested by the figures. Most electronic components are traded internationally and, overall, prices have dropped rather than increased.

Second, the one category shown in Table 8.1 to have fallen in output between 1983 and 1986 includes transformers. Significantly, though, the 1986 figures include an additional category entitled 'allowance for small companies'. This accounted for £245 million of output on top of the £1,555 million total that is given above. Small manufacturers are limited to the production of 'passives', since active components involve capital intensive production processes and these are concentrated into a few high-volume manufacturing sites. Accordingly, active devices are almost exclusively the preserve of a handful of international players, while a host of small and large companies operate in the passive sector. Once the allowance for small businesses is made, it is probable that the 'other passive components' category would record an increase in output along with all the others. With sales approaching £1 million a month by the end of 1986, Tabuchi certainly would have contributed to any increase recorded since 1986.

Similarly, Tabuchi is likely to contribute positively to the U.K. trade balance which, in electronic components, slipped from -£116 million in 1980 to -£563 million in 1984 (NEDO, 1985). Thus, whereas initially Tabuchi purchased only 40 per cent of its raw materials in the U.K., this proportion had risen to 85 per cent by 1987. The standard features of a transformer are a primary and a secondary coil of wire on a laminated 'former'. This is encased within a mould, with facilities for electrical input and output. Copper wire and

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the laminated formers are obtained in the U.K., while the bobbins are shipped in from Japan for compatibility with the Japanese machinery. If the design of the transformer is common to both Japan and Europe, the moulds are imported from Japan. However, if the design is used only in Europe, the moulds are purchased in the U.K.. (Decisions on such issues are important in the context of 'local content' rulings (see footnote 1) by the European Commission)

In 1987, thirteen per cent of output was exported (mostly to Europe) and the target was to increase this to 30 per cent in 1987 (Evening Gazette, 16.6.87.). However, set against this, a negative contribution to the trade balance was made as a result of shipping in machinery from Japan and in the future, as profitability increases, there will be an outflow of funds back to Japan.

Although a number of established customers are now secured, a steady flow of potential new ones approached the company throughout the study period. For example, Hitachi announced plans to build a new microwave oven factory in Hirwaun, South Wales, in 1987 and Tabuchi expected to win the contract for the supply of transformers. The arrival of Samsung (from South Korea - see Chapter Four) in Billingham, producing video recorders and with plans to manufacture microwave ovens, provided a more local source of demand for Tabuchi.

In Autumn 1986, the company expected at least to double its output of microwave oven transformers in 1987, based on estimated levels of demand provided by customers and on the company's own projections. However, output of micro-wave transformers in fact tripled, the production of SBTs rose by 80 per cent and that of power supplies was expected to double. This rapid expansion created problems both in terms of recruitment and supplies of 'raw materials' (see subsequent sections). The rise in demand was attributed by the company to its increasing share of an expanding market in

Europe. Tabuchi's major competitor (also Japanese and part of the Sony Corporation) had no European operations at the time of the research. However, the arrival of a competitor within Europe to check and reverse Tabuchi's growing share of the market must be a distinct possibility, with implications for employment at Tabuchi.

The other possible 'threat' to the Teesside operations is technological in origin. The fast rate of change in the design of consumer electronic products makes constant demands on the suppliers of components. No fundamental changes in technology were required during the study period, but the Personnel Manager indicated that, in time, new winding machines may be required to cope with new designs. The absence of research and development at the Thornaby works and the dependence on Japan as the source of all new technology are characteristic not only of 'screwdriver' (assembly-only) operations, set up to avoid import restrictions but more generally of branch plants in the peripheral regions (see Smith, 1985).

(iii) Work patterns and practices

The scale of production of each of the products made at Tabuchi varied during the study period (see iv below) but power supplies occupied relatively small numbers of employees throughout the period. The company manufactures only when it has firm orders and there is no production for stock. This is partly because of frequent changes in customers' specifications - the company claims that the design of a transformer has a life in production of about one year before it is replaced by a newer version. However, it is also, in part, because Tabuchi has a long-term aim of achieving 'just-in-time' (JIT) methods of production (see Sandras, 1986; Graham, 1988) (5).

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Essentially, a JIT purchasing and manufacturing policy involves an attempt to eliminate wasteful inventory. Ideally, materials should arrive as and when required on the production line, and orders should be completed on the date specified by the customer, thus minimising capital tied up in stock. However, U.K. suppliers have not so far been able to meet Tabuchi's requirements in terms of reliability - partly because of the faster than anticipated expansion of the company, which placed a strain on the capacity of suppliers. Consequently, the company uses more than one supplier for crucial items and some storage is necessary.

Transformers (and power supplies) are put together on a production line basis at Tabuchi. At one point on this line there are operatives working on winding machines. Connected to bobbins of wire, these machines are set up to make a specified number of turns in wire of a certain thickness, in accordance with customers' specifications. In the long run it is intended that all operatives will be trained to set up their own machines. However, during the study period this task was performed only by team leaders and supervisors (who were trained by Japanese staff members).

The number of operatives on the line varies from ten to 14, depending on the complexity of the product (e.g. transformers for microwave ovens require 14 workers per line). Workers on the lines are split into teams (6) and each team has a team leader (a 'working first line supervisor'). These leaders are responsible for overcoming any problems on a line and for maintaining discipline. Operators have the chance of promotion to team leader and, in turn, leaders can be promoted to a ('second line') supervisory position.

Training for the production lines consists of sitting alongside an experienced operator for three two hour sessions. After that, a new recruit understands the basic operations and must build up speed via a process of 'learning

by doing'. As suggested by the limited period of training required, each distinct task is relatively straightforward, given a reasonable degree of manual dexterity. This point is important because it means, in effect, that the quantity of labour supply is more important to the company than the quality in terms of achieving flexible patterns of work. In other words, the 'fixity' of labour is not great and fluctuations in labour demand can be met through 'hiring and firing' rather than, for example, through a mixture of 'hoarding' and use of over-time.

A stated intention of the company is to introduce 'flexibility training' so that operatives learn how to do several or all of the various jobs along the production line. However, because of the pressure to meet rapid growth in demand during the study period, there was insufficient time to move workers away from their specialist tasks. Furthermore, the Personnel Manager's time was absorbed by recruitment and the job of establishing a personnel record system. Attempts to recruit supervisors, who could have overseen such training, met with limited success (see v below).

Not only would flexibility training be of advantage to the company though, (e.g. reducing problems when cover is required for sickness and holidays), it would also be welcomed by the workers themselves as a way of introducing greater variety into the work. As one employee noted:

It would be better if you could move around and do different jobs on the line, but they won't do it because numbers [of finished products] would be down.

Another aim of the company was to introduce 'quality circles' (see George and Levie, 1984; Black and Ackers, 1988) and consultative committees (see Lewis, 1989). On the final visit to the company in July 1987, the Personnel Manager reported that a room had been equipped with tables and seating for around 40 people in preparation for the introduction of

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quality circles. The intention was initially to have three or four quality circles, each of around 40 workers, meeting once a week for about an hour (of work-time). The focus of the circles was to be on production methods and ways of improving working practices. However, there was a realisation within the company that quality circles do not necessarily have positive outcomes - an attempt to introduce them in Tabuchi's Tennessee factory was unsuccessful and they are not used in all of its factories in Japan (see also, Oliver and Wilkinson, 1988). Plans to introduce consultative committees were less advanced but would involve fewer people and would concentrate on issues of pay and working conditions, as an alternative to union representation.

The 'non-union' status of the factory (see vi below) along with the plans for quality circles and consultative committees and the moves towards JIT production might suggest to some the existence of a 'Japanisation' strategy for the workplace. Ackroyd et al (1988) might describe this as 'direct Japanisation', although their identification of a separate category of 'mediated Japanisation' (i.e. copying of 'Japanese' practices by British employers) is problematic in this instance (and others) because the Personnel Manager at Tabuchi is British, with previous experience in personnel policy amassed at Plessey's factory in South Shields, Tyne and Wear (see also the critique of the concept of 'Japanisation' by Dickens and Savage, 1988). Indeed, an important finding of the North East Area Studies of the 1970s was that local managers are often recruited by incoming (U.S.) companies precisely because of their knowledge of local labour markets (Johnson and Townsend, 1976).

In more general terms it is important to question whether Japanese ownership has made a significant difference to working patterns and practices at Tabuchi's factory. Although

the Personnel Manager was taken to Tabuchi's plant in Tennessee to see how the company operated, he claimed:

the principal task was to learn how to make transformers - it was equipment and methods rather than philosophy.

He added that the experience had not affected the way in which he approaches the personnel function. Nevertheless, an impression is created that employment at the factory is somehow different and 'special'. The receptionist spoke of how "you feel they care that little bit more about you". A cake on each individual's birthday is a small but appreciated example of this policy. In addition, there was a feeling that good work and regular attendance were recognised and rewarded by the company. Four months' unbroken attendance earns a worker a bonus payment of £30 (net of tax), rising to £40 after eight months, £50 and a certificate after 16 months, and £50 for each consecutive month thereafter. The Personnel Manager reported that during the study period "around a dozen" workers received bonus payments each week. Furthermore, these payments are presented once a week during company time at one of the daily briefings for each shift. These briefings involve the supervisors informing the workforce on the previous day's performance, and discussing any problems encountered or items of new machinery to be introduced. Once a month the Production Manager addresses the workforce and every two or three months the Managing Director personally updates workers on the state of the order book and gives his views on the factory's performance. The flow of information, however, is not one-way and workers are encouraged to ask questions and make comments.

However, according to Bill Gold (Personnel and General Affairs Manager of NEC Semiconductors (U.K.) Ltd. in Livingston, Scotland), the true distinction is not between 'Japanese' and 'non-Japanese' management techniques but between good and bad personnel management (Gold, 1988). Thus,

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many so-called 'Japanese' techniques have been adapted from American personnel manuals. Adaptation is the key word, as the Deputy Director of Matsushita has noted:

We understand that this is Britain, with a totally different history and traditions, and therefore the Japanese have deliberately sought not to impose the Japanese way of doing things, but rather to evolve, in consultation with the employees, a system which actually works

(quoted in Khi Pang and Oliver, 1988 p.20).

A sense prevails, though, that employment at Tabuchi is somehow a "little bit different" by virtue of Japanese ownership. The various measures (bonuses, team briefings etc.) used by Tabuchi contribute to a situation in which this belief is "practically-adequate" (i.e. it generates expectations which are, or appear to be, realised; Sayer, 1984 p.66). Similarly, in the study of Japanese companies by Khi Pang and Oliver (1988) it was found that:

Their very Japan-ness may also be an advantage, in that employees apparently expected working conditions and practices to be different (p.20).

High profile media coverage (see Introduction above) adds to the notion that working for the company is somehow 'special'.

Finally, on the subject of working practices, there is the issue of the use of sub-contractors. On the production side, some wire bending is sub-contracted to a Hartlepool firm and some sub-assembly work is undertaken by a smaller company on the same industrial estate as Tabuchi. During the study period negotiations were underway with another small company in Stockton to discuss the possibility of them doing some low volume work for Tabuchi (7). The use of such sub-contract arrangements provides an additional source of flexibility for the company, enabling it meet temporary peaks in output without recruiting any direct labour ([C1] in Table 2.1).

As for on-site functions performed by non-employees, a contract cleaning company carries out routine office

cleaning, (but the company also directly employs one full-time and two part-time cleaners). There was no canteen at the factory, but by the time of the last visit to the company (July 1987) a food vending machine had been installed in the factory's 'break' room. This was run by external contractors.

(iv) Employment structure, shift patterns and monthly changes in employment 15.7.86. to 9.7.87.

Before looking in detail at the changes in employment and labour demand over the study period (c below) it is useful to describe the labour force composition (a below) and the pattern of expansion of factory's productive capacity and the introduction of new shifts (b below).

(a) Labour force composition

Table 8.3 provides a guide to the sexual composition of the labour force on 15.1.87., roughly in the middle of the study period.

Table 8.3 Sex composition of the labour force at Tabuchi 15.1.87.

Category	Morning		Evening		TOTAL	
	Male	Female	Male	Female	Male	Female
Production operator	24	112	37		173	
QC operator	2	18	2		22	
QC technician	2	0	0	0	2	
Supervisors (2nd)	4	0	1	0	5	
Cleaners		3	0	0	3	
Warehouse	4	0	0	0	4	
Staff	1	9	0	0	10	
Maintenance	0	0	1	0	1	
Senior staff	15	1	0	0	16	
TOTALS	195		41		236	
Source: Personnel Manager, Tabuchi.						

The day shift ran from 08.00hrs to 16.30hrs with a 30 minute unpaid lunch-break and a ten minute (paid) break in the morning and afternoon. It therefore involved a 40 hour week.

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The evening shift ran from 16.30hrs to 22.00hrs, with one 15 minute (paid) break. Since this made up a 27.5 hour working week, it counts as part-time employment if the standard 30 hour cut-off is used. The number of lines in use varied over the course of the fieldwork (see below), but on the date for the count in Table 8.3 there were, on day shift, six lines making small bobbin transformers (SBTs), two making microwave transformers and one making power supplies. On the evening shift there were one microwave and one SBT line in operation.

By the end of June 1987 there were 193 production operators on the day shift and 92 on the evening shift (which by then involved three SBT and two microwave lines). In addition there was a full-time night shift from Monday to Thursday, from 22.00hrs to 08.00hrs with a 15 minute break after 2.5 hours, a 30 minute break in the middle and a ten minute break at 06.00hrs. A total of 39 operators and four quality control operators were working this shift. Of the total figure of 324 production operators by late June, 286 were women and 38 were men. All of the 31 quality control operators (20 day; 7 evening; 4 night) were female and all bar one of the 24 senior staff were male, as were supervisors and technicians.

A rapid increase in demand for labour at the end of the period was causing management to reconsider its position on the recruitment (or non-recruitment) of male operatives (see v below). Unfortunately, it is not known whether any significant numbers of men have been recruited for operative jobs, but the mere fact of reconsideration raises some interesting questions about the role of gender in the process of job allocation (8).

Finally, the average age of the production operators varied from 21 on the the day shift to 26 on evenings, reflecting a preference for older, married women on this shift (see v below).

(b) New lines and new shifts

Production at Tabuchi's Thornaby factory commenced in January 1986 with two production lines operating during the day-time (08.00hrs to 16.30hrs) and 35 employees. Three additional lines were started in March and employment rose to 108 by April. By May 1986 a further three lines were operational and the company had met its 'Stage One' target of 150 employees, agreed with the County Council.

In June 1986 a decision was taken to operate some of the lines on a 'temporary' evening shift (from 16.30hrs to 22.00hrs). The factory closed down for the summer holiday during the last week of July and the first week of August and reopened with an additional two lines in use during the evening shift. In September a new line came into production during the day shift, resulting in a total of nine lines (see a above).

Under the expansion announced in the same month, the '6-2-1' small bobbin transformer, microwave transformer, power supply combination of lines was intended originally to expand to '10-3-3'. At this time the plan was to move evening shift workers on to day shifts, working on new lines in the factory extension. In light of strong sales a decision was taken to add extra capacity via a '12-3-4' format. However, continuing sales growth in 1987 led to another up-rating of the long-run plan to a '12-5-3' format.

Meanwhile, two more of the existing lines were brought into use during the evening shift in the run up to Christmas, but were subsequently 'dropped' (see c below). After Christmas, demand continued to increase and a microwave transformer line was brought into action on the evening shift.

In March 1987, a temporary (three to four month) night shift (22.00hrs to 08.00hrs, Mondays to Thursdays) was started to train labour in preparation for the factory expansion. Three

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SBT lines were operated on this night shift and the plan was to transfer two of these lines on to day-shift working on 10.8.87.. However, demand was increasing so fast at this time that the Personnel Manager was preparing to recruit two new teams to replace them on the night shift. In July 1987 he indicated that although the long-term plan was to have day-time working only, "it doesn't look like we will get to it". In fact, the evening shift had proved itself to be of value to the company in a number of ways. These are considered below, but now attention turns to the month-by-month pattern of labour force changes.

(c) Changes in employment and labour demand

Table 8.4 Change in total employment at Tabuchi 15.7.86. to 9.7.87.

Date	Employment+	Comments
15.7.86.	180	Figure includes day and evening shift.
11.8.86.	192	Recruitment for two new evening lines.
8.9.86.	233	Recruitment for new evening lines continuing and new transformer line started on days.
8.10.86.	272	Two more lines brought into use on the evening shift to meet the Xmas rush.
7.11.86.	273	Replacement recruitment on evenings
11.12.86.	235	Reduction as two lines taken off on the evening shift.
18.1.87.	244	New line started on evening shift for microwave oven transformers.
31.3.87.*	300	Increase on evenings and a night shift started
30.4.87.*	348	Recruitment on evenings and nights
31.5.87.*	374	Continuing recruitment on evenings and nights
9.7.87.	429	Additional lines on evenings and nights

Source : Personnel Manger, Tabuchi Electric (U.K.).

+ - The total employment figure includes both full-time day (and night) shift workers and part-time evening shift workers.

* - No visit made (figures obtained at final meeting).

Table 8.4 (above) charts the changes in total employment against a summary of the changes in production line utilisation and changing shift patterns.

At the final meeting (9.7.87.) the Personnel Manager predicted that employment would reach 500 by the end of 1987. The changes in employment levels disguise the fact that there were 'leavers' as well as 'joiners' during the study period and Table 8.5 breaks down the monthly net employment changes into their component parts.

Table 8.5 'Joiners' and 'leavers' at Tabuchi during study period 15.7.86. to 18.1.87.

Month to:-	'Joiners'	'Leavers'	Net change	Employment at end date
11.8.86.	4 staff 11 prodn. operatives	3 pregnancies	+12	192
8.9.86.	45 prodn. operatives (3 male)	4 off evenings	+41	233
8.10.86.	1 day shift janitor 11 day shift on new transformer line 35 prodn. operatives (4 male)	2 pregnancies (off days) 3 to full-time jobs 1 disliked the work 2 for family reasons (all off eve)	+39	272
7.11.86.	8 on to eve (2 male)	2 dismissed on days (bad time- keeping) 1 janitor 3 (eve) to full time jobs 1 personal	+1	273
11.12.86.	2 on to eve 1 sales clerk 1 temp 1 QC clerk	2 to full-time jobs 40 'shed' off evening shift	-38	235
18.1.87.	10 on to eve 1 clerk 1 warehouse 2 supervisors	2 pregnancies 1 dismissed 1 to full-time 1 illness	+9	244
Source : Personnel Manager, Tabuchi.				

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By the time of the 'year-on' interview in June 1987, there had been net increases in the number of production operatives of 57 on the day shift, 55 on the evening shift plus the additional 39 on the night shift. Other significant increases in the labour force between January and July 1987 included another eleven quality control (QC) operators (seven on evenings and four on nights), four more in the warehouse, eight extra senior staff and six other staff. (As these are all net increases, the numbers recruited could have been higher, in order to cover for 'natural wastage'). With the addition of a handful of new jobs (e.g. a goods inward inspector; a stock control clerk), the total employment figure by July 1987 was around 429 (including 90 men).

Turnover of workers was for fairly standard reasons, including a mixture of pregnancies, personal/family reasons and leaving for alternative jobs. Those who left for alternative employment were predominantly from the (part-time) evening shift and found full-time jobs during the day, (some going to work in a Gateway supermarket which opened in Thornaby town centre during the study period).

There was a fairly high 'drop-out' rate (around one in ten) during the first two weeks of the night shift's operation. This was put down to the unpopularity of working four nights a week for ten hours, but also because the standards of recruitment were lowered as the supply of applicants dwindled ([A2] in Table 2.1). Thus, the Personnel Manager was forced to recruit people who he did not feel would 'stick' with the job (more details in v below).

Two main observations were made during the study period - the first concerned the events of November/December 1986 when the number of employees actually fell and the second involves the use made of the evening shift.

Between 8.11.86. and 11.12.86., as shown in Table 8.4, 40 evening shift workers lost their jobs at the factory. Total

employment consequently fell from 273 to 235. (Ironically, at the same time the Evening Gazette was reporting the company's expansion and the prospect of 150 'new' jobs). The 40 workers had been recruited on a temporary basis, as had become policy by this time (see v below). At their interviews the Personnel Manager had informed them that work beyond their three month contracts was not guaranteed. However, their individual files were kept when their contracts ended and, when employment picked up in the new year to 263, half of the increase was made up of those who had been 'laid off' beforehand and who had performed well on the job. At the November meeting, the Personnel Manager had predicted such a turn of events:

With the run up to Christmas, overmanning is likely on SBTs [small bobbin transformers] followed by undermanning on microwaves in February and March. Over the next fortnight we've got to decide whether to run the surplus through to avoid that shortage later on, or whether to introduce some lay-offs. Put it another way - we've got a two month gap for half [of] evening shift.

In a 'tighter' labour market 'labour hoarding' would probably have been the preferred option (so as not to lose staff on a competitive external labour market). However, Tabuchi was able to reduce labour demand in direct relation to the changing pattern of product demand. The ability of the company to act in this way has to be seen in the context of locally high unemployment, lack of union representation and the low level of skill attached to the work. The classification of the evening shift as 'temporary' enables employment levels to be moved up and down in this way with little 'outcry' (see similar comments in Chapter Four).

The evening shift serves a useful function for the company in this respect. It works to the company's advantage in other ways too. First, it provides a useful 'screening mechanism', allowing the company to assess workers' abilities whilst on a temporary contract and before offering them a full-time contract on the day shift. Second, the 'fixed costs' of

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employment on the evening shift are lower as the temporary employees are not included in the company's pension scheme. Thirdly, the evening shift acts as a useful vehicle for the company's training. By concentrating training in the evenings, output on the day shift is maximised and trainees can gather pace at a steady rate on the evening shift before joining the day teams. Finally, it ensures more intensive use of the capital equipment, reducing the 'pay-back' period. Thus, although the company's stated intention was to move to a situation where all work was performed on the day shift, there are good reasons from a company perspective for keeping the evening shift in operation, at least until the employment increase levels off. Once rapid transfer from evening to day shift is no longer possible, however, the attraction of the evening shift is likely to disappear.

(v) Recruitment policy and methods

(a) Production operators

The story of recruitment at Tabuchi is perhaps the most interesting of all the case studies. For a start, it was one of the few major employers in the TTWA at the time that was enjoying a sustained increase in the level of employment. In addition, as a relatively new employer, no clear policies on recruitment had been established or, where they had, circumstances dictated constant reappraisal.

The introduction of an evening shift (see above) as a 'temporary' measure had significant implications for recruitment policy with the Personnel Manager initially recruiting on to the evening shift wherever possible. All new recruits started on temporary contracts including a probationary period of three months. Depending on the 'order book', some recruits were offered no more than three months while others were given contracts for six months at first.

Unsatisfactory performance whilst on probation could lead to instant dismissal but after three months a system of warnings operated before an employee could be discharged.

'Recruitment' on to the day shift consequently involved mainly transfers from the evening shift, on a replacement-only basis. Evening shift workers could not apply to be moved on to the day shift, but they could refuse if they were offered such a move and it was inconvenient. A list of the workforce was maintained, with details of when each person joined. Individuals were offered day shift work on the basis of their length of service, with due regard paid to their record of attitude and attendance.

Given the local labour supply position and the lack of competing demand for female labour (see i above) it is unsurprising that for most of the study period there were no problems in recruiting labour (although see below). By December 1986, over 2,000 applications had been received for jobs at Tabuchi (relative to the total employment figure of around 240 at the time) (9). (The company had not become involved in the Government's Youth Training Scheme because trainees could not, by law, be used in direct production and the Personnel Department had insufficient time to devise and supervise a training schedule. However, it was considered a potential source of recruitment for later years).

Given the large numbers applying for production operator jobs, the Personnel Manager has been able to be very selective. On average he claims to accept one in four applicants. At times, however, he was forced to relax requirements ([A2] in Table 2.1) in order to ensure that new lines started on time. For example, during the meeting on 8.9.86., Bill Ballantine commented:

We're interviewing today and tomorrow and if eleven turn up and pass they'll start [on] Friday.

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Again, during recruitment for additional evening lines in October:

I took people I wouldn't have taken on for a permanent day shift. That's based on my judgement as to whether they're going to stick.

Vacancies are advertised in the factory and are announced at morning and evening meetings between supervisors and the workforce. If the numbers required are large, the vacancies are reported to Stockton Job Centre which was regarded as "good for [filling] low-level jobs". The Job Centre 'screens' applicants based on criteria laid down by Tabuchi's Personnel Manager. In urgent situations the company has had messages broadcast on the 'Job Facts' spot on Radio Tees. In addition the company receives frequent telephone calls and letters from job seekers, who are sent application forms. A waiting list had been compiled of such applicants and those considered suitable are called in for interviews as jobs become available.

As expected, 'word of mouth' contacts play an important role in attracting labour to the factory. (Employment of close relatives was avoided, however, in case of accusations of 'favouritism' - although, see below). One female operator, who herself was introduced to the company in February 1986 by a friend, confirmed the existence of widespread informal channels of recruitment (10). Furthermore, her comments revealed that workers themselves perform an important 'screening' function when considering whether to recommend people to work at the factory:

I've got people jobs here - but they've got to be prepared to work. The one downfall is if they're no good, it comes back on you. That happened to me with a couple of ther younger ones. I'll not be getting any more application forms.

Further evidence of word-of-mouth contacts occurred in September 1986: of 47 new recruits, ten came from Billingham,

all knowing each other and organising a 'car-share' scheme to get to the Industrial Estate.

Both Tabuchi's specification of supply-side characteristics to help the Job Centre identify suitable applicants and the informal network are likely to reinforce supply-side views about the type of jobs on offer at Tabuchi. Whilst the employees spoken to said they would take forms for men as well as women, one remarked that "the lads do the laminations - they get a bit of stick if they do winding". The Personnel Manager stated that the few men on the production lines were for the "heavy tasks" where "you need big hands" (e.g. lifting the microwave transformers).

At job interviews, applicants for production operator jobs must take three tests - one memory and two dexterity. Part one of the 'Crawford Small Parts Dexterity Test' measures dexterity in using tweezers to insert small pins in close-fitting holes in a plate and in placing small 'collars' over protruding pins. Part two involves starting small screws in threaded holes in a plate and then screwing them down with a screw-driver. Both tests are performed against the stop-watch.

For the initial interviews, when the company was first set up, the first line supervisors attended (as occurred during Nissan's recruitment at Washington - Industrial Relations Review and Report, 1986). However, due to the rapid rise in the number of interviews, this practice stopped. It was planned, though, to bring in supervisors again once the number of interviews levelled off. In the periods of expansion, an effort was made to recruit a whole line at a time so that training and speed-up times could be achieved in a co-ordinated manner.

Certain factors other than dexterity enhanced an applicant's chances of success at interview. First, other things being equal, local (i.e. Thornaby) applicants were preferred. This

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was thought likely to minimise lateness and absenteeism. It also means that the costs of travel to work are unlikely to feature strongly in wage negotiations. Secondly, it appears that left-handed people are at a disadvantage when trying to operate the winding machines. This emerged during a discussion with a left-handed operator who had 'slipped through the net'. Thirdly, on the evening shift, married women were felt to be more likely to stay in post than young, single applicants who often were looking for a full-time job during the day (see also details of the 'back' shift at KP Foods in Chapter Four).

Fourthly, the Personnel Manager said that in selecting applicants for interviews, he often invited first those already in employment and/or not on the telephone. This was in order to give him a 'safety valve' if recruitment became a matter of urgency (i.e. he could telephone applicants who would be available immediately). Whilst it is unlikely that such a policy was adhered to rigidly, it suggests another way in which being unemployed can work against an applicant in their chances of being called for an interview. (Although it was not stated, it is possible that underlying this policy could be the knowledge that a good reference from a current employer is a reasonable guarantee of an applicant's work 'suitability'). In contrast, the job subsidy scheme agreed with Cleveland County Council worked in favour of the unemployed. Under this agreement, the company was paid a subsidy for all unemployed residents of Cleveland who were taken on (up to 150 recruits). This subsidy varied according to the person's age and their duration of unemployment (11). Thus, by December 1986, of 169 people who had joined the company since October 1985, 118 were previously unemployed (including those on Youth Training Schemes and the unemployed ineligible for unemployment benefits). Of those who were recruited directly from other jobs, the main category of

previous employment was retailing where earnings potential was lower (see vi below).

Interestingly, the rapid expansion in 1987 created pressure for a reevaluation of some recruitment policies, with the Personnel Manager reporting in August 1987 that he was "running out of female labour". With 70 positions to fill, the company was hoping to interview around 200 applicants (indicating a higher acceptance rate than previously). Since considerably less than 200 people were either on the company's records or had made a fresh application, Tabuchi was forced to consider alternative options.

By mid-1987, training and recruitment on all shifts had become necessary and extensive overtime work was available ([A16] in Table 2.1). Overtime involved dayshift workers staying on to work on the 'free' lines on the evening shift. There was also overtime work for the night shift on Friday nights and some work available at week-ends. In early August the company received an exemption from the Factory Inspectorate allowing it to recruit under-18 year olds for the night shift. This enabled a supply of labour to be 'tapped' through the County's Career Service. In addition, the Personnel Manager was rethinking his policy of not employing close relatives. Lastly, he was contemplating the recruitment of male operatives (see footnote 8).

(b) Recruitment of other workers

When Tabuchi started up its Thornaby operations it had five Japanese and five British employees. The latter included Bill Ballantine, the Personnel Manager, who had been working for Plessey in South Shields. Of the other British recruits, one came from Thorn EMI at Spennymoor and another had been working for NSK, the Japanese ball bearing factory in Peterlee (both in Co. Durham). Management at Thornaby during

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the study period included four Japanese people (the Managing Director, the Company Secretary/Accountant, the Sales/Engineering Manager and the 'Quality Manager'). In addition to Personnel, the responsibilities of the British management were for Products and Materials.

Vacancies for supervisors, design and technical staff were advertised in the Evening Gazette, the Yorkshire Post and through the agency, P.E.R. (Professional and Executive Recruitment). During recruitment for supervisors in October 1986, the company intended to take on more than were immediately required in order that they would be trained by the time of the expansion. The Personnel Manager was looking for people who had experience of supervising female workers, in light engineering or possibly textile factories.

A total of 62 applications was received (only one from a woman) and 19 were called for an interview. After the interviews, eight (of the 19) were short-listed and eventually four of them (all male) were offered jobs. Three of these had heard of the job through P.E.R. and the other one saw the advertisement in the Evening Gazette. Three of the successful applicants were around 40 years old and the other was 27.

Of these four, only two accepted the offer. One of those declining was a man from the North East who was already employed by a brick company in London. His stated reason for refusing the job was that it was not senior enough, but Tabuchi's Personnel Manager suspected that he may have been offered a higher wage by his existing employer. If this was the case, it provides an illustration of the way in which recruitment amongst the 'already employed' (as opposed to from the unemployed) adds to wage inflation. The other person who turned down the job offer was unemployed, but had been offered another job at the same time and had chosen to accept that one instead.

The departure of an existing supervisor at the same time as the two new ones started led to growing concern about possible turnover of supervisory staff using their 'Japanese experience'. Another case of 'poaching' of a supervisor was reported at the final meeting in July 1987. By this time, a second round of advertisements for supervisors had been placed in the Newcastle Chronicle and the Northern Echo as well as the local papers, indicating a widening of the spatial search to the regional level in an attempt to improve the quality and quantity of applicants ([A3] in Table 2.1).

Accompanying the advertisements for supervisors in the regional and local press were adverts for graduate engineers and designers. Meanwhile advertisements for quality control and maintenance technicians were placed in Stockton Job Centre and remained on display from October 1986 through to January 1987. By July 1987 the company had recruited three quality control technicians and two maintenance technicians. Finally, clerical and other office jobs are advertised in the local newspapers.

(vi) Union position, wage bargaining and levels of pay

Tabuchi carefully considered whether or not to allow unions before recruitment took place at Thornaby. The company was approached by the AEU, the EETPU and GMBATU (12) but in the end all were rejected. Later, the EETPU approached the factory again and distributed leaflets to workers as they left work. According to the Personnel Manager there is no sign of interest in unions in the factory. Both employees who were interviewed expressed no personal desire for unions, but both said there was some support amongst the workforce for trade union representation: "A lot [of the workforce] says we should have one, but no-one does anything about it". Apparently, unions are most likely to be mentioned when the temperature in the factory is low. Another complaint said to

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be common amongst the workforce related to the strict conditions on the production line: "No eating and no talking". Significantly, perhaps, the use of temporary contracts of employment was not mentioned by either employee when asked about other employees' level of satisfaction with the recruitment process and the terms on which employment is offered.

The Personnel Manager claims that the company benefits as a result of its non-union policy. Comparing the situation to that at his former company, where there were seven unions, he noted that more time could be devoted to solving 'real' problems, as opposed to lengthy processes of negotiations with 'politically-committed people' over issues often far-removed from the requirements of the production line. However, he also acknowledged the important 'voice' role of unions, with the consequence at Tabuchi that far more of his time was spent informing employees about day-to-day changes. The commitment eventually to introduce a consultative committee can be seen as an obvious response to this situation, with a group of workers' representatives effectively filling part of the gap created by the absence of unions.

The Consultative Committee would represent the workers in negotiations over wages. However, during the study period these were set unilaterally, with annual reviews. Production operators, quality control operators and warehouse employees over 18 years of age started on £2.25 an hour, rising to £2.43 after three months and £2.60 after six months. Thus, after six months an adult employee working 40 hours a week would have been earning £104 a week. Wages for 16 and 17 year olds are 65 and 80 per cent respectively of the adult rates. The rates are the same for day and evening workers. Overtime is paid at time and a third for the first two hours and time and a half thereafter on weekdays. Saturday work is paid at

time and a half and any Sunday work attracts double time. On top of regular wages there was the potential for bonus payments based on good attendance (see iii above). These rates compared favourably with those available at the time in retailing, which were rarely above £2.00 an hour. Team leaders receive a £35 per week supplement to their pay.

Maintenance and quality control technicians (all classed as trainees during the study period) were paid £2.45 at first, rising to £2.73 after 3 months and £2.87 after 6 months. These rates were set to rise to bring them in line with the average for the region at the time of around £140 per week. The higher rate, however, would apply only after the technicians had been with the company for over two years. This can be seen as an incentive payment in order to retain more skilled members of the workforce.

Trainee supervisors were paid £6,000 a year initially. After three months this figure would rise to £6,300. The salaries of all other supervisors was decided on an individual basis, according to age and experience. They consequently range from £8,000 to £12,000.

Staff were divided into 'exempt' and 'non-exempt' groups. The former included second line supervisors and management, who were ineligible for overtime and perfect attendance payments. There was no set scale for their salaries, which ranged from £8,000 to £20,000 plus. The 'non-exempt' staff were the office clerks and the receptionist, on salaries of £5,000 to £6,000. In June 1987 a pay rise was implemented for all those with more than six months' service with the company. this was reported as being "to cover inflation".

Holiday entitlements were the same for day and evening workers. However, permanent day workers could take holidays based on expected employment in a year's time, whereas temporary workers had to have built up their length of service before they were entitled to holiday leave (13). The

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factory closes for two weeks in the summer and so 'holiday cover' does not require such planning as , for example, is required at KP (see Chapter Four).

Finally, workers on the evening shift were not included in the company's pension plan, but 'permanent' night shift workers over 18 years old, (set to transfer on to day shifts), were covered.

(vii) Net impact on the local labour market and unemployment

Some indication of the impact of labour demand at Tabuchi on the local unemployment situation can be given by looking at the change in the claimant count of unemployed women in nearby wards. Two warnings are necessary though. First, there is no way of knowing from published statistics the proportion of the decrease in unemployment that can be attributed directly to job creation at Tabuchi. (For example, a new Gateway superstore opened in Thornaby town centre during this period). Second, it cannot be assumed that all workers have been drawn from the three wards surrounding the industrial estate. (For example, it is known that some of the workforce travelled in from Billingham each day).

Teesside Industrial Estate is actually in the ward of Stainsby, but the main housing estates fall within Mandale ward to the North. In between Mandale and Stainsby is the Village ward. Table 8.6 shows the changes in female unemployment in these wards over the period from January 1986 to December 1987 (by which time employment of up to 400 women and 100 men was anticipated by Tabuchi).

Table 8.6 Changes in female unemployment in the wards of Stainsby, Village and Mandale (Jan. 1986 to Dec. 1987)

Area	No. of women unemployed			
	Jan. 1986	Dec. 1987	Change	%change
Stainsby ward	178	161	- 17	-9.5
Village ward	148	99	- 49	-33.1
Mandale ward	216	126	- 90	-41.7
Stockton TTWA	4,571	3,328	-1,243	-27.2
Source: NOMIS				

Bearing in mind the above caveats, some general points can be made. The absolute (comparative-static) reduction in unemployment in the three wards (156) is considerably less than the number taken on by Tabuchi. This could be explained both by recruitment of workers from other wards and by the recruitment of previously employed or non-claimant unemployed women. Nevertheless in the wards of Village and, particularly, Mandale, the percentage decline in female unemployment was considerably higher than the borough-wide average for women.

Partly because of the lack of educational and technical qualifications required for a job at Tabuchi and partly because of the operation of the jobs subsidy offered by Cleveland County Council (see footnote 11), a high proportion of the jobs at Tabuchi has gone to people who were previously unemployed. Of 169 operatives who joined between October 1985 and December 1987, only around a third (51) had come straight from another job. The other 118 had been either unemployed, on a Government training scheme or were unemployed but ineligible for benefits.

The fact remains, however, that in straight quantitative terms, even if unemployed Stockton women took all of the jobs available at Tabuchi, it would require another six or seven 'Tabuchis' to provide jobs for those women remaining (officially) unemployed in the TTWA at December 1987. Since a process of 'creaming off' of the 'best' workers was shown to be in operation at the recruitment stage, the quality of

labour (on employer's terms) is likely to decline as unemployment falls. (In a dynamic sense, though, fresh 'inflows' of unemployed women will replenish the skills of the unemployed 'stock'). Consequently, even if there were that many companies (Japanese or otherwise) looking to set up in production, the attraction of the Teesside Industrial Estate would rapidly disappear if another similar company chose to locate there. Not only would a shrinking pool of female labour reduce the scope for 'hire and fire' employment policies, but also the competition for labour would drive up the wage level. Thus, when Sanyo chose to set up on the same Industrial Estate in March 1988, the investment was capital-intensive and required only 25 people. A sister plant requiring 225 employees was located in Newton Aycliffe, Co. Durham (Financial Times, 12.3.88. p.4).

8.3 Concluding comments

The Tabuchi case study involved the examination of changes in employment and labour demand in a growth situation. Most of the study period was dominated by recruitment which more than outweighed natural wastage. Only on one occasion did employment drop, following the decision to reduce temporarily the size of the evening shift.

Whilst growth prospects for the company are good in the medium term, with ever more of its customers rushing to enter the European market in advance of '1992', this inevitably will level out in the longer term. Not only is there a limit to the size of the final product market, but also the rapid growth in demand for components is acting as a major attraction for other suppliers to set up in Europe and challenge Tabuchi's position. As market growth slackens and/or competition for sales increases, producers come under even more pressure to reduce the amount of labour used in the production of each unit of output. A flexible labour force

becomes not just a convenient way of coping with temporary fluctuations in the level of product demand, but an integral and permanent part of the competition between different capitals.

In the case of Tabuchi, changes in labour demand were mirrored closely by changes in the level of employment. Increases in demand were met by recruiting whole lines to 'man' new shifts introduced in the evenings and at night. The decision to recruit rather than, (and sometimes in addition to), offering substantial overtime working reflects both the scale of the rise in desired output and the low level of skills and training required to carry out the job. In such a situation the quantity of available labour is more important than the quality, but the latter can be more or less assured because of the ability to be selective in recruitment. Even with selective recruitment, however, the evidence suggests that Tabuchi has contributed to a decline in official unemployment in the neighbourhood.

With 500 jobs created, few would deny that Tabuchi has been a 'bright spot' in the local economy. However, concerns over the company's long-term prospects were raised throughout the chapter. These can be summarised as the issues of external control, the pace and direction of technological change and the possibility of greater competition in the market place for Tabuchi's output. Other issues are still to be worked out. For example, in Japan the departure from work of women upon marriage ensures the maintenance of a young workforce. Whether natural wastage can serve the same purpose for Tabuchi remains to be seen.

The arrival of Tabuchi represents another step in the restructuring of local employment away from Stockton's heritage of heavy engineering amongst skilled, male workers. As has been the case elsewhere, the 'demonstration effect' of Tabuchi's presence has magnified its true (but still

substantial) impact. The real benefits that the company has brought to the area (not least of these being an apparent show of 'confidence') should not be underestimated. However, the mechanisms of labour force adjustment used by Tabuchi and its competitive position depend on unemployment remaining sufficiently high to enable selective recruitment and the rapid translation of product variations into changes in the utilisation of labour. This point, when combined with the as yet unproven long-term commitment of the company to the town, seriously undermines the argument that there is a 'Japanese solution' to the problems of high unemployment.

Footnotes:

(1) 'Dumping' involves the sale of products in an export market at a lower price than in the exporter's domestic market. During the study period, the European Commission was drawing up proposals to extend anti-dumping legislation to cover components as well as finished products. This was to prevent companies establishing 'screwdriver' operations within European Community, assembling effectively 'dumped' components.

(2) The Northern Development Company superseded the North of England Development Council (NEDC) as the region's inward investment body in September 1986.

(3) For example, when Electrolux of Sweden established its European base for microwave production in Luton, Beds., it disclosed that its British sales were 1.8 million units compared with 1.2 million units for the rest of Europe combined (Financial Times, 24.11.86. p.1).

(4) Teesside Industrial Estate was opened in the 1960s as part of a package of infrastructural developments designed to improve the economic prospects of the Northern Region. Between 1977 and 1987 the number of firms on the estate rose from 23 to 78 (including Tabuchi) and the number of jobs increased from 1,017 to 1,920 - a long way short of the original target of 10,000 jobs (Figures produced by Stockton Borough Council, reported in Evening Gazette, 24.2.88. p.4).

(5) Tabuchi originally hoped to establish single-source suppliers for various materials. However, partly due to

unreliability and partly due to the increasing demands placed on suppliers by Tabuchi as a result of rapid expansion, a number of suppliers have had to be used. Tabuchi, of course, is itself a component supplier to other Japanese companies in Europe. Because of their weight, transformers are expensive to transport, helping to explain why Tabuchi is among the first component suppliers to set up in Europe. According to a report by Coopers and Lybrand, a 20-40 per cent premium is sustainable over domestic Japanese producers of transformers because of the high shipping costs (Financial Times, 5.4.88. p.8). With 76 per cent European content, transformers came second only to plastic parts in a list of components bought by Japanese companies in the U.K.. The U.K. content of transformer sales to Japanese companies accounted for £4.4 million out of a total demand of £7.2 million in sales.

(6) Tabuchi use the trade name 'Zebra' on their products and on work overalls. Reflecting the importance attached by the company to teamwork, a Japanese manager explained: "One zebra is a very weak animal, but when they group together they can protect themselves from attack - even from a lion".

(7) Tabuchi eventually decided not to sub-contract any work to this particular company.

(8) The growth of female employment and the 'gendering' of jobs were discussed at length in Chapter Four. At Tabuchi, the decision to employ female labour was justified on the grounds of manual dexterity. This position was established through initial selection processes and by criteria specified to the Job Centre and was subsequently reinforced by 'feedback' by word of mouth, influencing supply-side responses to job openings at the factory. The problems experienced in recruiting at the time of rapid expansion in 1987 led the company to reconsider the use of male operatives. Reluctance to take on men was at that time expressed not in terms of lack of dexterity, but a belief that men would not adapt so readily to the production line discipline. The issue of wages was not mentioned directly, but potentially higher rates of labour turnover were anticipated.

(9) The figure of 240 is a 'stock' count and is, therefore, not directly comparable with the figure of 2,000 which represents a cumulative total.

(10) When this woman started work at Tabuchi there were around 40 employees, of whom she already knew "six or seven".

(11) Cleveland County Council's scheme paid £39 a week for 26 weeks for over 25 year-olds who were long-term (12 months) unemployed residents of Cleveland; £30 for 26 weeks for those over 25 unemployed for over six months and £25 for 26 weeks for all other Cleveland residents. The claim for the subsidy could be submitted at Tabuchi's discretion and, therefore,

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could be applied to that combination of recruits that maximised the size of the financial gain to the company.

(12) AEU - Amalgamated Engineering Union; EETPU - Electrical, Electronic, Telecommunications and Plumbing Union; GMBATU - General, Municipal, Boiler Makers and Allied Trade Unions.

(13) Temporary workers leaving before taking the holidays owing to them were paid in lieu.

Appendix: Tabuchi Electric company history (prior to study period)

1925 - Parent company established in Osaka, Japan, by Shigeru Tabuchi, selling silicon sheet and manufacturing cores for radios under the name of Midori Shokai.

1939 - Manufacturing division separated and established as Tabuchi Electric Co. Ltd.. Began manufacturing transformers and rectifiers.

1943 - New plant built for manufacture of power transformers and transformers for radios.

1952 - Production of transformers for televisions, communication equipment, electronic appliances and electronic instruments.

1957 - Began manufacturing transformers for transistorised equipment.

1964 - Started producing transformers for colour televisions.

1969 - First production of transformers for microwave ovens.

1972 - Joint venture with Sam-Kwang Electronic Co. Ltd. of Korea led to the establishment of the Korea Transformer Co. Ltd. in Seoul.

1979 - Operations in U.S.A. began with the establishment of Tabuchi Electric Co. of America in Jackson, Tennessee, primarily manufacturing transformers for microwave ovens.

1985 - Operations began in the U.K. with the production of low power transformers, high voltage transformers and various power supplies:

Feb 1985 - became a registered company in the U.K.

Apr 1985 - Japanese management team arrived.

Jan 1985 - started manufacturing in temporary premises.

1986 - (Jan) moved into new (44,000 sq. ft.; 4,000 sq.m.) factory built by English Estates on Teesside Industrial Estate, Thornaby.

CHAPTER NINE : ITM - 'HEAD WRIGHTSON WAS ENGINEERING'

9.1 Introduction

In May 1986 the Evening Gazette reported on "The winners and losers on the takeover trail". Albert Roxborough, 47, - presented as "one of the fortunate ones" - told his story as follows:

I was a toolroom fitter at Head Wrightson Teesdale, Thornaby, which was sold by Davy to ITM Offshore two years ago... You could see the rundown was coming before ITM came along. The writing was on the wall and I took steps to find another job. I left and tried to find something in my own trade, but I had no luck. I became a self-employed consultant selling life assurances and pensions... I was too young to retire. I had some regrets at leaving 'Heads' after 28-and-a-half years. But you have to get on with life.

(Evening Gazette, 23.5.86. p.12).

The article continued:

Albert knows he's lucky because a lot of his former friends in the machine shop are still on the dole.

In almost caricature form the above extracts touch upon many issues central to this thesis. On the one hand, they raise pertinent questions about the balance of employment between manufacturing and service sector activities, about self-employment opportunities, job security and unemployment duration, and about occupational mobility, job search and the attitude of individuals towards labour force participation. On the other hand, events at the three companies that are quoted - Head Wrightson, Davy and ITM (International Transport Management) - capture the essence of change in local industry and the local labour market.

The internationally-renowned Head Wrightson group, with the simple motto 'Head Wrightson is Engineering', originated in

Stockton and maintained a strong local presence as a major employer until it was taken over by the Davy Corporation in 1976. After severe rationalisation of the group in the early 1980s the 'rump' was sold to ITM in 1984. This accelerated an existing trend towards work for the offshore oil and gas industry, but ended in failure in September 1986 - during the study period for this thesis - when the company was forced into receivership. In light of its background, ITM was an obvious choice for inclusion in the research, embracing at once local specificity, local industrial restructuring, the national decline of mechanical engineering and the internationalisation of production.

It is worth documenting events surrounding the demise of the Head Wrightson 'empire', intertwined as they are with developments within the Davy organisation and the collapse of the local manufacturing base in the recession of the early 1980s. This case study provides a rare opportunity to investigate 'under one roof' how new 'rounds' of accumulation create pressures for restructuring and a reorganisation of the labour process. In this particular case it is also possible to see how the pressures for such reorganisations have necessarily shifted upwards from the purely local to the national and international levels (see also Scott, 1985).

Section 9.2 expands upon some of the historical material presented in Chapter Three to illustrate these points and set the operations of ITM in context. Section 9.3 then looks at the pressures for change confronting the ITM organisation up until its closure. Included within Section 9.3 is a month-by-month account of the extent of, and reasons for, changes in labour demand. As before, the ways in which labour force 'adjustments' were made are discussed with reference to the categories in Table 2.1.

9.2 From Head Wrightson to ITM

From its origins described in Chapter Three, Head Wrightson (HW) grew to become one of the most important local employers (almost exclusively of men) in the 1960s. Indeed, only three of its Cleveland work-places were outside of the official Stockton TTWA, as shown in Table 9.1.

TABLE 9.1 Employment and HW company structure (mid-1960s)

	Activity	Company name and location	Main products and services	Employment	Closure dates
V Metal Manuf	Castings and Forgings	HW Iron & Steel Fndr's (Thornaby & Stockton)	Colliery and mining eqpt.	588	1978 & 1983
		HW Ironcast, Egglecliffe	Ingot moulds and tunnel segments	373	1979
	Stamping	HW Stampings Hartlepool	Components for engineering companies	(300)*	Still open **
VI Engin- eer- ing & Elec.	Machin- ing & Strip Coating	HW Machine Co Middlesbrough	Eqpt. for steel and non ferrous finishing trades.	(604)*	1982 ***
	Fabric- ating, heavy forming and welding	HW Teesdale, Middlesbrough and Thornaby	Design/drawing Blast furnace steel works, oil refinery+ nuclear power plant, dock + harbour eqpt., heat exchange	2,105	1979 & 1986
	Product design and devt.	HW Precision Forge, S'ton	Mining and colliery eqpt.	527	
		HW Iron & Steel Works Engineering, Thornaby	Economic eval- uation + plant commissioning	****	Transf- erred to Davy
		HW Processes, Yarm	Design, drafts + procurement -nuclear ind.	220	Bldg. sold in 1980

Source: Teesplan records (see Chapter Three); Company reports and promotional publications; Evening Gazette (various dates)

* Outside Stockton TTWA

** Operated as Davy Forge until May 1989. (Now part of the Caparo Group: renamed Clydesdale Davy -180 employees).

*** Operations transferred to Poole, Dorset.

**** Employees included in total for HW Teesdale, Thornaby.

Somewhat ironically, five years before the 1976 takeover of HW by Davy, HW added to its metal manufacturing capacity with the purchase of a Davy foundry in Billingham (renamed HW Steelcast). The circumstances of the sale, as reported at the time, hint at the contrasting reactions of the two organisations when faced with a similar set of problems:

A significant proportion of the output [of the Billingham foundry] is for the Davy-Ashmore group and sale of this subsidiary by Davy-Ashmore is another move towards its declared policy of converting into a process engineering and contracting company and to limit manufacturing capacity. Head Wrightson's interests in foundry work will be strengthened (The Times, 28.4.71. p.22).

Davy became involved in the late 1960s in a series of takeovers and rationalisations, inspired by the Industrial Reorganisation Corporation (1). Essentially, Davy decided upon a policy of moving 'up-market', concentrating on design, technology and contract management. It steadily withdrew from direct manufacturing, relying instead on sub-contract arrangements on a project-by-project basis, enabling it to extract the best deals via a network of international contacts.

Clear geographical divisions of labour emerged within its U.K. operations. The first was between its manufacturing 'remnants' (Gateshead and Sheffield) and its design, research and contracting functions (London, Stockton, Bedford and Poole). The second was within the latter group of functions and had a major impact on the Stockton offices. Until the early 1970s, Davy's Stockton operations comprised two major businesses, largely locally-controlled - Ashmore, Benson, Pease and Co. and Davy Powergas (see Chapter Three). The former performed work for the iron and steel industry (specialising in blast furnace technology as opposed to metal-forming technology at Bedford and Poole), whilst the latter was engaged primarily in work for the oil and petrochemicals industries. A major internal reorganisation in

1971 resulted in the consolidation of all Davy Powergas activities in London along with new, centralised headquarters functions. A change in the parent company name from Davy-Ashmore to Davy International was introduced at the same time to reflect the scale of the group's operations.

The move was justified at the time as follows:

The maintenance of two engineering centres for Powergas in the U.K. 250 miles apart, with the inevitable duplication of essential services has proved to be wasteful. Concentration in London as a single force will improve efficiency, ease communications between Powergas and our other major process engineering companies in Europe and the U.S.A. and will place Powergas in a better position to bid for large world projects
(Davy Chairman in Evening Gazette 27.8.71).

Despite transfers of some staff to London, some 1,000 jobs were lost locally - 3,000 throughout the U.K.. The need to be in a recognised and well-connected international centre caused Powergas to 'outgrow' its birthplace. The remaining Davy offices (still called Davy-Ashmore) were thus left almost totally dependent on the fortunes of the iron and steel industry.

Whilst a smaller scale operation than Davy, Head Wrightson represented an important source of local competition for Davy's Stockton operations, not least in the labour market for draughtsmen, technologists and design engineers (as revealed in the 'Vacancies' pages of the Evening Gazette e.g. 29.1.70. p.14). An IRC attempt, in 1968, to effect a merger between the two companies failed, but in 1973 inter-dependence increased as a result of a co-operative production agreement, thus:

Head Wrightson will relinquish their activity in bidding for the engineering, supply and commissioning of blast furnaces and oxygen steel making plants in which Davy-Ashmore already has a world business... In addition, it has been agreed that Davy-Ashmore will market sinter and pelletising plant to Head Wrightson designs. Head Wrightson will retain their design and

manufacturing capability for any items of equipment involved. Payments will be made to Head Wrightson over a number of years
(The Times, 2.3.73. p. 17).

HW's subordinate position in this relationship was reinforced by a deepening crisis in its foundry operations. The purchase of Davy's Billingham foundry (above) was part of a strategy designed to strengthen HW's business against a background of shrinking markets and over-capacity. To understand HW's policy it is necessary to consider the tradition and local allegiances of the company. It began as a foundry business and prided itself on the quality of its products. It is worth noting that the Wrightson family retained Chairmanship of the group until five months before the Davy take-over (2).

The iron foundry in particular, however, was beset by insurmountable problems. Its traditional markets (coal and railways industries) were in long-run decline and the only product produced on a mass basis - ingot moulds for the iron and steel industry - was experiencing a sharp fall in demand following the introduction of continuous-casting techniques. Entry to the European Economic Community in 1973 led to increasing levels of imports into what had been a largely intra-regional business because of the high bulk to value ratio of castings (Massey and Meegan, 1982; Freeman, 1985). The U.K. Council of Iron Foundry Associations complained that foundries on the Continent were paying up to 30 per cent less for their coke as a result of subsidies paid by other European Governments (The Times, 25.6.81. p.21). In the financial year to 1974, the HW group was forced to make exceptional provisions of almost £1 million against the iron foundry, where costs had risen by 55 per cent during the year (The Times, 8.11.74. p.21). Despite a temporary reprieve in the form of an order for tunnel segments from Brazil in 1975, growing problems in other parts of the HW group meant that

the organisation found it increasingly difficult to support the unprofitable business.

Before moving on to the eventual take-over by Davy, two crucial points need to be made. First, Davy was at the forefront of companies developing the continuous-casting techniques that eroded demand for the iron foundry's ingot moulds. Thus, the ongoing drive to reduce the demand for labour and increase productivity in steel production created a major change in the wider labour process. Demand for skilled and unskilled manual labour at the iron foundry was put into decline, whilst demand for design staff increased following the technological breakthrough. (Similar changes in labour demand were generated within the steel industry as a result of the adoption of the new technology - see Hudson and Sadler, 1985).

Second, the general shift towards the use of more scientific and professional labour in the engineering industry (EITB, 1986) has had profound labour market implications, as Stockton discovered to its cost in the relocation of Davy Powergas to London. Given the small supply of qualified labour (relative to skilled and unskilled manual workers) and the strong competition for such workers in the Stockton labour market in the late 1960s, the Powergas move was always likely once Davy decided to abandon local manufacturing (3) and concentrate on design and contracting.

The specialisation of Davy's Stockton offices on work for the iron and steel industry left them extremely vulnerable as uncertainty over the investment plans of British Steel Corporation (BSC) grew in the mid-1970s. (Ironically, Davy's success in designing and commissioning iron and steel plants overseas had contributed to the conditions of world over-capacity responsible for this uncertainty - Financial Times, 12.2.82).

Delays and indecision concerning the timing and location of BSC investments also created problems for parts of the HW organisation. In August 1976, 250 redundancies were announced at HW Teesdale's Thornaby and Middlesbrough works. Uncertainty was not limited to the steel industry either. An announcement of changes in the rules of eligibility for regional assistance caused HW to demand assurances that there would be no rephasing of National Coal Board projects (Evening Gazette, 9.8.76. p.2).

Head Wrightson under Davy 1976-84

In light of the delicate situation described above, when Davy made a £7 million offer for HW in November 1976, both management and unions welcomed the move (Evening Gazette, 24.11.76. p.2 and 29.11.76. p.2). The shared opinion was that the deal would allow Teesside to bid on more favourable terms for international steelworks contracts and that this would help to safeguard employment.

At the time of the take-over, employment at HW companies and all subsidiaries was 3,600 - mostly on Teesside (Evening Gazette, 24.11.76. p.2). Davy already employed over 8,000 world-wide including around 5,000 in the U.K. (Davy Review, 1977). In October 1976, employment at Davy's Stockton offices stood at 614, having doubled since 1971 (excluding Powergas) through recruitment (figures supplied by Davy).

The Government not only welcomed the deal, it was active in promoting it. The Times (24.11.76) reported: "Significantly, the Treasury has allowed Davy to raise its dividend payment nearly 60 per cent this year to aid the take-over" (p.23). This was against the background of the latest in a string of reports for NEDO by the Process Plant Working Party, expressing alarm at the declining share of hardware contracts won by British suppliers for overseas projects.

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Davy's main interest was in the contracting and design side of HW, and especially the nuclear business which offered an element of diversification away from the Stockton office's dependence on iron and steel trade. Indeed, as the steel industry moved into recession in the late 1970s, it was HW's capabilities in nuclear engineering, mining, sinter and coal treatment that proved crucial in Davy's survival in Stockton, not its compatible skills in steel plant work that were cited at the time of the take-over. Such was the expertise of the HW non-ferrous engineering staff that Davy even transferred its own non-ferrous metals division from London to Stockton in 1978/9 to consolidate the position of the Stockton office, with employment rising to over 1,000 (Davy Annual Report and Accounts, 1979) (4).

Meanwhile, the dismantling of HW's manufacturing empire was gathering momentum. Deteriorating trading conditions in the steel castings business precipitated the closure of the HW steel foundry in Stockton with 85 redundancies and 35 transfers to other parts of the HW organisation (Evening Gazette, 25.9.78). The iron foundry survived slightly longer (despite several 'moth-ballings') after winning work for the Selby coalfield and the London Underground. However, it finally closed in 1979 with the loss of 146 jobs over a two year period (Evening Gazette, 1.2.79).

When the closure of HW Teesdale in Middlesbrough (224 redundancies Evening Gazette, 12.1.79.) followed later in 1979, hostility towards Davy started to mount. An HW 'Action Committee' was set up claiming deliberate disinvestment by the new parent company. A statement from the Committee read as follows:

The losses incurred over the last four years are not in our opinion due to adverse trading conditions, but are due to various board decisions, resulting in detrimental reorganisations that have been made over the past five years.

In view of this it is the intention of the workforce

at Middlesbrough to oppose the closure. Facts and figures used to substantiate the closure will be contested and a most disturbing pattern of Davy policy will be brought to light

(Evening Gazette, 19.1.79.)

Especial concern was expressed about the imposition of a new Director brought in temporarily from Sheffield and seen as a 'hatchet-man'. Despite the opposition the closure went ahead, followed soon afterwards by the shutdown of the Precision Forge in Stockton in 1979 (Davy Report and Accounts, 1979). The difficulties continued - self-inflicted or otherwise, they were exacerbated by the maintenance of a strong pound and high interest rates - and in the year to March 1980, Davy's manufacturing operations in the U.K. collectively made losses of £1.7 million (Davy Annual Report and Accounts, 1980). Mistrust of Davy continued as a potential £2.5m export order from Norway for the Teesdale works (Thornaby) was lost and subsequently 99 redundancies were announced - one less than the limit at which 90 days' notice would have been required by law (Evening Gazette, 7.1.81.).

Still in 1981 a new 'flexible working system' was introduced at the Teesdale works after a secret ballot, amidst management claims that it would "pave the way for the company's survival" (Evening Gazette, 9.3.81). At the same time, Davy recognised the local potential to increase the level of work performed for the North Sea offshore oil and gas industry (5). A 'twin works' strategy was drawn up, linking the Teesdale works in Thornaby with the riverside site of the former Teesdale works in Middlesbrough. The essential idea was to carry out fabrication work at Thornaby and then transport the structures to Middlesbrough for riverside assembly and 'load-out' (on to barges). Significantly, the company's plans envisaged the recruitment of labour at Middlesbrough on a temporary or short-term contract basis. The first signs of 'modern' working practices in offshore-related engineering were emerging, against a

background of recession, works closures and rising unemployment.

In the depth of the world slump, from May to September 1982, Davy did not receive a single major order (The Times, 29.9.83. p.24). The HW closures continued. In 1982, production at HW Machine Co. (Middlesbrough) ceased. Despite earlier denials by the company, contracts (and key workers) were transferred to the 'sister' plant in Poole. Around 30 design staff transferred to the Stockton offices, but the remainder of the workforce was made redundant.

The fate of the last two HW steel foundries - one in Thornaby and one in Billingham - was decided after a meeting between a group of the industry's leading producers, the Department of Trade and Industry and representatives from the Bank of England. The merchant bankers, Lazard Bros., were asked to devise a rationalisation strategy for the production of steel castings. By 1981, a plan to eliminate 50,000 tonnes of annual capacity nationally had been agreed (6). The (general sector) scheme required companies which continued production to contribute to a fund to compensate those which withdrew from the industry and destroyed capacity. The 1983 Annual Report by Davy revealed:

... the continued fall in demand for steel castings finally led to the decision to accept the terms of the Lazard scheme and close the two steel foundries at Thornaby and Billingham... The foundries were not integral with the main range of Davy products and although the closures were a matter of great regret, the move eliminated a major loss-making operation (Davy Annual Report and Accounts, 1983 p.13).

At the time of closures, 335 workers lost their jobs (Evening Gazette, 1.2.83.) but the total was considerably higher as both foundries had been shedding labour over the previous two to three years (as well as making use of short-time working).

Since HW Stampings had been renamed Davy Forge (7), survival of the 'Head Wrightson' name rested with the HW Teesdale

works in Thornaby. However, the promise of the 'twin works' strategy disappeared when Davy sold the Middlesbrough site to a breakaway management team from Press Production Systems of Tyneside (see Sadler, 1986). An associate company - Davy Offshore Modules - was established, but had no formal links with the Teesdale works. Davy was unable to achieve a full work load for HW Teesdale and losses of £1.4 million were reported in the year to March 1982. The following year, together with a Manchester subsidiary, the figure rose to £4 million. Davy complained that the works faced a buyers' market, and it is certain that European competitors were receiving heavy subsidies in the purchase of their raw materials. A NEDO report in 1985 revealed that some Italian bids for the manufacture of heat exchangers - one of Teesdale's chief products - were as low as 50 per cent of the cheapest U.K. bids (NEDO, 1985). Hudson and Sadler (1986) provide figures from a separate NEDO report published the same year. These show the reductions in steel costs per tonne of 1983 output made possible as a result of indirect state aid, by country :

France	£8.30
W. Germany	£8.00
Italy	£6.00
U.K.	£1.20

Against such odds, and in the middle of the miners' strike in 1984, Davy announced that the Teesdale works would be closed with the loss of all remaining 250 jobs.

The decision of ITM to buy the Teesdale works for £1.5 million and to retain 100 workers came as a complete surprise, even to Davy. The move was an example of vertical backwards integration, which accorded with the ambitious plans of ITM's Chairman, Alf Duffield, discussed in Section 9.3 below.

It is useful first both to summarise this Section and discuss the implications for ITM. The build-up to the Davy take-over of HW saw the scope for localised control of production virtually obliterated by moves towards materials-sourcing and project management on an international basis. State-sponsored restructuring (by the IRC) promoted Davy to the position of 'national leader' in the process plant field. Events after the Davy take-over and during the recession of the early 1980s created both opportunities and obstacles for ITM. On the one hand, expectations of 'a job for life' were breaking down and 'new' patterns of work were being introduced. From the company's perspective, these were positive developments, enabling it to adapt more readily to changes in product demand and break-down job demarcations. On the other hand, the unfavourable conditions for manufacturing meant that such working practices were necessary if the company was to compete successfully in the international market-place.

Likewise, the loss of traditional markets made it essential to discover products in which Teesside-based operations might have a comparative advantage. The alternative was to withdraw from manufacturing and switch investments into other, more profitable activities as had been Davy's strategy (8). Either way the implications for the local labour market are momentous. The changes resulting from ITM's style of operation were the focus of the field-work for this chapter.

9.3 The rise and fall of ITM

This Section is divided into three parts:

- (i) the growth of ITM;
- (ii) the conditions surrounding the company's collapse;
- (iii) analysis of ITM's changing labour demands and their impact on the wider labour market.

(i) The growth of ITM

ITM (Offshore) Ltd. was a private company founded in Middlesbrough in 1976 by local businessman, Alf Duffield and two fellow directors with experience in specialised land and marine transport services. The long-run objective was to develop a self-sufficient oil and gas exploration company. Despite a shaky start - the company received only two jobs moving heavy engineering equipment in its first year of operation (Business Gazette, 18.11.86. p.8) - later success in winning some major contracts raised its national profile. These contracts included the (1981) transport from Teesside to London of the gates and ancillary equipment for the Thames Flood Relief Barrier, the (1982) lifting of the 'Mary Rose' from a recovery to a restoration barge and its transportation to Portsmouth, and the (1983) installation of a 'Flexi-port' at Port Stanley during the Falklands conflict.

ITM recognised the enormous opportunities raised by development of the North Sea at a time when much of U.K. manufacturing was collapsing. In the wake of the Iranian revolution (see Hamilton, 1986) the price of oil had risen to over \$30 a barrel in the early 1980s and daily rates for the hire of semi-submersible drilling rigs in the North Sea soared to over \$80,000 (Financial Times, 7.11.86. p.26). Despite its small size, especially compared to the U.S. corporations attracted to the scene, ITM was one of the first British companies to become directly involved in drilling activities and owned its own land drilling rig. It developed a strong Marine Division which included a multi-purpose diving support vessel (ITM Installer) and a vessel designed specifically to work with semi-submersible drilling rigs at great water depth (ITM Seafarer).

Exploration and drilling activity in 1981/2 by the oil multinationals led to a rush of discoveries of new fields. Though smaller than the likes of Forties, Brent, Ninian and

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Piper, these finds promised much in the way of fabrication work for production platforms. Between 1983 and 1985, yards on the Rivers Tyne and Tees received £300 million worth of company orders (Sadler, 1985 p.3). This appeared to mark the start of a second, larger boom in offshore construction work on the Tees (9). ITM was quick to realise the potential and the purchase of HW Teesdale must be seen in this context.

ITM was already familiar with the HW Teesdale works, having performed a number of transport contracts for Davy. Its decision to buy the facility and its workload resurrected the 'twin works' strategy, only this time it was ITM's Normanby Wharf site in Middlesbrough that served as the 'load-out' base. Significantly, in retaining 100 workers at Teesdale, ITM insisted on the complete removal of all trade demarcations.

The next major step came in March 1985 when ITM ordered from North-East Shipbuilders Ltd. (10) a £45 million mono-hull craneship with a 4,000 tonne lifting capacity - ITM Challenger. This vessel was intended to fill a potentially lucrative gap in U.K. capacity for heavy lifting at sea, as well as for salvage, fire-fighting and other emergency work. By entering a field dominated by Dutch, American and Italian operators it reflected Duffield's conviction that the U.K. should develop a 'home-grown' capacity and reduce dependence on foreign companies.

By late 1985 ITM had achieved a remarkable performance, with profits of £5 million on a turnover of £28 million. Although HW Teesdale made a loss, this was down to £400,000 and a number of major contracts had been secured. This resulted in an increase in employment at HW Teesdale to 350 - half of ITM's total workforce (11).

In a Financial Times 'Management' feature (30.10.85. p.14) Duffield spelled out his plans for future development at ITM. These included the construction of a sister ship for the

Challenger, capable of lifting up to 8,000 tonnes, the taking of stakes in marginal North Sea oil fields and a public share flotation in 1987/8 to finance the developments.

When ITM won a £10 million contract to build a single-point mooring buoy for Mobil in early 1986, all the signs were that the company was on course to achieve its ambitious objectives. However, in May 1986, Duffield suddenly resigned, inviting speculation that the company had over-stretched itself (Evening Gazette, 13.5.86. p.1). Speculation died down when it was revealed that the resignation was for personal reasons (12), that he remained a non-executive director and had retained a major shareholding. Indeed, a string of lucrative contracts created renewed optimism about employment prospects at ITM. The Teesdale works reported an order book worth £30 million, including the refurbishment of heat exchangers for ICI Severnside.

Thus at the start of the field-work for this thesis, ITM was popularly identified as a company that had 'rescued' one of the town's famous names and was heading for success in a 'growth sector' of the local economy.

(ii) The conditions surrounding the collapse of ITM

Two months into the field-work (early September 1986), a £0.5 million order was placed with ITM by BP Developments for their Cleeton gas field. Later the same month, ITM won a £7.2 million contract from McDermott International to use ITM Challenger to perform lifting and installation work during the 1987 phase of CONOCO's Southern basin 'V' block development.

Despite these encouraging signs, the state of the offshore supply industry had changed markedly since the hey-days of the early 1980s. In 1983, G.B. became the fourth largest oil

producer in the world and was among the top ten exporters (Hamilton, 1986). Rising production at a time of falling demand, however, was exerting downward pressure on prices. The Conservative Government formally rejected overtures from the Organisation of Oil Producing and Exporting Countries (OPEC) to help sustain prices. In the autumn of 1984 the Government abandoned its role as purchaser of 51 per cent of all oil produced in the North Sea (13). A series of public statements by officials made clear the turn-around in Government attitudes:

The British [Government]... who had started by greeting oil as the greatest economic benefit since the Industrial Revolution, now felt that the general benefits to trade and to world interest rates of a fall in oil prices outweighed any disadvantageous effects on the country's balance of payments and income
(Hamilton, 1986 p.160).

In the event, prices collapsed from \$30 a barrel to less than \$10 at one point (Financial Times, 8.5.87. p.9). This fall in prices (and hence profitability) prompted a curtailment of the oil companies' plans for expansion. Suddenly there was not enough work to go around for all the companies attracted into the offshore supply business. One report at the time stated:

Overcapacity is at its worst among the owners of rigs, drilling ships, diving support vessels and almost anything else that floats... A second area of dire over-capacity is in the fabrication yards which have become a focus for concern about the health of the industry

(Financial Times, 7.11.86. p.26)

Evidently, ITM was in the worst possible position while, at the same time, having to meet instalments for work on the Challenger. With a number of suppliers threatening to suspend deliveries because of non-payment by ITM, the directors approached their banks (one for each site) in October 1986. An attempt was made to arrange a 'rescue package', believed

to amount to £5 million (Business Gazette, 18.11.86. p.8). However, the American bank (Security Pacific), mindful of the spectacular failures amongst U.S. drilling companies at that time, was unwilling to co-operate. Left with no alternative, the receivers were called in and, five days later, the business was advertised for sale in the Financial Times (28.10.86).

The Personnel Manager (and company contact during the field-work) likened the situation to "a house being ruined because they won't lend you the money to put the last tile on the roof". He continued:

[The bank] burned their fingers on this one...[The receivers] don't understand the offshore game and have found themselves in an alien situation. They're used to arriving one day and cutting labour the next, selling assets - they couldn't believe how complicated it all is.

Subsequent events supported these views. Firstly, after the receivers had been called in, any ITM vessel could be 'arrested' as soon as it docked, to be held as security against money owing to creditors. This created problems regarding the transport of finished products to complete remaining contracts. Secondly, assets could not be sold - at realistic prices (14) - to pay creditors because of the depressed state of the offshore industry. Thirdly, the receivers undertook to guarantee contracts and wage levels. However, they quickly discovered that, far from shedding labour, they had to recruit in order to complete contracts on time (see 3 below). Otherwise, they would have become liable for late delivery penalty payments which characterise contracts in the offshore industry. Fourthly, although all unsecured creditors lost their money - creating knock-on problems for local employers (Evening Gazette, 11.11.86. p.11 and 2.12.86. p.9) - the receivers were forced to guarantee payment within seven days (instead of the customary 30) in order to secure deliveries necessary for contract completion.

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Finally, the complex distribution of work between the two sites - Teesdale and Normanby Wharf - created further problems, since most potential buyers were interested only in the latter and/or the Marine Division.

The final ironic twist came in January 1987. After a string of enquiries about the Middlesbrough wharf (15) it was announced publicly that it had been sold to Davy Offshore Modules (Evening Gazette, 8.1.87. p.1). However, the truth was somewhat different. An unsuccessful attempt at a management buy-out had prompted the resignation of the two original ITM directors. They used personal contacts at Davy Offshore Modules (DOM) to secure a meeting with the bosses of the parent Davy Corporation (renamed from Davy International after the 1978 merger with McKee; see footnote 4). They were encouraged by two key developments. First, Davy Corporation had increased their original stake in DOM from 43.75 per cent to 93.75 per cent in 1985 signalling a growing interest in North Sea offshore activity. Second, the new Chief Executive of the Corporation, Roger Kingdon, was the ex-boss of Davy's Stockton operations and was well known to DOM bosses. The meeting paid off, Davy Corporation agreed to co-operate in a £1 million purchase of the wharf and an 85 per cent owned company - Davy Normanby - was set up under the two ex-ITM directors.

The deal was facilitated by the movement from Thornaby to Middlesbrough of much of the remaining work-load. The receivers had settled for breaking up the Teesdale works and calculated they would make over £2 million from equipment sales. A last-minute offer from a local shotblast company attracted the support of local MPs and trade unions, but the offer fell short of the receivers' reserve price and was, in any case, withdrawn after orders were transferred to Normanby Wharf.

Prophetically, Ian Wrigglesworth - then the MP for Stockton South - claimed that the Government's plan to establish a new Urban Development Corporation on Teesside was partly responsible for the works closure:

In due course the estate agents will put the site on the market, but my guess is the building will be demolished. The sad fact is the development potential of the site for either housing or light industry is now so much greater thanks to the new Urban Development Corporation

(Ian Wrigglesworth in Evening Gazette, 22.4.87. p.3).

As predicted, the building has been dismantled and the site is included in a list of 'flagship' developments to be undertaken by the Teesside Development Corporation (see Chapter Ten).

(iii) ITM/Davy Normanby's changing pattern of labour demand July 1986-July 1987

Although ITM went into receivership in October 1986, work continued (and thus labour demands were studied) up until March 1987. Given the close links with the new Davy Normanby company, the 'year-on' visit was conducted with this company (same contact) even though it was based outside the official Stockton TTWA. In addition, employee interviews were conducted with Davy Normanby employees. Reverting to the pattern of previous chapters, findings are reported in six sub-sections as follows:

- (a) product market context;
- (b) work patterns and practices;
- (c) details of month by month changes in employment;
- (d) recruitment - policies, methods and catchment area;
- (e) trade unions, wage negotiations and levels of pay.
- (f) net impact on local labour market and unemployment.

(a) Product market context

To appreciate in full the pressures under which ITM was operating, it is necessary to understand the essential features of competition in the offshore industry. Sadler (1986) explains the influential role of the major oil multinationals in allocating work between competing suppliers and highlights the control function of customers' exacting requirements regarding work standards, safety and industrial relations. Contact is rarely direct with the oil companies, but more likely through project managers who establish on-site offices for the duration of a contract to ensure work is carried out to specification and, crucially, on time. Since these managers usually organise goods procurement and supply most of the material for a contract, competition between the offshore yards centres around the costs and efficient utilisation of labour (see ii below).

ITM was in competition not only with neighbouring yards on the Tees (16) but also with yards on the Tyne and in Scotland. However, not every yard was a direct threat - each tends to have its 'speciality' (e.g. DOM and Redpath Offshore both tend to specialise in the construction of 'topsides', the modules which sit on the platforms above the sea). ITM concentrated more upon the fabrication of 'jackets' - the legs of the platform - whilst also taking on special projects requiring skilled machining and continuing to perform the types of contract traditionally associated with Head Wrightson.

Table 9.2 summarises the main contracts on the ITM order books during the period of the field work.

Table 9.2 Main ITM contracts during study period

Client	Job	Value
EMH/Mobil	Single point mooring buoy	£10m
BP Devt.	'Beams' and 'nodes'	£1m
CONOCO	'Grillage for drill derricks - plus lifting work for Challenger (1987)	£7m

(Contd.)

Table 9.2 (Contd.)

Client	Job	Value
British Shipb'rs	Crane jib for Challenger	n.a.
Rolls Royce	Generators	n.a.
Source: Company sources and <u>Evening Gazette</u> (various).		

(b) Work patterns and practices

The timing of contracts is critical in the offshore business. Work is organised first around 'the season' (i.e. the summer) and then around 'weather windows' (anticipated periods of good weather) within the season. Once a date has been agreed upon for a contract, it becomes vital to meet this target since expensive support vessels, lifting gear and other equipment must be hired well in advance. Consequently, penalty clauses are built into all contracts and late delivery is likely to mean the loss of further business from the client. In ITM's case, this problem was compounded by the need to transport structures first from Thornaby to Middlesbrough by road (17). Since this usually required road closures (and even the removal of lamp posts on some occasions!) another set of dates had to be arranged that could not be missed.

Consequently, work intensity tended to grow rapidly as the dates for contract completion approached. The need to minimise labour costs led to the increasing use of short-term contracts, frequently offered on a thirteen week basis. This was 'the norm' in most offshore yards and was in no way peculiar to ITM. Indeed, Atkinson's (1986) 'core/periphery' model, discussed in Chapter One, is standard practice amongst these supply companies, enabling them to expand and contract as and when the oil companies 'hand out' contracts and throughout the life of a particular project.

Another distinction made by the company is that between 'direct' and 'indirect' workers. The former include chiefly

welders, burners and platers whilst the latter are crane drivers, storemen, drivers and other ancillary workers. The work process amongst direct labourers is roughly as follows. Steel plate goes first to the burner, who cuts out the shapes required from sheets of steel. These steel plates then pass to the plater who lays them out according to the engineers' plans. The welders are then responsible for welding the component parts together.

The issue of 'functional flexibility' ([C2] in Table 2.1) between trades is important here. Sadler (1986) notes that the newer companies like DOM and ITM had an advantage over the older engineering companies that diversified into offshore activities. He also found evidence to suggest that platers have come to occupy a more central role as a result of moves to increase flexibility between trades. A material controller with Davy Normanby confirmed that platers now 'tack' plates into position - something they were not allowed to do in the past, but which enables them to work with greater independence. Whilst noting that many workers at Davy Normanby approve of greater flexibility between trades, he cautioned:

Flexibility doesn't cause problems when there's plenty of work around, but sometimes it causes problems when there isn't - people protect their positions... [Flexibility] hasn't improved the situation in the sense that the lads aren't getting the jobs like they used to.

Traditionally, training for each of the trades has been undertaken through time-served apprenticeships. However, the numbers of apprentices taken on in the industry were sharply curtailed during the recession. This and the earlier admission of general workers to the craft-based trade unions have contributed to the 'blurring' of former job demarcations. Training to a high standard remains vital, nevertheless, in the offshore business and many welders fail to meet the level of proficiency required. For example,

standards of engineering in the shipbuilding industry do not have to be as high as in the offshore field. Thus, when workers from Smiths Dock, near Middlesbrough, started applying for jobs at ITM after the shipyard's closure was announced in mid-1986 (see Withington, 1989) the majority failed a simple plate test - 16 out of 18 on one week-end during the study period (see also Sadler, 1986). Indeed, the poor quality of much of the available supply of labour on the external market was a recurring criticism throughout the study period. Yet the use of short-term contracts clearly discourages companies from investing in training. Moreover, as ITM's Personnel Manager, Arnie Russell observed:

The use of temps is leading to a change in social attitudes and a decline in loyalty. Of course, we all learn that we've got to involve the workers in the firm's activities, but you can't involve people who know you only want them for thirteen weeks. In effect, we're using them and they know it.

Deciding on the number of thirteen week contracts to issue is inevitably an imprecise art given susceptibility to changes in design, delays in materials, bad weather and any other number of unanticipated happenings. However, at the start of each contract ITM drew up a 'works plan', followed by a crude work study exercise. This involved the Personnel Manager and the Works Manager, to lend 'fabrication intuition'. Thus, for example, for the single point mooring buoy for EMH/Mobil, groups of two and three 'cans' had to be welded together to form a 'tubulars' and the tubulars were then welded into a column. Based on experience, the company was able to predict how long each stage would take and thus, for example, how many work-faces would require welding by week six. By so doing it was possible to estimate how many welders would be required by that stage of the contract, whether recruitment would be necessary and so on.

Beyond the 'numerical flexibility' made possible through short-term contracts, ([C5] in Table 2.1), there remains

considerable scope for further variation. First, there is the potential for maximising the productivity during normal working hours (e.g. through intensification - [A14]):

Say there are 20 welders in Bay one on 'cans'. If materials are rejected or on hold or delayed, then these workers are moved to another job, or moved forward on the same job. So the plans can change... It's a fluid situation - like 'Airfix' kits - you can leave a bit out and move on to something else while the glue dries.

Since 'setting up' can take up to an hour for a welder, it is not worth doing this for a short period of time. However, in some cases ITM rented equipment and set it up elsewhere in the factory in case a switch did become possible. The second major source of variation in work effort with a given number of bodies is a change in the hours of work. This was a vital labour adjustment mechanism for ITM and took the form both of overtime [A16] and changes in the patterns of shifts [A15]. The frequent resort to these measures reflected the nature of the work ("ideally once a welder starts on a job he carries on until that weld's finished"), the lack of suitably-trained labour on the external labour market and the high fixed costs of recruitment (including the cost of test materials and the examiner's time).

The 'normal' hours of work at Thornaby were 08.00-16.30hrs from Monday to Friday and 08.00-15.30hrs on Fridays (18). With a half-hour lunch break each day this meant a standard working week of 39 hours. Overtime was available for day shift workers, after a 15 minute break, for two hours until 18.45hrs. The night shift ran from 21.30-08.00hrs from Monday to Wednesday, while Thursday's night-shift was from 22.30-08.00hrs, again with half-hour lunch breaks resulting in a 39-hour week. Friday nights were offered as over-time, as was work on the week-ends. However, whilst the company had negotiated the right to impose new shifts from Monday to

Friday, week-end over-time was strictly voluntary: ("we don't guarantee so we can't compel").

Generally, ITM operated the Teesdale factory with two-thirds of the workforce on the day shift and a third on nights. However, during the study period, the company exercised its ability to switch to two twelve hour shifts (07.00-19.00hrs and 19.00-07.00hrs), with a greater proportion on nights. To the extent that this was against the wishes of the Personnel Manager and in response to pressure from EMH, who saw the move as essential to complete their contract on time, it is apparent that the pattern of labour demand can be altered for 'political' reasons. As the workload moved from Thornaby to Middlesbrough, so Teesdale reverted to 'normal' shifts plus over-time and it became the turn of workers at the wharf to move on to night shifts.

Interestingly, there were marked differences between the labour forces at Thornaby and Normanby Wharf. ITM had a policy of not transferring labour between the two sites because different working agreements and pay rates existed (see e below). First, rates of pay at construction sites such as the wharf are higher than in factories such as Teesdale. Whilst there was a clear overlap in the trades recruited and the types of work performed at the two sites, the wharf was responsible for final erection work and came under closer scrutiny from project managers. Arnie Russell, who was responsible for labour at both sites noted:

When I interview at the wharf I get, for want of a better word, a different class of person. The guys on the [Normanby] site are better producers. Those at the [Thornaby] factory may have the same qualifications but can't do the job as fast... Down at the wharf they get instructions, but they know to get on with the next step without being told

Other social differences were also emerging:

Some blue-collar [workers] are just after the money but increasingly people are becoming more individual. They don't want to know about decision making

necessarily but want to be involved as an individual. This is mostly at the wharf. There's people there with D-reg BMWs and a lot have mortgages. They're middle class, married to say school teachers...

There's even a couple down there [at the wharf] getting into stocks and shares and reading the Financial Times every day.

Interviews with two older employees reinforced these points, with both acclaiming improvements in industrial relations and welcoming the opportunity to air any grievances at 'grouse meetings' held on the last Friday of every month during working hours.

Finally, it is of interest to consider another element of 'numerical flexibility' discussed Atkinson (1986) - the use of sub-contractors and agencies ([C1] in Table 2.1). At ITM, office cleaning had been 'put out' to a contract cleaning company before the study period started. Similarly, security at Normanby Wharf was handled by an external body. At the Teesdale works the idea of using an outside firm had been put to the test, but none of the tenders had beaten the existing 'in-house' costs. In the office, 'temps' [C4] had long been used for holiday cover, but there was also a growing use of agencies to supply technical and professional workers, including draughtsmen and drilling specialists. In direct production, ITM used less sub-contractors than many of its competitors. Significantly, this was in part because it had, through negotiation with the unions, extracted greater flexibility [C2] from its workforce (e.g. riggers were also expected to erect scaffolding - a common activity of sub-contractors in other offshore companies).

(c) Monthly changes in employment levels at ITM 12.6.86 to 20.7.87.

Table 9.3 provides a crude 'head-count' breakdown of the monthly employment changes at the times of visits to ITM/Davy Normanby.

TABLE 9.3 Monthly changes in employment at ITM/Davy Normanby 12.6.86. to 20.7.87.

Category	Visit dates:-								
	1986						1987		
	12.6.	1.8	1.9	14.10	10.11.	10.12.	27.1.	4.3	20.7
Factory	260	305	325	350	370	327	247	150	-
Mar. crew	80	68	68	68	15	15	7	7	-
NW site	130	130	140	150	160	210	280	350	300
Staff	200	180	180	180	150	120	101	*	*
TOTALS	670	683	713	748	695	672	628		
Source: ITM Personnel Manager									
* - Figures not comparable due to use of agency staff by receivers.									

At the first meeting in June 1986 it was disclosed that the problems caused by the drop in oil prices had led to many marine crew being laid off ([A18] in Table 2.1), leaving only 80 on ITM's payroll. Consequently, prior to the interview, 19 senior staff with responsibilities for marine crew had been made redundant [B10]. In addition to the total of 670 (column one of Table 9.3) 30 drillers were on a fixed term contract which ended before the next meeting [C5]. The staff figure of 200 covered both the Teesdale factory and the Normanby Wharf site and included 50 design engineers, 80 marine staff, 15 contract draughtsmen and all the women in the company (around 30 clerks, receptionists, secretaries and typists).

There was an abundance of fabrication work at the factory at this time as the date for the transfer to Middlesbrough of EMH/Mobil's cans was approaching. In the previous fortnight, around 100 direct workers had been recruited (see d below for methods). This recruitment [A1] continued and by the time of the next interview (1.8.86.) a further 50 welders and platers had been employed on thirteen week contracts. The net

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increase on the factory shopfloor, however, was only 45 since five welders left to work at offshore construction sites offering £1.50 an hour more than the factory (suggesting they had taken a factory job as a 'stop-gap' until a better one became available).

Meanwhile a further 12 marine staff had been made redundant along with eight senior managers, with no sign of recovery in oil prices. The 15 contract draughtsmen, however, had their six month contracts renewed for a further three months.

Over the following month (to 1.9.86.) turnover of factory workers increased with several leaving to work for Cleveland and Redpath Offshore, again attracted by the higher wage rates at construction sites. The higher turnover reflected the fact that 'contacts' had been exhausted and many of those being recruited were 'unknowns', or what one Davy Normanby employee described as "the fly-by-nights, chasing wherever the rate is a few pennies higher". Despite these losses the company recruited heavily and registered a net increase of 25 workers at the factory. (This emphasises the danger of assuming a smooth increase in employment as suggested by row one of Table 9.3). On the staff side there were, by this stage, only three left on the marine side - the general manager, the maintenance supervisor and the construction manager.

With the date for transporting Mobil's cans to the wharf set for 16th November, and other smaller contract dates approaching, heavy recruitment continued but now only on eight week contracts. Employment at the factory peaked before the September visit at 436 (322 direct; 114 indirect). By 14.10.86. this had dipped to 350 as employment contracts terminated and turnover continued.

Before the next meeting (10.11.86.) the receivers had been called in. Recruitment continued with 15 welders and six chippers taken on by the receiver and the whole factory

placed on twelve hour shifts (see above). Some 30 middle managers were made redundant - mainly on the marine side. The marine crew were reduced to 'care and maintenance' levels. Meanwhile some staff were starting to leave 'voluntarily' after finding more secure jobs elsewhere

Between 10.11.86. and 10.12.86. redundancies at the factory added to the outflow of those ending temporary contracts, since work was passing to the Middlesbrough site (where, consequently, employment was steadily rising). Thus, between these dates, direct workers at the factory dropped from 305 to 267 and indirect from 65 to 60. The comparable figures at the wharf rose from 110 to 150 and from 50 to 60. Marine staff were further reduced to 35. The number of other staff fell from 100 to 85 following departures which included the two Managing Directors and their secretary, in preparation for the establishment of the new company, Davy Normanby.

Thus, on 9.1.89. all workers at the wharf were fired by the receiver and a 'new' workforce recruited the following week (inevitably including many of the former ITM employees). These were taken on under ITM terms and conditions (pending a review in July 1987) and included 160 'permanent' employees and 80 temporary workers, taken on for the balance of their contract with ITM (e.g. someone five weeks into a thirteen week contract was offered eight weeks). Breaking previous policy, nine 'top' welders made redundant at HW Teesdale were among those taken on at the wharf.

At the factory, meanwhile, a build-up of workforce hostility accelerated the planned transfer of work to the wharf. By the time of the meeting on 27.1.87. there were only 247 workers left and this had fallen to 150 in March when the final closure took place. At that time, a further 50 from the factory were offered jobs at the wharf.

Concluding the study period on 20.7.87. it was revealed that employment at Davy Normanby had peaked at 505 on 5.6.87. but

had since fallen to 300 as the EMH/Mobil contract neared completion, ready for 'load outs' on the 1st, 8th and 24th of August (base, buoy and topside). Many of those included in the figure of 505 were, therefore, sub-contractors engaged in shot-blasting, painting and other 'finishing' tasks.

The above account demonstrates once more the 'dynamics of employment', and illustrates the danger of using aggregate statistics. Clearly, although total employment at ITM varied between a narrow range from 672 to 748 according to the 'stock counts' on visit days, the 'flows' of labour between these dates were extraordinary and accompanied by frequent changes in working patterns.

Before considering the net impact on the local labour market and unemployment, the vital issues of recruitment and remuneration policies are considered.

(d) Recruitment - policies, methods and catchment areas

Well-developed 'grapevines' or 'networks' by which news of job openings was passed around pubs, clubs, friends and (especially) family were by far the most important recruitment channels for ITM. These were, of course, by no means peculiar to ITM (see Sadler, 1986) or to the offshore industry (Maguire, 1986). However, they enabled the company to 'segment' its recruitment by maintaining two distinct networks (see Wilkinson, 1981).

At the wharf in particular the Personnel Manager spoke of one family that helped to organise recruitment: "They know all the good workers and the ones that won't cause any trouble - it's proving to be a good way of running things".

Significantly, news appeared to travel most quickly between those in work. In March 1987, an employee remarked:

Today, for example, there's a buzz on the shop floor. One of the companies up-river is recruiting. The

rumour's going round and people coming to the end of a 13 week [contract], or if they're unhappy, they'll look into it. You know, that's how it happens -, you get the whisper, so-and-so wants 35 welders. That's quite common - especially for welders.

Thus, the ITM Personnel Manager referred to the industry as an "incestuous business, - the people working for me today will be working for one of the others tomorrow". In this environment, detailed records are kept on all employees to ensure that only the best workers are taken on for short-term work. Since 'the best' are the ones with the most recent experience this, too, works against those who have been out of work for any length of time. One employee summed up the situation as follows:

You've got 10-12,000 people going after the same 4,000 jobs [on Teesside], but the same faces crop up over and over.

At the height of recruitment at the factory, however, in Autumn 1986, contacts dried up and other methods of recruitment had to be tried. After a tip-off that THC of Hartlepool were 'paying off' it was made known in the pubs and clubs around the works that 'Heads are testing'. This attracted some 'new blood' but Arnie Russell was under no illusions:

They're only coming here because it's getting near to Christmas and they want a bit of extra cash. But as soon as something better comes up they'll be off.

"In desperation" advertisements were placed in Stockton Job Centre, yielding hundreds of applicants. However, only a fraction was of a suitable quality and the vacancies were cancelled. (In the meantime, however, they contributed to a rise in 'vacancies notified', with the 'raw' statistics saying nothing of the eight weeks' duration of the jobs or of the plight of the company advertising them).

Importantly, however, in the context of the works plan discussed above, recruitment was seen as a last resort in a labour shortage situation:

In the past this industry suffered from over-manning but not any more. If I took on someone every time people said we haven't got enough staff, our numbers would triple in a month. Instead, I've got to look at the possibilities for overtime and see if someone working over here can't move over here for a while... The last thing we'll do is recruit.

Where recruitment was unavoidable, the ITM policy was to start all new workers on a temporary employment contract. Depending on the work-load at the end of the contract and on the worker's performance they would be considered for further temporary work or a 'permanent' post.

Finally, the 'catchment area' for the wharf appeared to be slightly larger than for the factory, reflecting the higher wage rates on offer (see below). Several workers travelled in from Darlington and Hartlepool and car-share schemes were in evidence. However, a company preference for locals ("better time-keepers") meant that the vast majority of the factory's workforce was drawn from Thornaby and the wharf's from Middlesbrough, thus vindicating the focus on unemployment in Stockton TTWA in (f) below.

(e) Trade unions, wage negotiations and levels of pay

Prior to the ITM buy-out Davy had been operating a classic example of 'wage-like' adjustment discussed in Chapter Two. Thus, in addition to holding down annual pay increases, the company was generating negative expectations about career prospects and employment stability at HW Teesdale. Therefore, the first move by ITM was to implement a 20 per cent pay increase 'across the board'. Subsequent recruitment introduced a young management structure, attracted by what

appeared to be exciting prospects for advancement at the time.

Four of the existing unions were recognised by ITM - GMB, AEU (Engineering section), TGWU and EETPU - and membership was 100 per cent on the shopfloor. Before redundancies set in, there were five shop stewards at the factory and three at the wharf. Separate agreements covered the two sites.

Wages at the factory were £4.68 an hour for skilled labour which compared favourably with rates at other factories in Stockton at the time. The hourly rate for skilled labour at the wharf was £5.55 which was lower than the 'going rate' of £6.00 an hour at other construction sites on the River. However, earnings potential at the wharf was greater than elsewhere because of the overtime on offer. Consequently, some workers were earning in excess of £20,000 per annum.

Overtime was paid at 'time-and-a-half', but calculated on a lower 'premium' rate of £4.05 an hour. Thus, for example, two hours' overtime at the wharf would attract $2(\text{£}5.55) + 2(\text{£}4.05)/2$. There was no clear evidence of attempts to introduce 'financial flexibility' in any greater sense, although Sadler (1986) noted the use of bonus payments in his study on Teesside.

Semi-skilled workers were paid at 80 per cent of the rate for skilled workers, and unskilled at 70 per cent, at both sites.

Staff salaries ranged from £3,000 for a junior clerk to £25,000+ with a company car and expenses for top management.

(f) Net impact on the local labour market and unemployment

There can be little doubt that the closure of Head Wrightson establishments in the late 1970s and early 1980s contributed to the surge in unemployment in the TTWA in this recessionary period. With so few employers taking on labour - especially

in manufacturing - it is a fair assumption that most of those losing their jobs would have registered or (since 1982) made a claim for unemployment benefit, at least for a spell.

However, during the study period, although redundancies occurred they were spread over several months and tended to involve relatively small numbers on each occasion. As noted in Chapter Five (Sarek Joinery), once early retirements, out-migrants and cases of long-term sickness are discounted and the spread of job losses across the TTWA is taken into account, the flow into local unemployment can be almost imperceptible.

The major redundancies at the Teesdale works took place in January 1987 and at the time of the final closure in March 1987, when 100 out of 150 remaining workers lost their jobs (the remaining 50 were transferred to Normanby Wharf). A simple analysis of unemployment change in the three wards surrounding the works does yield some signs of a localised impact on unemployment resulting from the rundown and closure. Thus, against a TTWA-wide background of unemployment decline between October 1986 and April 1987 (19), the situation was broadly static in Portrack and Tilery ward and in Parkfield and actually increased in the ward containing the works, Victoria. A comparison of the average monthly inflow to unemployment in these wards during this period with the average for the longer period from July 1983 to April 1987 provides further (but inconclusive) evidence. While the average monthly inflow in Portrack was slightly lower (at 43 a month during the closure compared to 45 for the longer period), Victoria saw a slight increase (from 35 to 36 a month) and Parkfield experienced a significant rise (from 65 to 76). However, it is impossible to make any definitive statements without detailed knowledge of the benefit eligibility and the place of residence of those made redundant.

In the case of 'outflows' from the unemployed into jobs at ITM, again it is not possible to give any precise figures. However, available evidence suggests that recruitment practices contain a strong bias against employment from the ranks of the unemployed. First, the skills required for work in the industry can deteriorate with time off the job and, consequently, the individuals considered to be most suitable (and the most likely to pass tests at the point of entry) are those who are moving straight from another job or, at least, who have been employed in the very recent past (20). Second, only rarely are the jobs advertised publicly - informal networks of friends and relatives are the most common channels of recruitment and information flows tend inevitably to best amongst those already in work.

The question remains, however, of whether those workers who move frequently between jobs actually 'sign on' for a short spell of unemployment between jobs. The indications were that most of the highly skilled workers had little difficulty in achieving continuous employment, moving from one temporary contract to the next. These workers were well known in the various yards and could move around to find the highest wages. Others could find themselves without work during 'slack' periods. In such circumstances, they invariably would make a claim for unemployment benefit, not least to maintain their national insurance records. The experience for many of the less skilled, though, appeared to be one of relatively long periods of unemployment interrupted by very short-term contracts when workloads peaked at the yards.

The following comment made by Mike Parkinson, Regional Organiser of the GMB, reveals how dependent such a system of labour demand is on the high level of unemployment in the external labour market:

We look for permanent employment wherever we can, but if there's a chance of 100 jobs for seven weeks, I'm not going to tell a lad who's been on the jam roll

[dole] that seven weeks is no good, especially if it means he can have a decent Christmas - because I know what he's going to tell me if I do!

The figure of seven weeks is significant. A change in social security legislation in January 1987 has reduced the incentive for people to take on temporary contracts for longer than eight weeks. Withington (1989) noted this in his study of the aftermath of the closure of Smiths Dock on Teesside:

Suppose you were unemployed before January 1987, and you had a mortgage. The DHSS met all your interest payment. In spite of the rule change of January 1987, if you remained unemployed, this arrangement continued for you as an existing claimant. Then, suppose you got the chance of a temporary job lasting, say, three months [and]... at the end of it you can't find another job. Now, though, because you are a new claimant, you are affected by the new regulations. So for the first four months of unemployment, you lose half your mortgage interest payments... If you take a job that lasts eight weeks or less, it does not count as having interrupted your spell of unemployment. So you stay on full mortgage interest payments (p.119).

The fact that thirteen week contracts remained popular in the offshore industry (with management and labour), after the new legislation came into force, suggests that the workers in question were confident of moving swiftly on to new contracts of employment.

Overall, then, it seems fairly clear that ITM's operations and ultimate demise would have added to unemployment in the Stockton TTWA during the study period but, yet again, the detailed case study reveals how misleading it can be to assume a direct relationship between job losses and flows into unemployment.

Because some of the key points from this Chapter are central to this thesis, they are drawn out in the following, concluding Chapter (Chapter Ten).

Footnotes:

(1) The Industrial Reorganisation Corporation was set up by the 1964-70 Labour Government, alongside a Ministry of Technology, with the aim of rationalising and 'modernising' British industry to make it more competitive in the international market place.

(2) Sir Guy Wrightson died in 1950 after 53 years at the company: as a director since 1899, Managing Director after 1910 and Chairman after 1921. On his death Sir John Wrightson took over and he remained Chairman until June 1976. J. Eccles succeeded Sir John upon his retirement and joined the Davy board in November 1976.

(3) Davy sold the manufacturing works of Ashmore, Benson, Pease & Co. to Whessoe in 1968. The £3.5 million deal was financed by the IRC.

(4) In September 1978 Davy merged with the U.S. McKee Corporation and all Davy's engineering and construction companies - including Davy-Ashmore of Stockton - were renamed Davy McKee. The parent organisation was renamed Davy Corporation. McKee's minerals and non-ferrous interests had clear links with parts of HW's organisation.

(5) Davy's oil-related business moved away from Stockton just as the first phase of construction work for the offshore industry was commencing on Teesside. The size of the organisation prevents it from undertaking small projects - its huge overheads render it uncompetitive. Instead, the company is geared towards the co-ordination of international projects and it supervised a number of massive projects in the Arabian Gulf. Its involvement in the first phase of the North Sea development was limited to a few major projects for the larger fields, including Ekofisk, Ninian, Forties and Clyde. The high price of oil and the poor performance of its traditional activities led Davy to re-evaluate its position and consider a more direct role in smaller operations.

(6) Lazard produced two schemes, one for the general sector and one for high alloy castings. A study by the London Business School (cited in Hudson and Sadler, 1986) concluded that the actual reduction in output in the general sector (36,700 tonnes) was not influenced by the Lazard scheme and would have happened in any case. This certainly seems true of the Head Wrightson foundries, which accounted for 6,400 tonnes of the reduction at Stockton and 3,600 tonnes at Billingham.

(7) HW Stampings was renamed Davy Forge in 1983/4, the works suffered from an international decline in its traditional markets (forgings for the mines, railways, petrochemicals, agricultural and earth-moving equipment). Computer-Aided Design and Manufacturing and computer numerically-controlled (CNC) machines were introduced and the company achieved

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success in aerospace, defence and nuclear work. However, in May 1989 the works were sold to Caparo (see notes to Table 9.1).

(8) In 1986, for example, Davy acquired the building and civil engineering company, Monk & Co.. This company has been linked with plans for the redevelopment of a number of derelict Head Wrightson sites for housing, offices and retail use.

(9) The first 'round' of work for the offshore industry saw the rise and fall of Laing's Graythorp yard and the diversification by Whessoe and BSC's Redpath Dorman Long engineering subsidiary into the offshore business (see Table 9.4 in footnote 16 below).

(10) North-East Shipbuilders was the local representatives of British Shipbuilders, on nearby Wearside.

(11) A temporary setback in September 1985 led to 90 redundancies at Thornaby and 20 at Normanby Wharf, however.

(12) Duffield's resignation came just 25 days after he had resigned, amidst much controversy, from his position as Chairman of Middlesbrough Football Club.

(13) This had been the role of the British National Oil Corporation (BNOC), set up by the Labour Government in 1976 following a pre-election pledge to raise public sector involvement in the development of the North Sea.

(14) At one point the receivers were considering an offer of £300,000 for ITM's land drilling rig, valued earlier at £3 million.

(15) Interest in ITM's assets and in Challenger was shown variously by the Tees and Hartlepool Port Authority, DOM, THC and Trafalgar House in the U.K. and Allseas Engineering and Heerema (two of ITM's Dutch rivals), McDermott International (U.S.), Microperi (Italy) and representatives from the Brazilian Government.

(16) Table 9.4 shows the main offshore yards on the Tees at the time of the field-work.

TABLE 9.4 Offshore yards on the R. Tees 1986/7

Yard name	Location	Owner	Details of entry to offshore prodn.
Cleveland Offshore	Port Clarence	BSC's Redpath Dorman Long subsidiary until 1982; then	Diversified from heavy engineering in early 1970s
Redpath Offshore	Linthorpe Dinsdale Midds.	Trafalgar House	
Laing	Graythorp Yard, nr. Hartlepool	Laing	Opened 1972 and closed 1976. Re-opened 1988.

(Contd.)

(Table 9.4, footnote 16 Contd.)

THC	Victoria Harbour Hartlepool	Dutch owned	Took over from MM Oil in 1984
Whessoe Offshore	Dock Point Mids.	Whessoe, Darlington	Opened 1954 to produce nuclear submarine hulls. Used post-1969 for oil/gas projects *
ITM (Offshore)	Normanby Wharf + Thornaby	Privately-owned until 1986	See main text
Davy Offshore Modules	Vulcan Works, Mids.	93.75 % owned by Davy Corporation	See main text
Offshore Engin'g Services	Portrack Lane, Stockton	Trafalgar House	Amalgamation of: -Cleveland Pipework Services -Lawrence Allison -Offshore Fabric'ns -RDL Mech'l Eng'g
Source: Sadler (1986); Tees Offshore Directory (undated); <u>Evening Gazette</u> (various dates).			
* Whessoe Offshore closed in late summer 1989.			

(17) River access to the Teesdale site (which used to house two shipyards) became impossible once dredging of this stretch of the river ended.

(18) The office hours of those directly connected with factory operations are the same as for the factory. For other office staff, a 35 hour week, 09.00-05.00hrs applied, with an hour for lunch.

(19) In October 1987 unemployment in Stockton TTWA was 12,752. By April 1988 the number had fallen to 12,086.

(20) Recognising this, the GMB established a training scheme, known as NEWTS (North East Welder Training Scheme), to give unemployed welders the chance to practice their skills before attending interviews at the offshore yards.

CHAPTER TEN: CONCLUSIONS

10.1 Structure of the Chapter and introductory comments

Although this thesis focused upon the changing labour demands of six individual employers, it is possible in conclusion to extract findings which are of relevance to a number of topical issues in economic and industrial geography. Amongst these, important insights can be offered into the nature of the restructuring process, the pressures upon employers to achieve 'flexibility' and the existence (or otherwise) of 'locality effects'. Following on from sections on each of these subjects, Section 10.5 evaluates the conceptual framework of the labour market presented in Chapter Two and questions the usefulness of unemployment 'flows' data as an indicator of labour market performance. On the basis of this assessment, suggestions are made regarding potential improvements in the types of labour market data that are collected. Finally, in Section 10.6, institutional structures and job creating initiatives that have been introduced since the study period are summarily examined in the light of the knowledge gained about the local labour market.

10.2 The nature of 'restructuring' and its impact on local unemployment

A sustained and stable pattern of economic accumulation requires a conformable and stable socio-institutional structure. If, however, there is a major alteration or disruption in the form or nature of economic growth, then a corresponding major reorganisation of the socio-institutional environment may be necessary if stability of the growth process is to be restored. On the other hand, a given socio-institutional structure fostered by and functional for a given regime of accumulation may itself subsequently become a source of rigidity and hence

dysfunctional for the economic system, precipitating instability or even crisis in the latter (Martin, 1989 p.29).

Much has now been written about the erosion of the 'post-war consensus' that provided the basis for economic accumulation in Western Europe until the mid- to late 1970s and there is no need here to rehearse what are now familiar arguments and accounts of the local outcomes (see, for example, Williamson, 1982; Massey, 1983; Davis, 1984; Dunning, 1985; Cooke, 1986; Lloyd and Shutt, 1985; Purcell et al, 1986; Martin, 1989; Hudson, 1989). Four terms which sum up the (inter-related) changes that have taken place since the late 1970s can be extracted from this body of literature. These are 'deindustrialisation', micro-electronics-based 'technological innovation', (private sector) 'tertiarisation' and the 'redefinition of State intervention'. Together the processes associated with these terms have established a new socio-institutional environment based on 'popular capitalism', self-help, individualism and private ownership.

In the 1980s, though, there was increasing awareness that the impact and, indeed, the very form of such changes varies over space in ways which are shaped in each 'place' by the legacies of past 'rounds' of investment.

Much of the attention in studies of restructuring in the U.K. has been focused on activities (and regions) central to the new 'regime of accumulation'. As a consequence, with some notable exceptions (for example, Hudson, 1989), the impact of the new socio-institutional structure on existing, 'traditional' and 'mature' employers (and on peripheral, 'old industrial' regions) has been relatively neglected. Yet, this thesis has shown that the patterns of labour demand and utilisation of six such employers (in one such region) have had to adapt in ways that are no less tied to macro-level 'restructuring'.

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Indeed, it was clear in a number of the case studies that 'new' and spatially remote activities can have implications for seemingly unrelated 'traditional' or 'mature' activities. Thus in the case of KP, for example, new forms of 'consumer-led' retailing, including instantaneous monitoring of sales patterns, generated requirements for a more responsive system of production and distribution. Research and development activities at Davy, paving the way for the introduction of continuous-casting technology in the iron and steel industry, helped to seal the fate of Head Wrightson's iron foundry, manufacturing iron ingot moulds. The Government's efforts to tie the National Health Service into the new framework of accumulation led to renegotiation of the contracts of cleaning staff at North Tees Hospital.

In a more general sense, the Government's diagnosis of, and prescription for, the 'regional problem' have added to the pressures on employers to realign their organisations to survive under the new 'regime of accumulation'. Thus, the 'regional problem' has been recast from being a question of unequal distribution to being one of supply-side rigidities, lack of enterprise, with inefficient industry hampered by strong unions. Consequently, the Government has reduced direct support to industry in, or moving to, 'peripheral regions'. In its place are policies designed to increase 'competitiveness' by stimulating private profitability and breaking down established workplace patterns and practices .

The essential point here is that pressures for restructuring at the 'internal', micro-level examined in this thesis are necessarily related to wider, 'external', macro-level restructuring pressures affecting the national and international economies. In this context, whilst the potential for investment in Stockton TTWA is dependent upon a host of factors, two stand out as especially important. The first (supply-side) is the legacy of previous rounds of

investment in the stock of both physical and human capital. The second (demand-side) relates to the type of investment that is profitable given the tastes and preferences born of the emerging regime of accumulation.

For many years Stockton's supply of (male) labour, skilled in the engineering trades, was its guarantee of attracting new rounds of investment. Post-war reconstruction ensured a reasonably steady source of demand for the products of the local heavy engineering companies. However, partly because of the TTWA's long history of work in this sector, working practices became established and resistant to the changes required under the increasingly international systems of production and distribution, from the mid-1970s onwards. Industrialists were faced with national economic conditions under which higher returns could be earned by investing in manufacturing overseas or in other sections of the domestic economy (for example property, services).

As this situation intensified in the early 1980s, so it became impossible to maintain 'inefficient' plant (witness the demise of the Head Wrightson foundries). Likewise, the basis of the TTWA as an attractive location for new (and relatively scarce) investment was undermined. The supply of skilled male labour changed from being an asset to a liability. Only in those cases where (male) labour was prepared to accept an erosion of its terms and conditions of employment could capital see investment opportunities that it considered viable (for example, in the offshore supply industry). Elsewhere, abundant, low-skilled female labour emerged as an alternative attraction for new investment. The demand for such labour has been on the increase across the country, tied inextricably to methods of production suited to the new regime of accumulation.

With its emphasis on 'competitiveness' and 'efficiency' this regime has raised the ever-present pressure under capitalism

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to minimise the costs of variable capital and maximise the rate of return on investment. Under such conditions, employers are bound to seek new technology that reduces necessary labour inputs and working practices that maximise the utilisation of labour when it is present. The method of achieving these goals will vary according to the nature of the production process or service operation (1) in question. Furthermore, the possibility that employment will have to increase at certain stages of the production process (especially at the service/delivery end) is not excluded. However, this thesis has shown that macro-level 'restructuring' has implications for all establishments and not simply those high-profile cases where 'flexible specialisation' is both observable and directly linked to 'new' activities.

In selecting six employers to study for this thesis, the intention was not to reach conclusions about these employers as an 'end' in itself. Rather, they were chosen because they were thought to be undergoing (or to be under pressure to carry out) some form of 'internal' restructuring (2). Given this, they were identified as employers whose labour demands were likely to show variation greater than would be expected from 'normal' labour turnover and replacement.

One important aim of this thesis was to investigate the (under-researched) ways in which internal workplace reorganisations interact with conditions in the external labour market. Notwithstanding the relatively short (one year) period of the fieldwork, therefore, the goal was to maximise understanding of how such reorganisations, prompted by the need to 'restructure', impact upon the external labour market. Greater understanding of changing labour demands and the 'dynamics of employment' was felt to be an important 'end' objective in its own right. In comparison to (often supply-side) studies of the 'dynamics of unemployment' (where

data are more readily available), the pattern and composition of labour 'flows' on the demand side of the labour market remain poorly understood.

Of course, it is artificial to distinguish between demand-side and supply-side pressures underlying observed labour flows - the ultimate goal must be to understand how the two sides of the labour market come together and influence each other. Another 'end' objective of the research, therefore, was to look in detail at one (much misunderstood) element in this overall process: the impact of variations in labour demand - or, more specifically, of any 'labour flows' that might be so generated - upon the 'stock' of unemployed people in the Travel to Work Area (TTWA). In using unemployment data based on official definitions of 'unemployment' it is recognised that this could only ever be a partial approach to the issue. The importance attached each month to the assumed relation between changes in official unemployment and changes in employment suggests, however, that this is a much needed exercise (see Section 10.5 below).

10.3 The pressure on employers to achieve 'flexibility'

Although, as stated above, it is not the purpose of this thesis to reach conclusions about the six employers themselves, it is useful to summarise some of the most significant findings about their operations, against the background of the discussion in Section 10.2 (above).

At KP, (Chapter Four), the level of employment was shown to be dependent upon the performance and the evolving organisation and objectives of the parent company, United Biscuits. Changes in KP's product market were creating pressures for more flexibility in production runs and, hence, in staffing levels. Computer technology was shown to be both a contributor to these pressures - enabling the rapid

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transmission of sales information from the leading retail stores back to the manufacturers - and an essential element of the company's response to this new environment (computer-controlled production equipment and computerised warehousing systems). The restructuring of the labour force that was underway before and during the period of fieldwork involved a change-over from full-time to part-time operatives.

Significantly, this transformation was achieved quietly over a number of years and the gender composition of the workforce was shown to have contributed to this. The introduction of a part-time labour force enabled the use of a new set of adjustment mechanisms and the use of 'extra-time' at standard rates of pay was shown to have substituted, in part, for the use of over-time. Last, but not least, the concentration of employment change amongst a miscellaneous group of 'temporary' workers served to reduce the perceived impact of labour force adjustments amongst 'core' workers and added considerable flexibility to the employer's operations.

The changes at KP might be characterised as an example of 'industrial de-maturation' involving the:

revitalisation and modernisation of existing 'mature' industries and firms through... the application of new production technologies, new product development and diversification of markets, so as to raise efficiency and competitiveness
(Martin, 1989, p.37).

At Sarek Joinery (Chapter Five) the decline in the public sector construction market was shown to have interacted with problems caused by increasing imports of cheap doors and a failure by management to respond to changing methods of marketing and distribution in the late 1970s and early 1980s. As a result, employment had declined from a peak of over 1,000 to less than 400 by the time of the study period. It was suggested that the problems being experienced by Bowater

(the parent company at that time) exacerbated the company's situation.

The state of industrial relations was shown to have had an important bearing on decisions about labour force adjustments at Sarek. They formed a barrier to any (belated) attempts to promote 'industrial de-maturation' in this instance. In this context, an interesting 'north-south' dimension was introduced in negotiations over the future of the Stockton works and its sister plant in Essex. Attempts to alter the 'employment relation' at the Stockton factory included 'off the job' training of multi-skilled workers, the introduction of 'quality circles' and the institution of a pay cut through a renegotiation and consolidation of bonuses.

At North Tees Hospital (Chapter Six), pressure to secure numerical, functional and financial flexibility were shown not to be exclusive to the private sector. No fundamental changes in employment were witnessed, but there was an unmistakeable shift towards part-time employment and, at the margin, elements of casualisation were shown to exist. Work intensification was in evidence across a wide range of occupations in the Hospital as 'manpower ceilings', budgetary constraints and, in certain services, private sector competition forced existing staff to take on additional duties. Institutional changes, as part of the Government's drive to introduce more commercial practices into the NHS, were shown to be the main factor influencing levels of labour demand, with actual employment clearly less than would be associated with desired levels of labour demand in most areas of the Hospital.

There were no major labour flows or changes in working practices at Glamal Engineering (Chapter Seven) during the study period although, in percentage terms, the increase in sales staff represented a bold step by a small firm. The role of one 'key worker' was shown to be of fundamental importance

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to the company's fortunes. Despite the professional approach of its management, Glamal was shown to be subject to pressures largely beyond its control, including the performance of its large suppliers and customers. Indeed, the company's whole operation was characterised as an example of 'distancing', with its stockholding and specialised machining functions identified as tasks that larger companies would rather sub-contract to smaller firms. Whilst it is not possible to generalise from this particular example, it is clear that, with the exception of personal services, many 'small firm' activities are similarly located within such interstices between large-scale, often multi-national concerns (see Pratten, 1986). As such they cannot deliver a 'solution' to the problems resulting from the restructuring of large firms.

At Tabuchi (Chapter Eight), it was argued that there was little to distinguish work content and the pattern of production line assembly from comparable U.K.-owned establishments. The very fact of Japanese ownership and the use of worker incentives and rewards did appear, though, to attach some 'special meaning' to employment at the factory, as far as some of the employees (and, presumably, some potential recruits) were concerned. The study period was one of expansion and rising employment at the factory, providing one of the few examples of large-scale recruitment amongst the employers being studied. The level of selectivity in recruitment varied according to the pressures to increase output. However, towards the end of the study period, labour supply constraints appeared to be more of a consideration and an unofficial policy of employing very few male production line operatives was under review.

The low levels of training required for production line work at Tabuchi enabled the company to lay off (and call back) workers during (and after) an anticipated dip in production

during the study period. Such a policy must be seen in the context of the company's non-union status, the high levels of local unemployment and the limited alternative employment options for women. However, it was possible to show that Tabuchi's growth coincided with an above average decline in female unemployment in the wards surrounding the factory. Furthermore, it is known that (officially) unemployed people were recruited (including some long-term unemployed) in order to maximise benefits available under an employment subsidy scheme operated by Cleveland County Council. Finally, though, the security of the job gains was questioned in light of the 'external control' element of the plant's operations, the pace and direction of technological change in the industry and the possibility of increased (possibly Japanese) competition within the U.K. and European market. The 'Japanese answer' to unemployment was not accepted in this thesis, first, because 'Japanisation' represents a 'chaotic conception'. The second reason was that the way in which it has manifest itself in Stockton is dependent upon high unemployment for the success of its labour adjustment mechanisms.

The attraction of Tabuchi to the TTWA might be regarded as evidence of a 're-industrialisation' strategy on the part of the local authorities, designed to allow Stockton to gain a share of employment in perceived 'growth sectors', such as electronics. However, the very limited influence of the local authorities on the decision-making of international corporations and the frequently low-grade nature of the jobs attracted to peripheral regions means that the prospect of such a strategy producing 'true' reindustrialisation are virtually non-existent.

Head Wrightson (Chapter Nine) provided clear examples of how new 'rounds' of investment bring new methods of production and new working practices in their wake. The latest 'round'

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on the former Head Wrightson site in Thornaby involves an office-housing-retailing complex. The development potential of the site ruled out any lingering hopes of preserving manufacturing activities in this part of the TTWA.

The forces for change, related as they are to the existing structure of industry and to changing markets, have moved up from the local to the international level. As a result, production and associated working practices have had to become internationally competitive. This condition resulted in the loss of employment in 'traditional' mechanical engineering activities, not only at Head Wrightson but also at the county, regional and national levels. Head Wrightson/ITM tried to carve a 'niche' in construction work for the offshore industry, but with a totally revised 'employment relation' based upon short term working and flexibility between trades. The ability to 'fine-tune' the hourly input of labour (and thus to keep labour costs to a minimum) was used as an essential tool in efforts to attract orders in a highly competitive market and then to meet tight delivery schedules. (In this respect, it is interesting to contrast the ability of ITM to switch labour onto alternative shift patterns with the situation at Sarek).

For school leavers in the TTWA, especially males, an established point of entry to the labour market and a reliable source of high quality (employer-based) training at Head Wrightson has been lost (as at Sarek). 'New' types of employment in manufacturing are as likely, if not more likely, to be filled by females as by males (for example, Tabuchi, Samsung) and, increasingly, offer part-time or short term contracts of employment. The transition from school to work is no longer a male-dominated concern and no more takes the form of time served apprenticeships. In 1989, 42 per cent of school leavers in Cleveland enlisted for the Government's Youth Training Scheme compared to a North East average of

just over 38 per cent and a mere 12.9 per cent in the South East of England (Northern Echo, 31.3.90. p.3).

In light of these comments, it is possible to comment on the concept of the 'Flexible Firm' outlined in Chapter One. As argued in that Chapter, there can be no denying its usefulness as a descriptive, classificatory system and the terminology of numerical, functional and financial flexibility was used throughout this thesis. However, the point was also made that attempts to 'prove' or 'disprove' the concept are misguided and depend critically on the definitions that are adopted.

It became clear in a number of the case studies that many so-called 'new' working practices were simply a euphemism for an intensification of work effort designed to extract the same amount of labour service from a reduced number of workers or for a lower rate of pay. As noted by a worker at Davy Normanby (Chapter Nine), flexibility "hasn't improved the situation in the sense that the lads aren't getting the jobs like they used to". The introduction of such practices can be understood only against the background of high unemployment and weakened unions in the 1980s.

Meanwhile, evidence of 'distancing' (externalisation of services previously performed in house) was found at all of the employers that were studied. Indeed, in the case of Glamal Engineering (Chapter Seven) it was argued that the steel-stockholding business was, in many ways, an example of an activity that had been 'externalised' by the company's major customers.

The intensive approach adopted in this thesis enabled not only a description of employment change but also an explanation of it. Such an understanding can be gained only from an in-depth analysis, as provided at the start of each Chapter, of the employer's operating environment and the way in which this influences and constrains the choice of labour

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market adjustment mechanisms. To focus solely on the numbers and proportions of part-time and temporary workers in the economy is to tell only part of the story and ignores the interconnections between changes at different stages of the labour process. The ability to use 'peripheral' sources of labour is dependent, amongst other things, on the nature of the production process at an establishment and this, in turn, depends on how that particular establishment fits into the wider scheme of production.

To take an extreme example (though not too removed from the case of Tabuchi and other examples of Japanese inward investment) the design and development of a product may take place outside of a given spatial area, but that area may attract the associated production and assembly activities. If these latter activities require little training and recruits can be drawn from the local labour market with relative ease, then use of peripheral types of labour is a strong possibility. However, any resulting increase in the 'peripheral labour force' says more about the external operating conditions (for example, standards of education and training of the labour force, competitiveness of local industry, availability and conditions of financial assistance, indigenous design and development capabilities, policy towards and ability to influence inward investment) which encourage the initial spatial division of labour than it does about 'new' working practices on the part of employers.

By taking the distribution of employers and employees as 'given', those supporting the concept of the 'Flexible Firm' (for example, Atkinson and Meager, 1986) fail to consider the historical processes which generated these distributions during previous rounds of investment. On a related point, previous rounds of investment will have created and recreated various patterns of gender relations. To take the present

pattern as 'given' is an equally serious omission on the part of those investigating the 'Flexible Firm' since previous 'rounds' of gender relations can influence the possibility of attracting different types of employment. For example, over the course of the study period, production line work at Tabuchi was 'constructed' as 'women's work'. Towards the end of the period, as it became difficult to attract sufficient numbers of women, the company was forced to consider using men to fill the vacancies but believed that they would be less likely to 'stick' to the work. Such beliefs - justified or not - clearly influence decisions about labour utilisation. To ignore them is to exclude an important explanatory factor from the analysis of labour markets.

10.4 Evidence of locality effects

One of the issues raised in Chapter Two was whether processes within localities combine to exert an overall influence on observed outcomes which amounts to 'more than the sum of the parts' of each individual process. One possible example where this applies is the growth of the offshore industry on Teesside. Here the geographical 'resources' of the River Tees and proximity to the North Sea oil and gas fields combined with the decline in 'traditional' market opportunities for local engineering companies (such as Head Wrightson, Redpath Dorman Long and Whessoe) in the early 1980s. The processes generating firm closures, job losses and high unemployment amongst workers in the boiler-making trades changed workers' expectations and led to acceptance of the short term contracts suited to work patterns in the offshore supply industry. Furthermore, the workforce was used to shift work and therefore more receptive to the highly flexible work patterns expected in the industry.

In addition, there was a 'ready-made' network of companies (including Glamal) set up to serve the petrochemicals

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industry on Teesside and able to diversify into sub-contract and supply work for the offshore yards. The involvement of the Davy Corporation in, first, Davy Offshore Modules and, later, in Davy Normanby surely owes something to the Corporation's presence and history on Teesside and to the personal contacts and close-knit nature of the local industry.

In a similar way, ICI's involvement in Belasis Hall Technology Park (see Appendix to Chapter Three) possibly owes something to the company's desire to promote a 'socially responsible' image in its 'birthplace', against a background of job losses from its Billingham fertiliser works.

However, the question of 'locality effects' is usually framed in terms of social processes related to, but external to, the labour market. Since such social processes were not the subject of detailed investigation in this thesis, no definitive opinion can be offered as to whether the Stockton TTWA constitutes a 'locality'. However, from available evidence it seems possible that if there were 'locality effects' they were more likely to have been at either the 'lower' community level (for example, in Billingham) or the 'higher' sub-regional level (that is, on Teesside).

10.5 Evaluation of the conceptual framework of the labour market

(i) Assessment of the concept of adjustment mechanisms

In all cases (with the possible exception of Glamal where there were few notable events or changes during the study period) a variety of the adjustment mechanisms listed in Table 2.1 were identified, including instances of adjustment associated with restructuring. Inevitably, many 'second order' (day to day) decisions regarding production and labour utilisation also came under scrutiny but these can have an

significant bearing on more important decisions (for example, a recurring problem such as absenteeism needs to be dealt with as it occurs but will also influence decisions, say, about the location of new investment or may encourage a reorganisation of working practices). Similarly, restructuring of production changes the range of adjustment mechanisms that is available (for example, use of extra-time at KP following the switch to part-time operatives).

Whilst it is not practical here to list all the various types of adjustment that were identified in this thesis, there were examples of almost every type of adjustment listed in Table 2.1. As would be expected, the short to medium term mechanisms predominated, with over-time [A16] (and 'extra-time') featuring most often. Examples of adjustment associated with restructuring were less numerous, but included disinvestment [B1] at Head Wrightson, relocation of production [B2] at Sarek, closure of plant [B3] at Head Wrightson, ICI, Sarek and North Tees Hospital, opening of new plant [B3] at Tabuchi and United Biscuits, reorganisation of the labour process [B4] within the Davy organisation, transfer of employees [B5] in the case of Powergas and the consideration of such a move at Sarek, transfer of production [B6] at Sarek, change in the length of the working week [B7] at KP and for nurses at North Tees Hospital, a change in people's expectations [B9] at Head Wrightson under Davy and at KP and redundancies [B10] at ICI, Head Wrightson, ITM and Sarek.

At first glance, a number of these mechanisms may appear to have little to do with an adjustment for an imbalance in labour demand and supply. However, as explained in Chapter Two, they must be considered within the theoretical framework of the labour theory of value, where labour is the original source of value for all other commodities. Thus, for example, a disinvestment decision may be associated with investment in

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another part of an organisation where the opportunities for extracting surplus value have emerged as superior. The organisation then needs to restructure its labour inputs in order to meet its new investment priorities. The clearest example of this in this thesis was the disinvestment by the Davy Corporation in the Head Wrightson organisation.

The 'adjustment mechanism' categorisation served as a useful reference point throughout the thesis, helping to emphasise that many forms of adjustment of labour demand involve no change in the level of employment. Thus, when investigating the likely labour market impact of a new establishment (or of a change in the operating environment of an existing one) it is a useful starting point to assess, based on an in-depth knowledge of the firm's production process, how it is likely to meet (or adjust) its labour requirements.

What the preceding sections have demonstrated, though, is that 'local knowledge' is necessary but not sufficient for an understanding of how labour demand is likely to change over time at existing establishments. Equally important are parent companies' corporate plans (where appropriate), the relation of particular establishments to the broader scheme of production and/or service provision, changes affecting both suppliers and the markets being served, local labour market conditions and 'custom and practice' which set the limits within which adjustments 'in situ' can be achieved.

As for potential new investment, the local supply of labour and the state of local infrastructure (amongst other things) are criteria against which investors gauge their decisions. These are based on their 'inside' knowledge of the technology and associated production process that could be used and on investment opportunities in other sectors and alternative locations. Knowledge of the local labour market enables potential investors to decide whether their labour demands and preferred methods of adjustment can be accommodated.

(ii) Changing labour demands and unemployment 'flows' data

One perhaps surprising finding of this thesis was the extent to which flows into and out of the workplaces under study bypassed the unemployed altogether. (It must be remembered, though, that it was possible only to study the interaction with official unemployment. Many of those moving in and out of work were drawn from or were heading into joblessness but, because of benefit eligibility criteria, they would not feature in the official unemployment statistics).

On the recruitment side, there were numerous examples where bias against the unemployed was inbuilt, albeit unintentionally (for example, superior information flows amongst those in employment) or for 'sound' business reasons (for example, the requirement upon workers to meet a certain level of proficiency, associated with recent work experience). As for 'outflows' from employment, it proved almost impossible to identify significant variations in local unemployment even after sizeable redundancies. Instead, it would appear that after allowance is made for early retirements, long-term sickness, ineligible claimants and out-migrants and once the impact is spread across the TTWA the 'unemployment impact' of localised job loss cannot be separated (given available data) from all the many other factors influencing the monthly count (see also Österland, 1989).

Given these points, the question must be asked whether the regular collection and publication of unemployment flows data serves any useful purpose. Certainly, there is considerable potential to increase understanding of the dynamics of unemployment by examining the relationship between unemployment duration, unemployment flows and the monthly unemployment count. However, (as argued in iii below), this potential cannot be realised at present because certain vital pieces of information are not collected and because the time

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periods used for reporting flows and duration data are not compatible. Until such times as these obstacles are removed it is impossible to interpret the flows data with any reliability and studies are restricted to statements of the 'more research required' variety:

During the 1970s the average unemployment rate of [skilled men aged 45 years and over] rose from 0.4 per cent to 3.7 per cent. This change came about almost entirely from the nearly tenfold increase in the likelihood of inflow into unemployment, although the outflow probability falls slightly also. The worsening unemployment position of this more skilled and experienced group... suggests that the possession of skills is an insufficient protection from the effects of the more severe recessions (Department of Employment, 1986c, p.367, emphasis added).

Furthermore, the implicit (and unacceptable) assumption in such studies is that all outflows result from unemployed people finding jobs. During the study period monthly meetings were held with Job Centre personnel at Stockton and Billingham. At these meetings it became clear that 'special employment measures' funded by central Government were responsible for taking many people out of the unemployment count. For example, in the year to April 1987 the number of people placed on a Community Programme (CP) scheme in the Stockton Job Centre area (excluding Thornaby, Yarm and Billingham) was 1,611. This figure is almost 40 per cent of the number of people placed in job vacancies (4,121) over the same period. Furthermore, because of the eligibility requirements of CP, it is known that all 1,611 had previously featured in the unemployment count (unlike those filling vacancies, who might have been unofficially unemployed or looking for a change of job). As noted in Chapter Three, for the TTWA as a whole, approximately a third of the monthly outflow from unemployment during the study period was to a CP vacancy.

Developments during the study period included the introduction of stricter 'availability for work' tests under the Government's 'Restart' programme (Department of Employment, 1986b) and of the ill-fated new Job Training Scheme (Unemployment Unit, 1986). Since then, 'availability for work testing' has been brought forward to cover the initial step of 'signing-on' for unemployment benefits (Unemployment Unit, 1988b) and 'Employment Training' (Unemployment Unit, 1988c) has replaced CP. All of these developments have had major implications for those attempting to obtain unemployment benefits.

If the objective of this thesis had been to account for observed changes in official unemployment, it would have been necessary to investigate in detail the impact of each of these 'institutional' changes on unemployment counts, durations and flows. However, too often studies become obsessed with 'explaining' changes in unemployment. They fail to recognise that the official count is based on an arbitrary (and frequently changing) definition of what is, in any case, a socially-defined phenomenon. Explaining changes in official unemployment statistics should not become an end in itself. Only if the unemployment statistics can be 'tied in' with other aspects of labour market change is in-depth study warranted. This was possible to only a very limited extent in this thesis. The next section, consequently, makes some recommendations as to how the situation might be improved by changing methods and types of data collection.

(iii) Recommendations for improvements in the collection of labour market data

Despite the rapid growth in recent years in the number of studies purporting to be about 'the labour market', the market's operation remains poorly conceptualised and available sources of data tend to be used unquestioningly.

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However, drawing on the vision outlined in Chapter Two and exemplified throughout this thesis, it is possible to make a number of suggestions about data collection that could improve understanding greatly.

The first, and most obvious, recommendation relates to the information collected at the point when an individual ends his or her claim for unemployment benefit. The reason why a person 'signs off' is a critical piece of labour market intelligence and it is quite amazing that this information, whilst collected by the Employment Service for each individual's personal records, is not aggregated or used in any other analytical sense. A breakdown of the 'outflow' from unemployment by the 'reasons for leaving' would enhance considerably the understanding of the processes underlying observed changes in unemployment. To date the only source of such information has been special surveys of the unemployed (for example, Moylan et al, 1984). Amongst other things, such a breakdown would provide a clearer picture of the relationship between unemployment and employment (or self-employment). The Employment Service could even record details of the companies recruiting from the unemployed. This would save the enormous amounts of time and money currently being spent on surveys to discover exactly this type of information.

Unlike the Community Programme, places on Employment Training (ET) are not recorded as vacancies. Implementing the above arrangements would serve another purpose, therefore, by providing an accurate source of information on the numbers of unemployed people leaving unemployment to take up ET. Clearly, it would involve relatively little effort to record such details broken down by the age and sex and duration of unemployment of the individuals involved.

Meanwhile, 'flows' and duration data, at present, are collected for differing time periods. This makes it difficult

to relate the two sets of data to one another. Synchronised reporting periods would enable a more detailed examination of the dynamics of unemployment at local, regional and national levels. Thus, monthly inflows and outflows to and from unemployment could be related to changing levels and durations of unemployment in a direct manner. 'Continuation rates' (3) could be calculated for the various duration cohorts (see Perry, 1972). This would provide policy makers with accurate information on the success (or otherwise) of initiatives targeted at certain categories of unemployed individuals.

Another much needed source of information relates to the occupation and skills of the people entering unemployment. This used to be recorded when the unemployment count was registrant-based, but was dropped after staff union objections. Recent moves to re-integrate Job Centres and Unemployment Benefit Offices present an excellent opportunity to start collecting such details once again (for purely statistical purposes). Indeed, there are signs locally that the Employment Service is considering this possibility following the creation in Middlesbrough in 1989 of a labour market intelligence office staffed by two full-time employees (4). Certainly it would remove the perceived need for 'skills audits' which are now proliferating (at great cost) around the country. Likewise, 'Restart' interviews collect much of the information necessary to establish a database of the skills of the unemployed but, as with 'signing off' details, little or no attempt has been made to analyse this information in an aggregate sense for local labour markets (5).

Meanwhile, Job Centre vacancy data on NOMIS constitute a much underused resource, notwithstanding the fact that they tend to be a biased sample of all available vacancies in a local labour market. Robinson (1989) recalls the survey that, until

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1987, was conducted each spring, known as the 'Survey of Long-Duration Vacancies' (SLDV). This, he argues, provided a useful indication of the importance of skills shortages relative to other factors such as low pay and unsocial hours as a cause of long duration vacancies:

If the SLDV was reconstituted and firms were encouraged to notify all their vacancies to the Job Centre, we would be closer to getting an adequate database
(ibid, p.11).

He continues, by arguing that the extra burden this would impose on firms would be offset by a qualitative increase in recruitment.

Even if Robinson's suggestions are not implemented (and there would be little chance of success for a voluntary system of notification by employers) there are still ways in which the necessary information could be assembled. Job Centres, the Training Agency (through CALLMI), local authority departments and business organisations all collect various pieces of labour market information (LMI) but, at present, this is carried out in a rather haphazard and unco-ordinated way. In the late 1980s there was increased interest in opportunities for 'data pooling', whereby all relevant agencies co-ordinate the collection and distribution of company-based LMI. In Cleveland, a recent report (Fox, 1989) recommended rapid progress towards such a local labour market 'consortium' of interested and committed parties in the county. Vested interests appear to have prevented the adoption of the recommendations in full, but progress in this direction undoubtedly would muster considerable resources for the necessary task of setting labour market data in context.

Finally, there is no real substitute for the case study approach when gathering information on labour adjustment mechanisms at individual workplaces. Beyond the workplace, knowledge of 'internal' labour market processes remains very

poor - one reason why the establishment of employer-led Training and Enterprise Councils (TECs) may seem to have strong appeal. The case for and against TECs is made briefly in the following, final section of this thesis.

10.6 Concluding comments

It is difficult, (some might say impossible), to jump from a study of six individual employers to make statements about the operation of labour markets in general. Similarly, such a study may appear to confer little authority to make pronouncements about 'institutional' developments of national importance designed to improve the performance of local labour markets. However, it is argued here that the intensive research presented above, by uncovering causal mechanisms, provides a greater insight into the operation of labour markets than any number of statistical exercises which describe patterns but fail to examine processes.

Certainly, it would be wrong to suggest that six case studies provide a sound basis against which to assess the likely future performance of the labour markets of Stockton TTWA. Furthermore, there definitely is a role for statistical overviews that set the parameters within which local labour force decisions take place. For example, it is essential to know how demographic trends are going to affect the size of the local labour supply. It is also important to make employment projections at an aggregate level. In this way it is possible to show for an area like Cleveland that even though the 'job gap' is likely to narrow over time, unemployment will remain a serious problem (Cleveland County Council, 1990b). Such forecasts are vital for prospective investors, anxious to know whether their anticipated labour demands can be met by the local economy.

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The 'macro' picture of the labour market, though, is intimately related to the vast range of developments at the 'micro' level. While the latter remains poorly understood it is difficult to make statements about the former with any certainty or depth of knowledge. Consequently, the central aim of this thesis was to improve understanding of how micro-level changes in labour demand 'feed into' macro-level measures of the labour market - unemployment in particular. Complicating the situation, there is no neat dividing line between 'micro' and 'macro' - the two levels are mutually dependent and interact in a form of 'structure-agency' relationship (see Sayer, 1984). Consequently, much of the research effort here was spent trying to untangle how national and international pressures in the sphere of production were forcing micro-level changes and then attempting to tie in these relationships with macro-level changes observed in the Stockton TTWA.

In doing so (albeit imperfectly) it was necessary to recognise the influence of the legacies of previous rounds of investment in the TTWA. These created both opportunities and obstacles for the employers when choosing the most appropriate labour force adjustment mechanisms. As a final exercise, therefore, it is interesting to draw on the findings of this thesis to shed light on two initiatives of central Government that are likely to play a crucial role in shaping the labour market outcome of the next major 'round' of investment in the TTWA - the Teesside Development Corporation and the Teesside Training and Enterprise Council.

This is not the place to enter into the debate about Urban Development Corporations (see instead Colenutt and Tansley, 1989; Coulson, 1990) or about TECs (see Unemployment Unit, 1989; Bennett et al, 1989; Employment Institute, 1990). Instead, the intention is to consider the likely labour market impact of the two bodies on Teesside.

The Teesside Development Corporation (TDC) was set up by central Government in May 1987 as one of four 'second generation' UDCs, following the first generation established in London Docklands and on Merseyside in the early 1980s. The TDC has been allocated £150-200 million to carry out projects of physical regeneration designed to 'pump-prime' and attract investment from the private sector. To assist it in its task, the TDC (in common with other UDCs) has replaced the local authorities as the planning authority for the 5,000 hectares of land along the banks of the River Tees which form its Urban Development Area or UDA (see Fig. 3, Page 89). Much of the UDA and a number of the TDC's 'flagship' development projects fall within the TTWA of Stockton. These include a proposed weir across the River Tees at Portrack and a walkway across the River linking Stockton town centre with a major development on the 'Teesdale' site, previously occupied by Head Wrightson/ITM. The 'Teesdale' development will involve a mix of housing, office space and some retailing. To the south-west of Teesdale (and on the other side of the east to west A66 highway and railway) a massive retail-leisure complex is under construction (at the time of writing) on the site of the former Stockton horse racecourse.

The success of these developments (on their own terms) will depend on a number of factors beyond the control of the TDC. These include the extent to which the ending of the consumer boom of the mid-1980s (and continued high interest rates) affects the plans of developers and possible tenants, the Government's plans for further relocations of departmental offices to the regions and the impact of the Uniform Business Rate. Whilst it is too early to suggest likely outcomes it is clear that a high proportion of the jobs created (after construction) will be in retailing and other service functions. To the extent that many of these are likely to be

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taken by women, the direct impact on the official unemployed stock is not likely to be great.

In the case of retailing employment the concern must be that employment will be transferred from existing town centres rather than being 'additional' employment. (On a smaller scale, this was observed during the study period in Billingham town centre, following the opening of Dunnes Stores in an out of town location - see Chapter Four footnote 17, Page 137). In April 1990, one of the stores (Poundstretcher) that has signalled an intention to take space at the Racecourse was closing down its shop on Stockton High Street. In the case of office employment, (in addition to the possibility of transfers), this thesis has demonstrated the importance of locating functions in their appropriate place in relation to the process of production (4). Without further information on the office functions that will occupy the new blocks it is impossible to make further comment at this stage.

As for the Teesside TEC, the idea of placing employers in charge of Government funds for training has some initial appeal given the above statements regarding the poor level of knowledge of internal labour market processes amongst official agencies. It builds on the earlier concept of Local Employer Networks (see Bennett et al, 1989) and was outlined in the Government's White Paper: Employment for the 1990s (HMSO, 1988). However, given the contractual relationship between TECs and the Government, relating to the delivery of Government training programmes, concerns have been expressed about the scope for local initiative (Employment Institute, 1990).

Quite apart from this, there are other worries about the TECs' chances of success. The argument that 'employers know best' when it comes to training has been questioned (see Robinson, 1989). Whilst they may understand their demand

requirements, there is no reason to assume that their knowledge of the supply side of the labour market is superior to the public sector's. Furthermore, knowing their own labour demands is no guarantee that this set of demands is necessarily in the best interests of the local economy. For example, labour demands that translate into short and fixed term contracts require that labour is already trained, and rely heavily on 'poaching'. One of the chief arguments for a public sector body like the Training Agency is that it is in a position to adjudicate between the interests of competing capitals based on its knowledge and understanding of the strengths and weaknesses of the local labour market. In this context, Robinson (1989) calls for more information on the relationship between TECs and the Employment Service:

Clearly, it would present insuperable problems if employer-led bodies were also made responsible for the Service which is supposed to provide an impartial matching function for both jobseekers and employers, and one of whose functions is to check the eligibility of individuals for social benefits (ibid, p.20 emphasis in original).

Robinson goes on to assert that a partnership, rather than domination, is needed between the providers of education and training on the one hand and employers on the other. He concludes that "ET is not really geared towards the most important skill shortages at all " (Robinson, 1989, p.17) and calls for an overhaul of the educational system (especially higher education) to tackle deep-seated problems on the supply side of the labour market.

It is fitting to finish with these comments by Robinson about the supply side of the labour market. The focus of this thesis - on the restructuring of the demand for labour - has revealed that employment prospects depend to a considerable degree on the part of the overall chain of production that is attracted to an area. This depends, in turn, on investors' perceptions of the abilities of the labour supply in the area

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and the ease with which potential changes in labour demand can be accommodated over time. Successive rounds of investment in Stockton TTWA have seen the centre of activity change from shipbuilding to process plant fabrication and engineering and chemicals through now to light assembly work and service sector activities with no dominant sectors.

The story of labour demand in Stockton can be characterised as an adjustment mechanism writ large, with one of the TTWA's central attractions changing from being a source of skilled engineering workers to an abundance of cheap, often female labour. Against a background of high and long-term unemployment, local labour generally has been forced to reassess 'career' opportunities and expectations and accept the 'new' jobs and working conditions.

The challenge for the TEC is to equip the labour force of Teesside with the types of skills that will attract (and generate from within) new rounds of investment associated with secure jobs of a high quality. This requires a proactive approach - such a positive restructuring (of the supply and demand for labour) will not be achieved merely by a 'free market' response to the short-run requirements of existing employers.

Footnotes

(1) Although the focus in the six case studies was on manufacturing activities, the conceptualisation of the labour market is no less relevant to service occupations. The 'imperative' to reduce labour inputs does not weigh as heavily on service occupations, since quality of service can be an important part of the 'product' and this may require more rather than less labour. Ultimately, however, increases in service sector employment are dependent upon continued increases in labour productivity in manufacturing, enabling higher levels of consumption and an associated higher level of demand for services (for example, higher levels of car

ownership generate higher levels of demand for insurance, car repairs, service stations).

(2) Where a major investment (or disinvestment) decision is taken, this will have fundamental consequences for employment at the establishment(s) in question (witness, for example, the demise of the Head Wrightson organisation - Chapter Nine - following the apparent decision of the parent Davy organisation to withdraw from manufacturing operations in the TTWA). By a careful selection process, an attempt was made to identify employers in the TTWA where decisions of such an order were likely to be being taken. In this way it was hoped that instances of restructuring and accompanying adjustment might be captured in what amounted to a virtual snap-shot of the employers' activities (i.e. over just a single year period).

Thus, at KP (Chapter Four) a major investment programme was known to be underway. At Sarek (Chapter Five) the company was known to be experiencing difficulties and had recently been the subject of a takeover. North Tees Hospital (Chapter Six) was known to be experiencing problems resulting from expenditure constraints in the public sector. For a small, independent firm such as Glamal (Chapter Seven) it is not much of an exaggeration to say the most of its decisions are of first order importance, given the lack of opportunity to spread investment risks across a number of establishments. As an incoming Japanese company, Tabuchi (Chapter Eight) was thought likely to be taking key decisions in terms of laying down the working practices it wished to establish. Finally, ITM was identified as a company undergoing a major change in direction as it reoriented itself towards opportunities in production for the North Sea.

(3) 'Continuation rates' signify the percentage of a duration cohort that passes into the next duration cohort as opposed to 'flowing out' of unemployment.

(4) The new 'availability for work' criteria place a much greater responsibility on the Employment Service for the collection of local labour market information. The Service is now expected to 'know its local labour markets' in order to be able to judge whether people's employment and wage expectations are realistic.

(5) Slightly more problematic are the relationships between unemployment and, first, redundancies and, second, migration. In both cases, though, the Employment Service could ascertain whether the reason for signing on (or off, as appropriate) is due to redundancy or migration. The inaccurate picture of female unemployment presented by the official statistics is unlikely to be overcome without a reassessment of the whole basis of the benefit eligibility system. On the employment side, sub-regional details of the numbers registered as self-employed (for National Insurance) would be invaluable.

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