Who calls the tune at work?

The impact of trade unions on jobs and pay

Neil Millward, John Forth and Alex Bryson

The **Joseph Rowntree Foundation** has supported this project as part of its programme of research and innovative development projects, which it hopes will be of value to policy makers and practitioners. The facts presented and views expressed in this report are, however, those of the authors and not necessarily those of the Foundation.

Published for the Joseph Rowntree Foundation by YPS

ISBN 1 902633 94 6

Work and Opportunity Series No. 25

Cover design by Adkins Design

Prepared and printed by:
York Publishing Services Ltd
64 Hallfield Road
Layerthorpe
York YO31 7ZQ
Tel: 01904 430033; Fax: 01904 430868; E-mail: orders@yps.ymn.co.uk

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Acknowledgements

The authors wish to thank the Joseph Rowntree Foundation for supporting the research that led to this report and the Foundation's Principal Research Managers, Derek Williams and Barbara Ballard, for the part they played in the work. They are also grateful for the valuable contributions made at formative stages of the project by members of the Advisory Group: Mark Beatson, Alison Booth, William Brown, Simon Burgess and David Coats. Thanks also go to Mark Stewart of the University of Warwick for technical advice on the interval regression procedures used in Chapter 4 and to Incomes Data Services for information on the timing of pay settlements which is used in Chapter 5.

The authors acknowledge the Department of Trade and Industry; the Economic and Social Research Council; the Advisory, Conciliation and Arbitration Service; and the Policy Studies Institute as the originators of the 1990 Workplace Industrial Relations Survey and of the 1998 Workplace Employee Relations Survey data, and The Data Archive at the University of Essex as the distributor of the data. None of these organisations bears any responsibility for the analysis and interpretations of the data contained here.

The research was carried out at the National Institute of Economic and Social Research and at the Policy Studies Institute.

1 Introduction

Issues and agenda

In Britain, employers currently have a great deal of freedom to decide how many people to employ and what pay and employment conditions they should offer employees. British employers have more freedom on these issues than their counterparts in most other European countries (Siebert, 1999) and in many ways they have more freedom than they did, say, 20 years ago. To some people, such room for manoeuvre represents the natural state of affairs in a capitalist or market economy. To others, it shows the degree to which Britain has moved away from the model of the mixed economy embraced by most of Britain's partners in the European Union. Yet, there are limits – legal, economic and social – to the jobs that employers can create or destroy, both in terms of the numbers of jobs and their 'quality'.

In this report, we focus on how workers and their representatives modify employers' decisions about jobs and employment conditions. When trade unions were more powerful and well over half of all employees belonged to them, a collective employee voice through trade union representation was taken for granted as modifying the behaviour of employers. Wages were generally negotiated wages and these were demonstrably higher than for similar non-union workers (Stewart, 1983a). Trade union pressure in pursuit of the protection of jobs was also common, although less often successful. But, nowadays, unions represent a third of employees or less and they have been hit by a tide of legislative restrictions that limit their negotiating power. So we address the following questions in this report:

- Do trade unions have an impact on employers' decisions about jobs?
- Do unions still negotiate higher pay than would otherwise be the case?
- Are other conditions of employment affected in similar ways?
- Do any non-union forms of employee representation make a difference?

Public policy on employee 'voice' at work

Employment relations in Britain have developed within a legal framework often described as 'voluntarism'. In the 1980s and 1990s, employers were under no obligation to recognise trade unions for collective bargaining or for any other purposes – and this remains generally the case. Those who do recognise unions are put under some limited legal obligations, such as consulting with union representatives when collective redundancies are planned or when certain health or safety matters are at issue. The agreements that arise from collective bargaining about pay and other conditions are not legally enforceable.[1] Nor are they 'extended' to give effect as legal minima elsewhere in the same industry or region, as happens in many other European countries. Employers who do not voluntarily recognise a union are obliged to consult other 'appropriate representatives' of employees about collective redundancies and some other matters. But these obligations have little impact on employers' decisions about the size of their workforces (Dickens and Hall, 1995) and none at all upon the terms on which they engage employees –

the obligation to consult is a far cry from an obligation to negotiate and agree. The law does, of course, place some limits on what employers can pay their employees. The obligation to pay women and men equally for work of equal value is the longest standing of these limits; the recently introduced National Minimum Wage sets a floor for the pay of the lowest paid workers. But these legal obligations give no direct support to the representative institutions that give employees a role in pay determination or that can bring pressure to bear on employers on employment matters more generally.

One recent development has done so, however. The Employment Relations Act contains a provision for employers to recognise a trade union 'where a majority of the workforce wants it' (Department of Trade and Industry, 1998). The provision came into force on 6 June 2000. Secondary legislation specifies how collective bargaining about pay, hours and holidays shall be conducted, where the trade union achieves recognition under the new legal provisions. But it does not specify how a failure to agree at the final stage of the bargaining process shall be resolved.[2] In the USA, one-third of new bargaining units brought about by the procedures failed to produce an initial wage agreement (Dunlop Commission, 1994). As with all other situations of voluntary union recognition in Britain, collective bargaining consequent upon statutory recognition may become a simple trial of strength in which the employer generally has the resources to prevail.

There is also the prospect of the current limited obligations to inform and consult employees being extended by European Union requirements. The draft directive on information and consultation, issued in November 1998, proposes information and consultation requirements relating to:

- recent and 'reasonably foreseeable' developments in the business
- the structure of, and prospects for, employment
- offsetting measures where employment is under threat
- decisions likely to produce substantial changes in contractual relations with employees.

These developments make it especially appropriate at the present time to examine how the largely voluntary system of negotiation and consultation about jobs and employment conditions in Britain has been working. But, first, we briefly summarise how the context of that system has changed in recent years, changes that, to a large degree, have strengthened the hands of employers in their dealings with employees.

How employers and workplaces have changed during the 1990s

The reshaping of industry – much in evidence in the 1980s – continued in the 1990s. There was further expansion of private sector service activities, particularly in new workplaces, with wholesale and retail activities and business services experiencing substantial growth in employment. In contrast, private sector manufacturing industries continued to contract, having been hit hard by the recession of the early 1990s. In the public sector, activities continued to be contracted out to the private sector from local authorities and the National

Health Service, whilst privatisation was extended to the electricity industry, British Rail and British Coal.

Product markets were said to be increasingly competitive in the 1990s and organisations faced rising demands to contain costs. Customers exerted greater pressure on prices and this combined with more widespread demands from shareholders for quick and profitable returns on their investments (Burchell *et al*., 1999, pp. 5–9). Competition also increasingly took on an international dimension, with greater import penetration in manufacturing industries and a near doubling of foreign-owned workplaces in the private sector.[3]

The labour market also became more competitive over the decade. In 1999, unemployment stood at its lowest level for nearly 20 years after substantial rises in the early 1980s and early 1990s. Regional differences became accentuated, at least in the late 1990s: the unemployment rate in the most favoured region (the South East, excluding London) was only one-third of the rate in the least favoured region (the North East of England) in 1999, compared with one-half of it in 1995.[4] Occupational differences in labour demand remained much as they were in the early 1990s, however. In 1998, professional workers had an unemployment rate only 23 per cent of the rate for unskilled workers, little changed from the comparable figure for 1992.[5]

Employees, for their part, were required to become more flexible in the tasks they performed and in the hours they worked. The intensity of work was also shown to have increased (Green, 1999), but this was accompanied by greater feelings of insecurity, at least for those in higher paid occupations, who became less optimistic than lower paid workers during the 1990s (Burchell *et al*., 1999, p. 18). Managers were seeking closer and more direct links with their workforce, both as a means of strengthening employee commitment and enhancing work quality. But this approach was often viewed as being at odds with traditional, indirect methods of representation, most obviously those involving trade unions.

How employee voice changed in the 1990s

The institutions through which employers and employees jointly regulated employment relations experienced severe decline in the 1980s and 1990s. Employers' associations ceased to co-ordinate wage settlements in many industries. But the greatest decline was in the institutions of collective representation for employees. Trade unions lost members until the end of the 1990s and they represented fewer workers in collective bargaining. Table 1 compares the situation in 1998 with that in 1990, using six indicators of union representation and two of non-union voice. Over that period:

- fewer workplaces had any union members
- the proportion of employees belonging to a union fell by nearly a quarter
- the proportion of workplaces with recognised unions fell by a fifth
- workplaces where union bargaining covered most employees dropped by nearly a third (nearly a half in the private sector)
- the proportion of employees covered by union pay bargaining fell by a fifth

Table 1 Trade union representation, 1990 and 1998

Percentage of	All workplaces 1990	All workplaces 1998	Private sector 1990	Private sector 1998	Public sector 1990	Public sector 1998
Workplaces with a union member	64	54	49	37	99	97
Employees who are union members	47	36	36	26	72	57
Workplaces with recognised unions	53	42	38	25	87	87
Workplaces where bargaining covered most employees	42	29	30	16	71	63
Employees covered by collective bargaining	54	44	41	33	78	68
Workplaces with union-based JCC	14	6	8	3	27	9
Workplaces with non-union JCC	12	17	10	16	18	22
Non-union workplaces with employee representative	10	11	11	12	0	2

Source: Workplace Industrial Relations Survey (WIRS) 1990 and Workplace Employee Relations Survey (WERS) 1998; workplaces with 25 or more employees.

- workplaces with a union-based joint consultative committee (JCC) dropped by a half.

On all these measures, union representation became less widespread, particularly in the private sector of the economy where most people are employed. To a small degree, the loss of union representation was offset by a rise in the incidence of non-union consultative committees. However, non-union employee representatives became no more common. Broadly speaking, there was a severe fall in the extent to which employees had a collective voice to represent their concerns and views to management. And, where union representation remained, it showed signs of becoming weaker in many respects (Millward *et al*., 2000, Chapter 5). Thus, employees' influence upon employers' decisions about jobs and pay levels declined at a time when increased competition in product markets gained greater salience in those decisions.

The data and methods of research

We have used nationally representative surveys of workplaces and their employees as the basis for the research summarised in this report. The two main sources are the Workplace Employee Relations Survey (WERS) of 1998 and its predecessor, the 1990 Workplace Industrial Relations Survey (WIRS). The surveys covered all industries except agriculture and coal mining, and included both private and publicly owned establishments. Further details of the surveys are given in Cully *et al*. (1999) and Millward *et al*. (1992, 2000). The survey results can be generalised with confidence to the population of workplaces in Great Britain employing ten or more employees in 1998 (25 or more in 1990).

For the analysis reported in Chapters 2 and 3, we use the panel of workplaces contained within the two surveys of 1990 and 1998. In Chapter 2, the data mostly come from the 1990 management interview, supplemented by a pre-interview questionnaire about the establishment's workforce. These data on 2,061 workplaces provide the starting point for examining which sorts of workplace closed or survived by the time of the 1998 survey. In 1998, efforts were made to contact all of the 1990 surveyed workplaces, some to conduct the panel interview, others simply to determine whether they were still in existence and had at least 25 employees. From this information, the 1990 sample was divided into 'closures' and 'survivors' for the analysis of factors that increased the likelihood of closure. Chapter 2 examines how trade unions and other forms of employee voice have an impact upon management decisions regarding workplace closures.

The analysis of employment changes in Chapter 3 is based upon the 1990 management interview and the corresponding interview in 1998 at a sample of those workplaces that had survived. The 1990 interview data are used to characterise these continuing workplaces before they grew or shrank over the subsequent period up to 1998. The sample for this analysis is 834 workplaces with at least 25 employees in both 1990 and 1998. The chapter focuses on the impact of the various forms of employee voice upon the growth or shrinkage of workplaces over the period 1990 to 1998.

We use two linked elements of the 1998 cross-section survey for our analysis of pay levels in Chapter 4. One is the management interview, carried out face to face with the senior workplace manager responsible for personnel or employee relations. The other is the survey of employees, administered within workplaces where a management interview had been achieved. This short, self-completion questionnaire was distributed to a random sample of 25 employees in each co-operating workplace, yielding 28,237 usable returns.[6] They are representative of employees in Great Britain employed in all but the very smallest workplaces. Data from the appropriate management interview were linked to these data for the employee-based analysis. Chapter 4 examines the union impact on wage levels and fringe benefit provision.

The analysis of pay settlements in Chapter 5 uses only the management interview data from the 2,191 workplaces covered by WERS 1998. The pay settlement in question was the most recent one for the largest occupational group within each workplace; where possible, the characteristics of this group are considered, in preference to those of the workplace as a whole. Again, the focus is on union effects.

Methods of analysis

In each of Chapters 2 to 5, we focus on a principal 'outcome' and examine how a number of selected characteristics of employers and employee representation have an impact on this outcome. In doing so, we have to take account of other factors which might also be associated with it. For example, when examining whether trade unions raise pay levels, it is important to take account of the personal and job characteristics that also affect employees' pay. Multivariate statistical methods have been used to control for these other factors as far as possible. Unless otherwise stated, it is always these multivariate results that are being reported; the phrase ‘controlling for other employee and workplace characteristics’ should be taken as implied. The statistical methods we have used always take account of the complex sample design used for the surveys, but they vary according to the nature of the outcome being examined.

More detailed accounts of the research

Chapters 2 and 3 draw on more detailed reports of the analysis of workplace closure and creation, and of employment change in continuing workplaces (Bryson, 2001; Millward *et al*., 2000). Chapters 4 and 5 are similarly based upon more detailed accounts of the research (Forth and Millward, 2000a, 2000b). All four sources give further information on the data and statistical methods used.

2 Workplace closure

Introduction

The labour market is commonly viewed in an atomistic fashion, consisting of hosts of individual job matches between employees and employers. But an equally valid approach is to see it from the viewpoint of the workplace, with the total employment of the economy consisting of the sum of jobs in all workplaces. From this angle, changes in the total number of employees in employment arise from three sources: the setting up of new workplaces; the closure of existing ones; and the shrinkage and expansion of existing workplaces.

In this chapter and the next, we consider the role played by unions in decisions to close workplaces and to expand or contract employment. Our focus is what happened to workplaces in existence in 1990. Here we concentrate on workplace closure, the most dramatic manifestation of a management decision to reduce the number of jobs. By 'closure' we mean the complete cessation of the activities of a workplace with the termination of all contracts of employment.[1]

There are several reasons why we do not give equal attention to the jobs created by newly established workplaces during the same period. After all, new workplaces accounted for one-fifth of all workplaces in 1998, and one-sixth of all employment, if we exclude the very small workplaces excluded from WERS 1998. The first reason for omitting detailed analysis of new workplaces is because the prospect of possible unionisation is unlikely to deter managers from setting them up.[2] This is especially so for new firms with a single workplace. Decisions to set up new workplaces within multi-site organisations could be influenced by experiences of union activity elsewhere in the same organisation, if it exists.[3] However, there is no recent survey dataset that could be used to address this issue through statistical analysis. Second, even for new workplaces set up between 1990 and 1998, there is no information in WERS 1998 on the circumstances facing management at the time they set up the new workplace, or indeed decided not to set up others. Consequently, we can say nothing about any role unions might have in discouraging or encouraging the establishment of new workplaces. Third, although we could say something about employment growth among workplaces set up since 1990, these workplaces are only a little younger than our 1990 sample. We think the best guide to their employment changes is the pattern of employment change of workplaces existing in 1990, which we describe in Chapter 3.

How unions might affect workplace closure

In representing workers' interests, unions are engaged in a balancing act. They seek to improve the terms under which their members are employed, putting pressure on employers to offer more than they might otherwise offer in the absence of a union. However, if they press too hard, they may drive employers to concede more than the firm can bear, reducing profitability to the point where the viability of the workplace is put at risk. Union pressure will only result in closure where unions are strong vis-à-vis the employer, the employer's financial or market position is poor, and the unions do little to improve workplace performance. If, on the other hand, unions only exert pressure where they know the employer can afford the better terms, or where their own actions have improved productivity and profitability, employers may be able to meet union demands without jeopardising the workplace's future. So, it is a reasonable question as to whether unions increase, decrease, or have no effect on the chances of workplace closure.

How to measure the effects of unions and workplace characteristics on workplace closure

To establish the effect of unions on workplace closure during the 1990s, we need detailed information on how workplaces were unionised at the beginning of the period, and whether or not they had closed by the end of the period. But we must also make allowance for other factors affecting their fortunes. The ones most often highlighted in research studies are:

- the size, ownership, age and location of the workplace
- the profitability of the business
- the ability of the employer to adjust to downturns in demand
- the competitiveness of the markets to which the employer provides goods or services
- other features of that industry.

These features, and extensive data on union representation, are available within a particular dataset created as part of the 1990–98 WIRS panel. All the 2,061 workplaces interviewed in WIRS 1990 were followed up to establish whether they had closed by 1998 or survived.[4] Our analysis of those data examines which features of the workplace and its circumstances in 1990 statistically predict the likelihood of closure by 1998.

Between 1990 and 1998, 25 per cent of workplaces closed in private sector manufacturing. In private sector services, 15 per cent closed in the same period and in the public sector the figure was 7 per cent. The question addressed in the remainder of this chapter is: how was the likelihood of closure affected by factors at the discretion of management, and how far was it influenced by the behaviour of unions?

Workplace closure in the private sector

The results largely bear out expectations based upon previous studies. They show that the chances of workplace closure in the 1990s were:

- higher in declining industries, such as leather, footwear and clothing, and lower in expanding sectors, such as banking, finance and insurance
- higher where the workforce was predominantly manual, rather than non-manual
- lower for larger workplaces
- lower for single, independent workplaces than for workplaces belonging to larger enterprises
- higher for workplaces where performance was poor in 1990 or earlier, as measured by financial performance, capacity utilisation and employment change
- lower in workplaces using flexible employment contracts

- lower in workplaces with a diversified product base
- higher in workplaces facing more intensive competition.

Workplace managers may have relatively little influence over some of these factors that affect the likelihood of closure, such as ownership and competitive conditions. Equally, there are other factors, such as the deployment of labour and product diversity, which they can affect.

The union impact on closure in the private sector

The factors mentioned above were taken into account when we looked to see what effect trade unions and other employee representation arrangements had on workplace closure.

In general, we found that private sector workplaces recognising unions for pay bargaining were no more likely to close than non-unionised workplaces. As in the 1980s (Machin, 1995), this was so, regardless of the strength of the union and the market conditions faced by the workplace.[5] There were, however, some clear effects stemming from trade unions when manufacturing and services were examined separately and when different types of union representation were distinguished.

Private services

The results for the private services sector can be stated very briefly. Unions had no discernible impact on workplace closure in private services.

Private manufacturing industry

In contrast, unions generally increased the likelihood of closure in the private manufacturing sector. The average impact of unions was to increase the chances of closure by 15 per cent, relative to similar manufacturing workplaces that were not unionised (Table 2). The effect, however, was not universal; it varied with the type of employees covered by the union, the bargaining arrangements in place and whether unions negotiated over employment.

The nature of union representation in manufacturing

Recognised unions representing only manual workers at the workplace were the only ones that increased the chances of closure in manufacturing. They did so by 19 per cent, relative to similar non-unionised workplaces. By contrast, workplaces with unions representing only non-manual workers at the workplace were 14 per cent less likely to close than similar workplaces without such unions. Unions representing both manual and non-manual workers had no impact on closure. Since the analyses controlled for the proportion of manual workers at the workplace, industrial sector and industry-level unionisation, the increased likelihood of closure in the presence of unions representing manual workers cannot be explained purely by industrial decline in traditional industries with heavily unionised manual workers. Nor can it be explained by their strength since, on nearly all measures of union strength, unions representing manual workers were weaker than unions representing non-manual workers. It may be that negotiations in the manufacturing sector involving management and unions representing only manual workers take less account of the

Table 2 Effects of unions on likelihood of workplace closure in private manufacturing, 1990–98

Union status in 1990	Percentage difference in the likelihood of closure compared with workplaces with no recognised unions	Percentage of workplaces with this kind of union representation
Recognised unions present	+15*	44
Any recognised union representing only manual workers	+19**	34
Any recognised union representing only non-manual workers	–14**	9
Recognised union representing both manual and non-manual workers	–3	17
Single recognised union	+21*	22
Two or more recognised unions	+8	22
Recognised unions and:		
No negotiation on employment	+19*	26
Negotiations about staffing levels	+13	6
Negotiations about recruitment	+7	2
Negotiations about both staffing levels and recruitment	+9	10

Source: WIRS 1990–98 panel; workplaces with 25 or more employees in 1990.

Key to significance: * = 95% confidence; ** = 99% confidence.

possible consequences for the whole workforce. But, whatever the explanation, it seems that the effect can be mitigated by broadening the occupational scope of union representation at the workplace. Having a recognised union representing non-manual workers reduced the likelihood of closure in the private manufacturing sector; and unions representing the broad spectrum of occupations, both manual and non-manual, were neutral in their impact.

The number of recognised unions at the workplace also had a bearing on closure rates. Where there was a single recognised union, the chances of closure were significantly higher than for comparable non-union workplaces. But, where there were two or more unions, the likelihood of closure was no different. Together with the previous results, this result suggests that it is unions representing a narrow range of occupations that increase the chances of plant closure in manufacturing, possibly by pursuing sectional interests to the detriment of the plant as a whole.

A third important characteristic of union representation was whether the scope of union bargaining included employment levels, not just pay. Where unions had no role in determining staffing levels or recruitment, the likelihood of closure was higher. But, where managements did allow unions a role in determining these aspects of employment, the chances of closure were no different from those of non-unionised plants. This may be because unions become more sensitive to the employment consequences of their wage claims where management involves them in decisions over employment. Or it may be that an involvement in the broader set of issues affecting the future of the plant engenders a more constructive relationship between unions and management.

A further characteristic of management–employee relationships that had an impact on plant closures in private manufacturing was the complexity of representation and communication arrangements. The most complex arrangements, involving union representation and alternative, non-union channels of communication, had a particularly high rate of closure. This may be because the different channels deal with different issues and discourage a holistic consideration of matters affecting the viability of the plant.

Non-union representation

Management–employee communication channels that were not built on union representation spread during the 1990s (Millward *et al*., 2000). Their increasing use may have been occasioned in part by employers' belief that this would bring benefits to the firm that were not associated with union-based channels of communication. If this was the case, it is not apparent in our analyses of workplace closure in manufacturing. The likelihood of closure was not reduced by the presence of non-union communication channels, compared with similar workplaces that did not have them.[6]

Workplace closure in the public sector

Compared with the private sector, where the closure of a workplace indicates economic failure, sometimes of a whole enterprise, workplace closure in the public sector may have different origins. In the period covered by our analysis, many services provided by local and central government were removed from public sector employment and contracted out to the private sector (Corby and White, 1999, p. 8); in some cases, the result will have been workplace closures and job losses. Furthermore, although the public sector was much more heavily unionised than the private sector throughout the 1990s, negotiations about pay and employment conditions were conducted against a backdrop of spending limits and reviews, rather than what the market would bear. Consequently, theories regarding the impact of unions on economic viability that inform our understanding of workplace closure in the private sector have little relevance for the public sector. This led to a smaller number of factors being taken into account when the possible effects of trade unions were being examined.[7]

On average, public sector workplaces were no more likely to close if they had unions that were recognised for pay bargaining than if they did not. However, particular forms of union representation were associated with a higher likelihood of closure: multiple unions and those with enough influence to limit management's ability to organise staff in the way they wanted. Although these effects were statistically significant, they were small relative to the corresponding effects in private manufacturing industry. This may reflect the lower absolute rate of closure in the public sector over the period and the smaller amount of variation in union representation there.

Summary

Broadly speaking, workplace closures during the period 1990 to 1998 were little affected by whether workplaces had union representation in 1990. In the private sector, workplace performance, market conditions, workforce composition and structural features of the workplace, such as size and ownership, were far more important. However, the impact of unions was clearly discernible in private sector manufacturing. Closure in this sector was more likely where there had been unions representing a section of the workforce, such as only manual workers, and where unions were excluded from negotiating with management about employment matters such as recruitment and staffing levels. Where representation and negotiating arrangements were comprehensive, the potential negative effects of unions were absent.

3 Employment change

The previous chapter showed that certain types of trade union representation were associated with a greater likelihood of workplace closure during the 1990s, although there was no general association with trade union presence *per se*. Yet those results tell only a minor part of the more general picture about the possible impact of unions on employment. The major part of the picture comes from an analysis of unions' impact on the numbers employed in continuing workplaces.

How unions might affect workplace employment levels

The activities of trade unions may have positive and negative effects on the level of employment in a particular workplace. If successful in raising wages, unions may depress employment levels by making labour costly relative to capital, in which case employers will tend to substitute capital for labour. Higher labour costs may also discourage employers from hiring additional workers, and adversely affect sales – either directly by forcing up prices, or indirectly by reducing the capacity of the firm to reinvest. On the other hand, higher wages may help to avoid labour shortages by encouraging existing employees to remain with the employer and by attracting new recruits.

By restraining their wage claims in hard times, unions may help to avoid future redundancies. Strong unions may also play a role in maintaining artificially high levels of employment, by enforcing restrictive work practices. But unions can directly promote employment growth by supporting productivity-enhancing initiatives. Indirect effects may also arise if unions improve skill levels by raising recruitment standards and encouraging training. Both are examples of ways in which the union may play a role in the improvement of company performance which could, potentially, lead to further job creation.

Research suggests that unions inhibited the expansion of workplaces in the 1980s, to the extent that employment levels in unionised workplaces grew by 2–3 per cent less per annum than in similar, non-unionised workplaces (Blanchflower *et al*., 1991; Booth and McCulloch, 1999). In this chapter, we investigate the impact of trade unions on employment change in the 1990s.

The involvement of trade unions in negotiations about employment levels

The evidence from the WIRS surveys is that unions are less commonly involved in negotiating about employment levels than they are about wages, as shown in Table 3. Managers reported negotiations with recognised unions about staffing levels or recruitment in under one-third of all workplaces in 1990, compared with a half of workplaces where they negotiated about wages. Employment negotiations of this kind were relatively common in the public sector, occurring in nearly two-thirds of workplaces; in the private sector they were much more rare, occurring in less than one-fifth of workplaces. There were fewer workplaces – and many fewer in the private sector – where both staffing levels and recruitment were negotiated. Thus, the opportunities for unions to directly affect the frequent decisions of employers and managers to adjust employment levels were limited, especially in the private sector. Moreover, even where these matters were reportedly the subject of negotiations with unions, it could still be the case that the unions had little or no impact on the decisions to create new jobs or declare some existing jobs redundant.

Measuring the impact of unions on workplace employment levels

The information needed to assess the impact of unions on the expansion, or contraction, of workplace employment levels is similar to the information needed to assess its impact on workplace closure. We require information on the nature of union representation at the workplace, together with information on other characteristics that might influence the numbers employed there, all of which should be measured at the beginning of the period we want to observe. The ones most often highlighted in research studies are:

- the size, ownership, age and location of the workplace
- the type of goods made or services provided
- the competitiveness of the markets to which the employer provides those goods or services
- the ability of the employer to adjust to downturns in demand
- the nature of the workforce
- the ability of the employer to elicit maximum productivity from employees
- the profitability of the business
- technological change within the workplace and among its competitors
- local labour market conditions.

Table 3 Extent of trade union negotiations over employment matters by sector, 1990

Percentage of workplaces with	All workplaces	Private manufac-turing	Private services	Public sector
Recognised unions	53	44	36	87
Any recognised unions that:				
Negotiate about staffing levels or recruitment	29	18	13	63
Negotiate about staffing levels, but not recruitment	10	6	6	17
Negotiate about recruitment, but not staffing levels	1	2	†	2
Negotiate staffing levels and recruitment	19	10	7	44
Negotiate neither staffing levels nor recruitment	24	26	23	24

Source: WIRS 1990 and WERS 1998; workplaces with 25 or more employees.

† Less than 0.5 per cent but greater than 0.

Of course, we also require information on the numbers employed by the workplace at the start and end of the period in question. This extensive range of data is available for a subset of workplaces within the 1990–98 WIRS panel. The panel survey collected detailed information about 846 surviving workplaces, including the size of their workforce in 1998. Using information from these 846 workplaces, we are able to examine which features and circumstances of the workplace in 1990 are statistically associated with a net change in the numbers employed over the following eight-year period.[1]

In fact, the detailed information that we require was only collected in workplaces with 25 or more employees in 1998. Our sample does not therefore include those workplaces that shrank to employ less than 25 employees in 1998, nor those that had closed down. As a result, in this chapter, we are only able to present a detailed examination of the workplace characteristics that were statistically associated with employment change *among workplaces with 25 or more employees in both 1990 and 1998*.

To the extent that certain types of union representation are associated with an increased likelihood of workplace closure or shrinkage below 25 employees, the findings presented in this chapter will constitute upwardly biased estimates of unions' impact on employment growth across the whole range of outcomes.[2] But, since workplace closure was little affected by whether workplaces had union representation in 1990 (see Chapter 2), one might expect the degree of bias to be relatively small.

Influences on workplace employment levels vary markedly between the public and private sectors. Accordingly, we present the results for the two sectors of the economy separately.

Change in workplace employment levels in the private sector

Two-thirds of private sector workplaces continued to operate with 25 or more employees between 1990 and 1998. Employment in these workplaces grew at a very modest rate of one-third of 1 per cent per annum, on average. This meant that the level of employment in the average, continuing private sector workplace grew by 2.8 per cent over the period.

It is perhaps surprising to note that private sector manufacturing workplaces grew at a slightly faster rate than those engaged in service activities: the mean rate of growth was 0.46 per cent per annum in manufacturing, compared with 0.3 per cent in service industries (Table 4). This shows that the well-documented decline in manufacturing employment occurred because new entrants to the sector were smaller and less numerous than those leaving it through closure. The number of manufacturing jobs lost through closures was almost treble the number created by new manufacturing workplaces over the 1990s. In contrast, in the services sector, roughly two-thirds more jobs were created through start-ups than were lost through closures.

Our analysis of employment change in continuing private sector workplaces controls as far as possible for differences in the characteristics of workplaces, their market circumstances and their performance, all of which previous research shows can have a bearing on the numbers employed at an establishment. As in previous studies, we find the rate of workplace employment growth to be:

Table 4 Change in workplace employment per annum, by sector, 1990–98

Change in workplace employment (% per annum)	All workplaces	All private sector	Private manufacturing	Private services	Public sector
Mean	1.0	0.34	0.46	0.30	1.48

Source: WIRS 1990 and WERS 1998; workplaces with 25 or more employees.

- lower in larger workplaces
- higher in workplaces with a diversified product base
- variable across regions
- variable across industries.

Influence of unions on workplace employment levels in the private sector

In simple descriptive terms, employment levels in workplaces with recognised unions actually declined by an average of 1.8 per cent per annum between 1990 and 1998, whereas employment levels in those without unions grew by an average of 1.4 per cent per annum. The annual rate of growth of employment was therefore around 3 percentage points lower among workplaces with recognised unions. This would appear to suggest that unions were still acting to depress workplace employment levels in the 1990s, as they had done in the previous decade.

To investigate this further, we took account of the many other factors known to impact upon workplace employment – summarised in the previous section – and sought to identify the independent effect of unions on workplace employment levels. Table 5 shows a selection of the results.

After taking account of other factors, the annual rate of growth in employment in private sector workplaces with recognised trade unions was around 4 percentage points lower than in similar workplaces without recognised unions. So, the independent effect of trade union recognition in the private sector was actually slightly larger than suggested by the raw, unadjusted figures. Further investigation showed that union recognition had a larger downward impact on employment levels in service sector workplaces than in manufacturing establishments. Within private sector services, the presence of recognised trade unions depressed the growth rate by 4.7 percentage points, on average. This compared with 3.4 percentage points in private sector manufacturing.

Earlier in this chapter, it was suggested that unions might adversely affect employment levels by inhibiting the reinvestment of capital. But this did not appear to explain the negative association that we found between union recognition and employment growth in the private sector. The negative union effect was present in workplaces that had introduced new

Table 5 Influence of unions on workplace employment levels in the private sector, 1990–98

	All private sector	Private manufacturing	Private services
Recognised unions	–4.2**	–3.4*	–4.7**
Any recognised unions that:			
Negotiate over staffing levels or recruitment	–2.2	–2.8	–1.4
Negotiate neither staffing levels nor recruitment	–5.0**	–3.6*	–6.1**
Proportion of employees at workplace covered by collective bargaining (%):			
1–49	–4.0	–2.0	–4.4
50–69	–4.5**	–3.6	–5.6*
70–99	–2.6*	–2.4	–3.0
100	–5.2**	–5.7*	–5.0*
Single recognised union	–3.7**	–2.0	–4.1**
Multiple recognised unions	–4.9**	–4.6*	–5.8**
Nature of employee voice:			
Union arrangements only	–7.0**	–3.4	–8.7**
Union and non-union arrangements	–4.3**	–3.6	–4.8*
Non-union arrangements only	–1.4	–0.5	–1.8

Source: WIRS 1990 and WERS 1998; private sector workplaces with 25 or more employees.

Key to significance: * = 95% confidence; ** = 99% confidence.

Note: Figures given in table represent the average percentage point difference in the rate of change in workplace employment per annum, compared with workplaces without recognised unions.

plant, machinery and equipment over the period 1987–90, as well as in those that had not.

It was also suggested that unions engaging in restrictive working practices might help to maintain artificially high employment levels. A negative union effect might therefore represent the outcome of removing such restrictions as unions became weaker. If this were the case, one would expect the effect to be confined to workplaces in which unions were limiting management's ability to organise work in 1990. But, in practice, the negative union effect on employment growth over the 1990s was also apparent in workplaces where recognised unions were not limiting work organisation at the start of the period.

Clearly, other factors lay behind the negative effect of union recognition on employment growth. But it did not appear to represent an age or cohort effect, whereby unionised workplaces appear to have slower rates of growth simply because they tend to be older and have more stable employment levels than younger workplaces. Categorising younger workplaces, somewhat arbitrarily, as those in existence for 20 years or less in 1990, and older workplaces as those in existence for 21 years or more, there were no significant differences in the union effect across the two age groups.

The impact of different types of union representation

Although these results demonstrate a general, negative effect on employment levels in the 1990s arising from union recognition, it is conceivable that different forms of union representation are associated with different outcomes. Our analysis of workplace closure in the private sector, presented in Chapter 2, showed that a workplace was more likely to close if unions negotiated over wages but had no role in determining staffing levels or recruitment. The analysis of employment change shows similar results. The annual rate of growth in workplaces where unions negotiated over wages, but not staffing or recruitment, was 5 per cent lower than in workplaces where unions were not recognised. But the annual rate of growth in workplaces where unions negotiated over wages and employment, although slightly lower, was not significantly different from that in non-unionised workplaces (Table 5). These findings add weight to the suggestions, made in Chapter 2, that unions which are involved in employment decisions may either have more constructive relationships with management or may be more sensitive to the employment consequences of their wage claims.

Union strength and coverage

If union recognition has a general, negative effect on employment, one might also expect the magnitude of the effect to be conditional upon the strength of the union at the workplace. A commonly used measure of strength is the proportion of employees at the workplace whose pay is set through collective bargaining. And the results presented in Table 5 do show a relationship between the coverage of collective bargaining and changes in employment. In the analysis of the private sector as a whole, unions were found to have statistically significant associations with lower rates of employment growth only where collective bargaining covered at least half of the workforce at the establishment. However, the relationship with the level of coverage was not linear and, although coverage of between 70 and 99 per cent was associated with lower employment growth when compared with no coverage, the magnitude of the effect was quite small relative to that in adjacent categories (–2.6 per cent per annum, compared with –4.5 per cent where coverage was between 50 and 69 per cent). One possibility was that unions with coverage of between 70 and 99 per cent were most likely to negotiate over wages and employment, this acting to mitigate some of the negative association with the level of coverage. However, upon further investigation, this did not appear to be the case.

Looking at the separate analyses within manufacturing and services, it is notable that, in manufacturing, unions were associated with significantly lower rates of employment growth only when all of the employees at a workplace were covered by wage bargaining. In service industries, differences between various levels of coverage were less pronounced, and statistically significant negative effects were found to be associated with coverage of 50–69 per cent and 100 per cent.

It is apparent that the negative association between union recognition and employment growth in the private sector could be identified in cases where either single or multiple unions were recognised (Table 5). Nevertheless, the negative association with the recognition of a single union was restricted to service sector workplaces. In manufacturing, a negative association was only found in workplaces recognising more than one union.

Non-union representation

Finally, it is interesting to note that the negative impact of employee voice on employment levels in the private sector appears to be specific to union representation and does not extend to alternative, non-union channels of communication. Unlike the presence of trade unions, the existence of solely non-union channels of communication between management and employees did not act to depress the rate of employment growth.[3] But, equally, any potentially positive impact upon levels of productivity or workplace performance that may be associated with these more direct methods of communication did not generate faster rates of employment growth when compared with workplaces without such arrangements.

Change in workplace employment levels in the public sector

Employees can influence workplace employment change in the public sector through negotiation over wages and employment in much the same way as occurs in the private sector, but the scope for influence may be more limited, despite a higher incidence of negotiation over employment and of recognition for pay bargaining. This is because centralised wage determination through national collective bargaining and Pay Review Bodies limits the scope for employee influence at workplace level in the public sector. Staffing levels are commonly set within predetermined cash limits, with resources allocated according to the priorities of central and local government. Consequently, employment growth is most likely to occur when improving a service is a high political priority, as in the case of the health service during the late 1990s. That said, resources tend to be targeted at best performers. And so, to the extent that employees influence workplace performance, they can affect resource allocation which, in the heavily labour-intensive public sector, often impacts upon employment levels.

Public sector workplaces actually grew more rapidly than workplaces in the private sector over the 1990s. Setting aside those public sector workplaces that closed down (7 per cent) and those that survived to employ between one and 24 employees in 1998 (10 per cent), employment among the remainder, which employed at least 25 employees in both 1990 and 1998, grew at an average rate of 1.5 per cent per annum (Table 4). In further contrast to the private sector, the average growth rates of workplaces with and without recognised unions were both positive in the public sector. Differences between the two were also less marked. Public sector workplaces without a recognised union in 1990 grew at an average rate of 2.9 per cent per annum between

1990 and 1998, compared with an average rate of 1.3 per cent among workplaces with recognised unions.

After controlling for a range of factors known to influence employment levels, the rate of growth in employment in public sector workplaces was found to be lower in larger workplaces, as observed in the private sector. However, there was no significant variation by region or industry.

Furthermore, there was no significant difference in the rates of growth of public sector workplaces with and without recognised unions, once other factors had been accounted for. In addition, there were no significant differences according to whether unions in public sector workplaces negotiated over both wages and employment, or wages alone. And there were no significant associations between the level of coverage of collective bargaining and rates of employment growth in the public sector.

Summary

Unions appear to have a more general effect on employment change than on the extreme case of workplace closure. Other factors are clearly important: it is, perhaps, to be expected that smaller workplaces grow faster than larger ones, and that growth rates differ according to a workplace's activity and location. But the nature of union representation also appears to impact upon the level of workplace employment over time, if only in the private sector.

Employment in the average unionised workplace in the private sector declined at a rate of 1.8 per cent per annum between 1990 and 1998, whilst employment in the average non-union workplace grew at a rate of 1.4 per cent per annum over the same period. This difference persisted after controlling for other factors known to impact upon employment levels and, so, union recognition is shown to have restricted the growth of continuing workplaces in the private sector over the 1990s. The negative effect of unions on employment growth was slightly larger in service industries than in manufacturing, and where multiple unions were recognised. However, it was confined to cases in which unions negotiated over wages but had no role in determining staffing levels or recruitment. The rate of employment growth among private sector workplaces where unions negotiated over wages and employment was no different to that seen among workplaces without recognised unions.

Non-union channels of communication were not significantly associated with the rate of employment growth in either the private or public sectors.

4 Pay levels and fringe benefits

How unions might affect wages

Trade unions were born out of the desire by low-paid workers to get a better deal from their employers. They set out to achieve this by bargaining, with the strike weapon as their ultimate sanction. Since those early days, trade unions have greatly broadened their bargaining agenda and have spread to large sections of the economy that have few low-paid workers. But, in the 1980s and 1990s, their activities were considerably restricted by legislation aimed at reducing their power to bargain with employers. Do they still have an effect on pay? Do they only achieve higher pay at the expense of the employer? What characteristics of local union organisation have the most impact? Do any other forms of employee representation increase pay? Do unions increase the provision of fringe benefits?

How these questions can be addressed by research

To answer such questions as securely as possible, we need to use data that are representative of jobs in the British economy. We need details of the employees' pay and hours of work, and of the part trade unions play, if any, in setting them. But we must also make allowance for a host of other factors that affect people's pay. The ones most often highlighted in research studies are:

- the occupation, skill levels, qualifications and training of the employee
- the employee's age, gender and family situation
- whether their skills are in short supply
- dangerous or unpleasant working conditions
- the competitiveness of the markets to which the employer provides goods or services
- the profitability of the business
- the size of the workplace and the organisation.

The WERS 1998 dataset provides this mix of data. Some of the data are supplied by employees themselves; the rest is provided by the management interviewee about the workplace and its component workforce. The only significant exclusion from WERS 1998 is data about employees in the smallest workplaces – those with less than ten employees.

How we define 'pay'

Employees in WERS 1998 were asked how much they were 'paid for their job before tax and other deductions were taken out'. They responded by ticking one of 12 boxes corresponding to bands of weekly pay (for example, £181 to £220 per week). We could have used these data on weekly pay directly, but the associations revealed in the analysis might have been confounded by differences in hours worked. So, we converted the data into hourly pay, with each employee's pay being reported within a band (which could vary from one employee to another). The resulting variable can be analysed with the same statistical methods that are well established for the analysis of weekly pay that is reported in fixed bands.[1]

The sets of influences that have a bearing on pay levels vary markedly between the private sector and the public sector, so we treat the two sectors separately in this chapter.

Private sector pay – employer and workplace influences

In analysing pay in the private sector, we control as far as possible for differences in 'human capital' and other personal characteristics that give rise to higher pay. The validity of the data is reinforced by the fact that the results show pay levels to be higher for employees:

- in higher-level occupations
- with greater autonomy in their job
- with higher qualifications
- with substantial recent training
- who are older
- who have been longer with their employer.

Similarly, the results confirm previous studies by showing that women earn less than men and that employees with a work-impairing disability earn less than others, when other relevant factors are taken into account. However, some job characteristics that are largely at the discretion of management have an impact that is less well established from previous research.

Job characteristics

The analysis shows that temporary or fixed-term contract jobs are paid about 10 per cent less than similar permanent jobs filled by similar employees. More surprising is that employees who work additional hours voluntarily have a *lower* hourly wage than those who only work their contractual hours. Many of the employees who work extra hours get paid for them, but the additional unpaid hours worked by others combine to give a lower hourly return for employees working voluntary overtime as a whole. Where employees work extra hours compulsorily, their weekly pay is greater, but their hourly pay is no different from comparable employees who do not do overtime. On the other hand, performance-related pay systems add around 5 per cent to hourly earnings.

Pay also varies between jobs that are largely done by men and those that are largely done by women within the same workplace. The difference between the extreme cases is remarkable: hourly pay is 13 per cent higher for jobs done solely by men than for jobs done solely by women. It seems unlikely that the whole of this difference is a mere reflection of occupational segregation at national level.

Management and workplace characteristics

In common with many other studies, the analysis shows a substantial wage premium for working in large workplaces. In this case, it is only apparent when workplace size is over 200 employees. In the largest workplaces (500 or more employees), there is a substantial premium of 17 per cent over the smallest workplaces (ten to 24 employees). There is also a premium of around 10 per cent attached to working for a foreign enterprise. But, in contrast to other studies, the results show no advantage in working for larger enterprises. Managerial regimes make a difference, though. Employers that use a range of labour management practices exemplifying a 'high involvement' approach pay around 7 per cent more than those using very few of the practices.[2]

These and other factors account for most of the pay differences that are generally seen across industrial sectors, apart from the two cases of wholesale and retail distribution and hotels and restaurants, sectors renowned for their low rates of pay. Further variables that control for the intensity of competition faced by the employer in the product market, the state of the product market and the workplace's recent financial performance show largely non-significant effects. However, there are clear relationships between the state of the labour market and the level of pay. Employers in tight labour markets pay higher wages, as do those situated in London, where national employers often include an explicit allowance for the relatively high cost of living.

Private sector pay – the influence of unions

All the factors mentioned above were taken into account when we examined the data further to see what effect trade unions and other employee representation arrangements might have upon pay levels. We tried a number of different formulations of how employees were represented by trade unions. Only some of these show a significant wage advantage.

The analysis shows that, in general, there is no significant difference in pay arising from unions bargaining with employers in the private sector. On average, the pay of employees who are covered by collective bargaining between their employer and a union or unions is a mere 3 per cent higher than the pay of other employees – a difference that is not statistically significant. Nor, when we examine the type of pay-setting arrangement in more detail, are there substantial differences. It matters little whether collective bargaining is carried out at workplace level with the employer as a whole or with multiple employers at industry or regional level. Similarly, there are no differences according to whether employees' pay is set by management at the workplace or at a higher level in the organisation.

The impact of collective bargaining coverage

Where we do find significant differences is in workplaces where a large proportion of employees are covered by union bargaining arrangements. As Table 6 shows, the critical threshold is about 70 per cent. Above this, employees are paid substantially more than employees not covered by collective bargaining. More precisely, the 19 per cent of employees in the private sector in workplaces where bargaining covers between 70 and 99 per cent of the workforce are paid significantly more than employees where there is no bargaining. Their gain averages about 9 per cent. Surprisingly, perhaps, there is no pay advantage where bargaining covers all employees (including workplace managers). This appears to reflect other indicators of the relative weakness of unions in these particular cases.

The spillover of the union impact on pay

But the employees in these workplaces with high levels of collective bargaining coverage are not the only ones to benefit. The other group of beneficiaries from the unions' efforts are employees in the same workplaces whose pay is settled unilaterally by management (Table 7). On average, they are paid 14 per cent higher

Table 6 Pay premiums in the private sector according to the coverage of collective bargaining at the employee's workplace, 1998

Proportion of employees at workplace covered by collective bargaining (%)	Average percentage difference in pay compared with employees in workplaces with no collective bargaining	Proportion of employees receiving this premium on average (%)
1–39	–2	4
40–59	1	3
60–69	2	2
70–79	12**	4
80–89	10*	4
90–99	7**	11
100	2	12

Source: WERS 1998; 14,913 employees in private sector workplaces with ten or more employees.

Key to significance: * = 95% confidence; ** = 99% confidence.

Table 7 Pay premiums in the private sector according to individual and workplace coverage, 1998

Proportion of employees at workplace covered by collective bargaining (%)	Employee covered by collective bargaining arrangements	Employee *not* individually covered
1–69	3	–4
70–99	8**	14*

Source: WERS 1998; 14,913 employees in private sector workplaces with ten or more employees.

Key to significance: * = 95% confidence; ** = 99% confidence.

Note: Premium calculated in comparison with employees in workplaces with no collective bargaining.

than employees in workplaces with no union coverage, whereas the 'covered' employees are paid 8 per cent more. While it is not certain that the non-covered employees benefit more than those covered by the union arrangements, it is clear that the benefits of the unions' bargaining activity do spill over to other employees at the same workplace. Some of the employees who benefit are in lower occupations than those that the unions represent and hence are lower paid. But most of them are higher paid senior professionals and managers. These higher paid employees are generally not union members, but they gain from the efforts of the unions representing their fellow workers who, in the case of managers, are also their subordinates.

The impact of multi-union representation

Separate analysis shows that the impact of union bargaining is confined to situations where more than one union is involved (Table 8). Employees covered by such arrangements (around 15 per cent of employees in the private sector) are typically paid 11 per cent more than employees in non-union workplaces. The smaller number of employees in these same multi-union workplaces who are not individually covered by the union bargaining arrangements are also paid at similarly advantageous levels over comparable employees elsewhere. Representation by a single union, however, carries no pay advantage, whether or not the individual employee is covered. In this respect, representation by a single union, often advocated in 'partnership' arrangements, is less advantageous to the employee than arrangements where separate unions represent different occupational groups.

The form of multi-union arrangement makes no difference to the advantage conferred by multi-union representation. Unions that negotiate jointly at a 'single table' fare no better or worse than those that negotiate separately with management.

Employee voice arrangements that confer no pay advantage

Where pay is not negotiated with trade unions, managements sometimes consult employees collectively about pay matters through a joint consultative committee. Around 18 per cent of employees in the private sector work in workplaces with such consultation. Their pay is no different from employees in workplaces where there is no consultation over pay issues. Similarly, non-union representatives have no detectable impact on pay levels.

The provision of fringe benefits in the private sector

Fringe benefits such as pensions and longer holidays can be provided by employers for a number of reasons: to elicit loyalty and commitment, to compensate for relatively poor pay, and so on. Unions generally see them as

Table 8 Pay premiums in the private sector according to individual coverage by collective bargaining and multi-unionism, 1998

Number of recognised unions at workplace	Employee covered by collective bargaining arrangements	Employee *not* individually covered
One	1	1
Two or more	11**	14**

Source: WERS 1998; 14,913 employees in private sector workplaces with ten or more employees.

Key to significance: ** = 99% confidence.

Note: Premium calculated in comparison with employees in workplaces with no collective bargaining.

beneficial to members and part of their bargaining agenda. We examined data from the management interview in WERS 1998 to see whether union representation increases the likelihood of employers providing two common fringe benefits: employer-provided pensions and extra-statutory sick pay. The questions were asked only about the largest occupational group of employees, excluding managers, at each sampled workplace. Typically, this group contains two-thirds of the non-managerial workforce, so the findings are broadly applicable to all non-managerial employees in the private sector.

The statistical analysis[3] takes account of a number of workforce and workplace characteristics which previous studies have shown to be relevant to fringe benefit provision. These include the gender composition of the largest occupational group, the degree to which it involves part-time work, the size and industrial activity of the workplace, and so on. However, in contrast to the analysis of pay described above, in the analysis of pension provision, the workplace characteristics are being used as proxies for the characteristics of whole enterprises, since pension provision is generally on an enterprise-wide basis (Casey *et al*., 1996, p. 49). There is a further contrast. In the pay analysis, we examine factors that are either contemporaneous with the observed pay levels or can be reasonably taken as predating them; causal links can thus be plausibly inferred. However, most employers' pension schemes have existed for many years (Forth and Millward, 1999) so the analysis can only reveal associations, not causal links.

Employer pension schemes

Just over half of all private sector workplaces with ten or more employees provided a pension scheme to members of the largest occupational group within their workforce in 1998. Provision was significantly more common:

- for professional and technical occupations[4]
- in larger workplaces and in older workplaces
- in large enterprises
- in workplaces with better than average financial performance
- in a tight local labour market.

Provision was less likely:

- where high proportions of young workers were employed
- in declining product markets.

Unions and pension provision

The analysis shows clear associations between certain forms of union representation and the provision of pensions. Pensions are six times more likely where the occupational group is covered by collective bargaining arrangements that apply to their enterprise as a whole than in cases where there is no union representation. And they are four times more likely where the employees are represented by a single recognised trade union. But these are the only types of employee representation that are positively associated with pension provision in an unambiguous way. There is a weak association with union representation as a whole, but none with multi-union representation, which has a clear advantage in the case of pay, discussed earlier. The results do, however, suggest that, if union pressure increases the likelihood of pension provision for the largest occupational group, it also benefits other groups of employees in the same workplace or enterprise. None of the non-union forms of employee representation that we examined has any association with pension provision at all.

Extra-statutory sick pay

The analysis of sick-pay provision closely followed the analysis of pension provision, described above. However, the results can be interpreted with more confidence because sick-pay arrangements are subject to greater workplace autonomy than pension schemes (Marginson *et al*., 1988, pp. 186–91) and so a workplace-level analysis is more appropriate. It also seems likely that sick-pay arrangements are generally of more recent vintage than pension schemes, so the drawing of causal inferences is less problematic.

Two-thirds of private sector workplaces with ten or more employees provided sick pay in excess of statutory requirements to members of the largest occupational group within their workforce in 1998. Provision was more common:

- for professional, technical and associated occupations and sales occupations
- for employees in receipt of performance-related pay
- in larger workplaces
- in those with high proportions of older workers
- in workplaces belonging to larger enterprises
- in tight local labour markets.

Unions and extra-statutory sick pay

Here the link with union representation is clearer: the odds of the largest occupational group being provided with sick pay in excess of statutory requirements are significantly enhanced under collective bargaining. In fact, the odds are more than tripled. Sick pay provision is more likely whatever level pay is negotiated at. Paralleling the patterns with respect to higher pay, sick pay is more commonly provided where there are multiple unions and where 70–99 per cent of employees are covered by bargaining. However, there are no discernible spillover effects to other employees in the same workplace; employers appear to be selective in their use of enhanced sick-pay as an inducement to long-term commitment.

Yet, in this analysis, the general effect of unionism seems stronger than on pay levels. And, so, groups covered by single recognised unions, groups without access to local representatives and those in workplaces where strong management support for membership has not been secured are also more likely to be provided for than groups not covered by collective bargaining.

Pay in the public sector

In separate analysis of the public sector, we again establish the importance of a number of personal, job and workplace characteristics that have to be taken into account before looking in detail at the effect of institutional arrangements on pay levels. There are fewer of them than in the private sector. Fewer occupations towards the lower end of the hierarchy are paid substantially more than unskilled workers, but qualifications, training, age and length of service all increase pay levels in the same general way as in the private sector. However, the public sector appears to give greater additional rewards for degrees and for longer periods of employer-provided training. In terms of personal and family characteristics, the results suggest a small male–female differential and no extra disadvantage for women with young children. The wage penalty associated with disability in the private sector is not apparent in the public sector.

Temporary jobs carry no wage penalty in the public sector and there is no clear premium on hourly pay from having performance-related pay elements. Public sector jobs that entail voluntary overtime produce a significantly lower hourly wage, as in the private sector. Part-time jobs pay somewhat higher hourly wages than full-time jobs, other things equal. Gender segregation within the workplace has a similar effect as in the private sector, with jobs done exclusively by women paying much less than those done exclusively by men.

Public sector pay is responsive to fewer workplace and contextual characteristics than pay in the private sector. Workplace size has no impact. The very largest organisations possibly pay less than smaller ones, as in the private sector. Unlike the private sector, pay levels are unaffected by the presence of 'high-involvement' management practices. Workplaces with a relatively high concentration of part-time employees pay lower hourly wages or salaries, although the effect appears smaller than in the private sector. Compensating differentials for hazardous working conditions are not apparent. Unlike the private sector, there is no evidence of higher pay in tight labour markets, but there is a similar-sized premium attached to jobs in the London area.

The impact of wage-setting institutions in the public sector

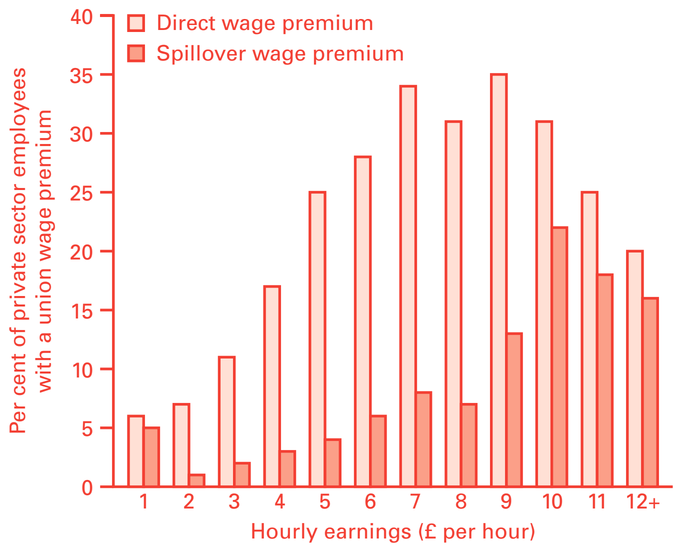
Union representation of some form or another is very widespread in the public sector and pay-setting arrangements are much more centralised than in the private sector. Indeed, 63 per cent of employees have their pay negotiated by trade unions at a level above the workplace and a further 22 per cent have their pay set by a higher authority, usually central government after the recommendations of a Review Body. This makes it much more difficult to isolate a distinct union impact on wages in the public sector with the workplace-based data from WERS.

The analysis suggests that, after controlling for the personal, job and workplace characteristics mentioned above, there is no significant difference in the public sector between pay that results from union negotiations and pay determined in other ways. The only institutional difference we can discern is between employees whose pay results from multi-employer (national) bargaining and those whose pay is determined by bargaining at a higher level than the workplace in their own organisation. The latter typically have hourly pay of around 4 per cent less than the former. This modest difference could be a symptom of the abandonment of multi-employer bargaining in several parts of the public sector as part of the previous government's policy of decentralising pay determination, leaving some employers a greater freedom to contain pay increases. But there may well be other explanations. Put simply, public sector pay levels appear to be largely unaffected by the particular mechanism through which they are decided. There is no clear effect arising from direct negotiations between trade unions and employers, as against making representations to a Review Body, with the government making the ultimate decision.

Summary

The research confirms that trade unions continue to have an impact on private sector pay levels, even in their weakened state compared with earlier times. The effect is, however, not a general one. It is only discernible where pay-setting arrangements cover at least 70 per cent of employees in the workplace or where multiple unions are involved. Unions are also associated with greater provision of some fringe benefits in much the same circumstances as where they achieve higher pay. Other employees also benefit from the unions' bargaining activity, commonly managers and higher paid professional workers in the same workplaces.

Figure 1 Variation of the extent of the direct and indirect impact of effective union bargaining in the private sector, by hourly earnings level, 1998



Source: WERS 1998; employees in private sector workplaces with ten or more employees.
Note: Effective union bargaining is measured by the presence of multiple recognised unions or between 70 and 99 per cent of employees at the workplace being covered by union bargaining.

Figure 1 summarises how these two effects bore upon employees at different parts of the pay distribution in the private sector in early 1998. The direct impact of union bargaining affected a mere 6 or 7 per cent of employees at the bottom end of the pay distribution, where wages were only £1 or £2 per hour.[5] The most extensive impact of unions was for people being paid between £5 and £10 per hour – at least a quarter of them benefited directly from union bargaining. At higher pay levels, the effect was less widespread. But the indirect impact was at its most extensive in this upper section of the pay distribution – at £10 an hour or more, over 15 per cent of employees benefited from the spillover from union bargaining on behalf of, not themselves, but other employees at their workplace.

5 Pay settlements

How unions might affect pay settlements

Trade unions affect, or might affect, the way employers set the pay of employees in several respects. First of all, by obtaining the employers' agreement to negotiate about the pay of a group of employees, they crystallise the definition of groups of employees whose pay is always reviewed together. The new statutory recognition procedure contained in the 1999 Employment Relations Act uses the term 'bargaining unit' to describe such a group of employees, but the term is equally applicable to groups of employees who achieved union recognition by voluntary means, as is usually the case. Second, unions might stimulate employers into reviewing pay levels more regularly and perhaps more frequently. Third, they might affect the size of the settlement. This chapter examines each of these aspects of pay settlements.

Data and methods

The data used in the analysis come from the management interviews in WERS 1998 and refer to the most recent settlement at the time of the interview; thus, the settlements occurred mostly in the period early 1997 to early 1998. They are focused upon the largest occupational group (excluding managers) and are not therefore fully representative of the settlements for all employees. However, in two-thirds of workplaces, the largest occupational group formed the majority of employees; and, overall, employees in the largest occupational group formed 60 per cent of all employees. In addition, where questions were also asked about other groups of employees in the same workplace, the results show considerable uniformity with the largest occupational group.[1] So, although not perfect, these data are very strongly indicative of settlements in the economy as a whole during the period in question.[2] For simplicity, we refer to employees in the largest occupational group as 'core employees'.

How pay is determined

Structure

In around a quarter of workplaces, core employees have their basic pay set by collective bargaining. In the private sector, the figure is a mere 15 per cent. In half of these, the bargaining covered more than one workplace of their enterprise; in a quarter, it was confined to their own workplace; and, in the remaining quarter, it was set by multi-employer, industry-wide bargaining. So, most private sector settlements are the result of unilateral management decision-making, more usually at workplace level (44 per cent of workplaces), but also commonly by higher-level management (27 per cent). In the public sector, Pay Review Bodies are the main alternative to collective bargaining, which affected core employees in three-fifths of workplaces.

Process

Where pay is ostensibly set by collective bargaining, it is not always clear that unions play an active role in negotiations. The evidence here is confined to cases where core employees were reported by managers to have their pay set through bargaining at the workplace or a higher level in the same organisation. In one-sixth of these cases, the manager said that no union representative or official was involved in arriving at the latest settlement. A similar proportion said the union had only been consulted, rather than the settlement having been negotiated. So, in many cases where pay is considered to be the result of collective bargaining, the unions appear to have little influence on the process.

The frequency of pay reviews

Unions do, however, appear to have an impact on the frequency with which employers review pay levels. Where settlements were subject to negotiation with unions, 96 per cent were the result of an annual review; 1 per cent conducted a review more than once a year; and a similarly small proportion (2 per cent) conducted a review less than once a year. By contrast, where employers were free to choose the frequency of settlements, only 86 per cent had based their most recent settlement on an annual review; 6 per cent conducted a review more than once a year; 7 per cent did so less than once a year. Annual reviews are a very strong norm where collective bargaining occurs, irrespective of the sector, industry or occupation of the employees affected.

The size of pay settlements

The largely annual reviews of pay for core employees generally resulted in a pay increase. In only 3 per cent of cases was the outcome a standstill or a decrease in basic pay, usually because the employer was in financial difficulties.

The uniformity of pay increases

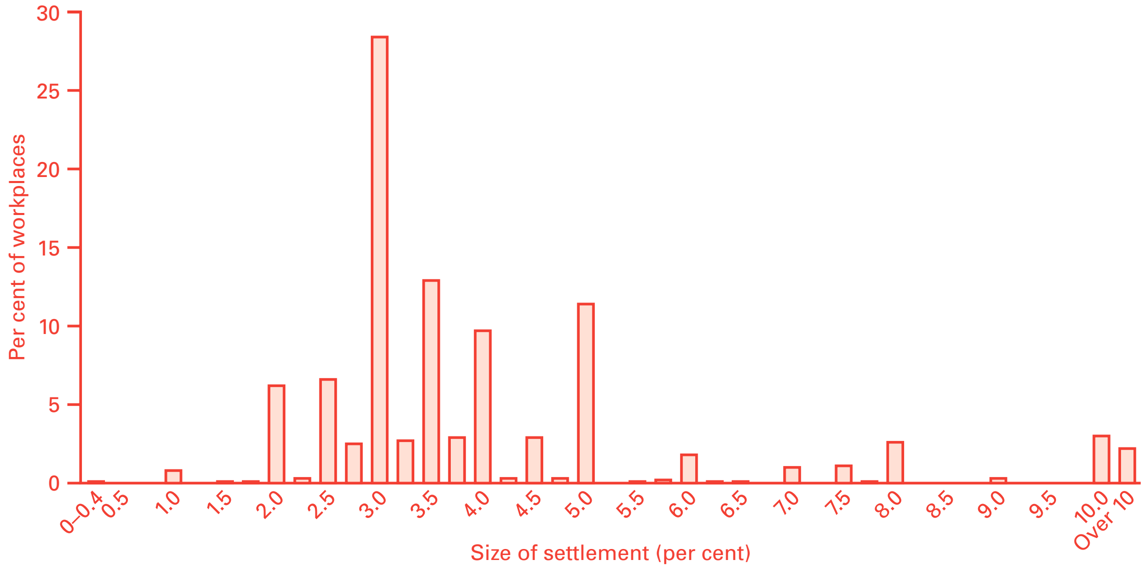
Pay increases were heavily concentrated around 3 per cent. This was the most common figure in both the private and public sectors. Other very common figures in the public sector were 2.5 and 2 per cent; together these accounted for over a half of public sector cases. Increases were very similar in size in the public sector, whether they resulted from collective bargaining or other means, largely Review Bodies. In the private sector, there was greater variation, shown in Figure 2. The remainder of the analysis focuses on explaining this variation in the private sector.

The size of pay increases in the private sector

About a tenth of private sector increases were of 7.5 per cent or above, with many of these at 10 per cent or more. Detailed examination showed that these were mostly cases where the majority of employees at the workplace were paid less than £4 per hour after the settlement. It seems clear that these were exceptional increases that anticipated the introduction of the National Minimum Wage, introduced a year later. In what follows, we focus on the bulk of cases in the private sector – those with increases below 7.5 per cent – where statistical analysis can provide some assessment of the main factors at work.[3]

Before examining the possible impact of trade union involvement in the pay-setting process, the analysis took account of a number of factors that generally preceded the pay settlement and could be expected to have led to a larger increase. The results established that increases were lower where the workplace's

Figure 2 Size of most recent settlement for largest occupational group, private sector, 1998



Source: WERS 1998; workplaces in the private sector with ten or more employees reporting a pay increase for the largest occupational group.

recent financial performance was poor and were larger where:

- the workplace was expanding its workforce
- the workplace was more than five years old
- the workplace was foreign owned and core employees were higher-paid professionals
- core employees were in the lowest-paid occupations in industries with many low-paid employees (again reflecting anticipation of the National Minimum Wage).

There were also less robust indications that pay increases were higher where:

- inflation was higher just before the settlement was made
- recent sales of goods or services were rising faster than labour productivity
- average earnings in the industry had increased more rapidly and managers reported that their settlement matched that of similar employers
- core workers were becoming more 'functionally flexible'.

And they were lower where:

- the risk of redundancies was reported as important
- the workplace was recruiting core employees at a time when they were becoming more plentiful

- performance-related pay was becoming a higher proportion of total pay, with basic pay being correspondingly reduced as a proportion.

All these factors were taken into account when we focused analysis on the question of whether collectively bargained pay increases were different from those decided unilaterally by management.

In essence, they were no different. Where core employees had their pay set by collective bargaining, the size of the increase was not significantly different from that received by core employees elsewhere whose pay was not determined through bargaining.[4] Of course, it would have been surprising if bargained settlements had been larger than non-bargained ones. This would imply that any pay premium gained by unions was growing, an unlikely situation when so many other indicators of union strength have been pointing the opposite way. Another possible interpretation of the result might be that unions were maintaining a general wage advantage for the employees they covered. But we showed in the previous chapter that there was no such general union pay premium in 1998. Only specific types of union representation were associated with demonstrably higher pay when other relevant factors were taken into account. Multi-union representation was particularly linked with higher levels of pay. So, did this specific type of union representation have smaller pay increases, reflecting the general fall in union strength? The answer is yes. Increases achieved for core employees in multi-union situations were significantly lower than other pay settlements in the same period, around 0.3 per cent lower on average.[5]

However, there were other features of union representation which had higher pay levels (as shown in Chapter 4) but which did not have lower settlements in the period 1997–98. Settlements were slightly lower in these cases, but not significantly so. It may be that they would also turn out to have lower increases if observations were available over a longer period.

Summary

Basic pay is adjusted annually for most employees and this is particularly the case where trade unions are involved. But unions appear to affect the process of pay determination more than the outcome. Pay increases in the private sector are no greater where unions are involved in negotiations, when other factors suggested by economic theory are taken into account. If anything, it is more likely that they are smaller. Employees covered by multi-union representation, who were paid more than other comparable employees in 1998, had smaller pay increases at that time. This is consonant with the long-term decline in influence that British unions have experienced in the 1980s and 1990s. It suggests that any pay premium for unionised employees will become confined to a smaller and smaller portion of those covered by collective bargaining. Indeed, it may gradually disappear in the future, unless the causes of union weakness are addressed.

6 Conclusions and policy implications

Developments during the 1990s saw the British labour market make a further move away from its earlier position where trade unions had played a substantial part in shaping jobs and pay. Much of this came about through the increasing turnover amongst workplaces: new service sector workplaces, mostly untouched by unionism, replaced older workplaces, often in manufacturing, where unions had been well established. By 1998, less than a third of employees in the private sector were covered by pay-setting arrangements in which unions played a role; and many fewer than that were employed in workplaces where unions played a part in management decisions about the numbers of jobs.

In these changed circumstances, the question arose as to whether unions still had an impact on pay levels and on the creation, retention or destruction of jobs. The question has acquired greater importance, now that recent legislation enables unions to achieve recognition from some employers in circumstances where they would not otherwise have achieved it voluntarily. The direct and indirect effects of the legislation might be to slow down or even arrest the decline in union representation for pay bargaining that has been in evidence for over 20 years. Such a prospect gives added saliency to the impact of unions on pay and jobs.

The impact of trade unions on pay

The research confirms that trade unions continue to have an impact on private sector pay levels, but only in particular situations, not in general. Only where union–management pay-setting arrangements cover at least 70 per cent of employees in the workplace, or where multiple unions are involved, are pay levels clearly higher than for comparable employees in similar workplaces. In these circumstances, which apply to around 15 per cent of private sector employees, a premium of around 8 to 11 per cent is typical. Unions are also associated with greater provision of some fringe benefits in much the same circumstances as where they achieve higher pay. A smaller group of other employees also benefit from the unions' pay-bargaining activity, even though they are not directly covered by it. They are commonly managers and higher paid professional workers in the same workplaces.

It seems very likely that the union impact on pay is smaller now than it was previously. There are no directly comparable datasets for earlier periods on which we could repeat our analysis and confirm that judgement. But there are many indications from other research that unions have become weaker in the last two decades. They certainly represent many fewer employees. Our analysis of pay settlements in 1997–98 also supports the idea of a declining impact on pay levels. Settlements were no higher where unions were involved and in some circumstances were lower than for comparable workers in non-union situations. Indeed, the multi-union bargaining situations that clearly showed higher levels of basic pay were the ones that also clearly showed smaller pay increases in our analysis of settlements. These multi-union situations are becoming increasingly rare, reinforcing the likelihood of a disappearing union impact on pay levels.

The impact of trade unions on employment levels

The research examined the potential impact of trade unions on the number of jobs in the economy in two separate ways. The first concerned the likelihood of complete closure of a workplace between 1990 and 1998. This was found to be no different for union and non-union workplaces in the major part of the economy – the service sector, whether public or private. However, the impact of unions was clearly discernible in manufacturing. Closure in this sector was more likely where there had been unions representing a section of the workforce, such as only manual workers, and where unions were excluded from negotiating with management about employment matters, such as recruitment and staffing levels. Where representation and negotiating arrangements were comprehensive, the potential negative effects of unions in the manufacturing sector were absent.

The second way in which the research examined the possible impact of trade unions on the numbers of jobs was by comparing the rates of growth or contraction among continuing workplaces from 1990 to 1998. In the private sector, unions generally served to inhibit employment growth by several percentage points per annum. This negative impact was slightly larger in service industries than in manufacturing, and where multiple unions were recognised. However, it was confined to cases in which unions negotiated over wages but had no role in determining staffing levels or recruitment. The rate of employment growth among private sector workplaces where unions negotiated over wages *and* employment was no different to that seen among workplaces without recognised unions.

Future implications

An important implication of the findings is how the economy might be affected by the new legal provisions through which trade unions can achieve recognition from employers to negotiate about pay, hours of work and holidays. Such cases are likely to form only a small fraction of instances of newly granted recognition. But the legal provisions seem most likely to encourage the creation of a particular type of bargaining unit: one with a single union representing employees, principally in cases where the employer does not already recognise another union for different groups of employees. If the bargaining unit is defined broadly (and initial indications are that this is generally so),[1] these cases of new recognition will resemble the situations of high coverage at workplace level that, in the 1990s, were associated with employment decline in the private sector and a greater chance of closure in manufacturing industry. The results also suggest that these undesirable consequences for employment might be avoided if managements and unions agreed to a broad bargaining agenda that gave the union a role in decisions about employment as well as pay. But there seems little prospect of this happening generally in those few situations where an employer has been obliged to recognise a union for bargaining about pay through recourse to the law.

In cases where unions achieve recognition without using the new legal provisions, the findings give a clear pointer to management for avoiding the possible negative impact of unions on employment – they shall encompass a wide range of issues, including recruitment and staffing levels, within the scope of joint regulation. In workplaces where unions are already recognised for pay bargaining, the findings suggest it would be beneficial to expand the scope of negotiations to include employment matters in the majority of unionised workplaces in the private sector that do not currently do so. Such a move seems likely to benefit employees and employers alike.

As we noted in Chapter 1, the achievement of statutory recognition does not guarantee a pay agreement, let alone one that specifies basic rates of pay higher than for comparable employees elsewhere. Thus, the statutory procedure seems very unlikely to lead to recognition being granted on such a scale, and in sufficient numbers of cases that lead to substantial and enduring pay increases, that the trend towards a disappearing union pay premium would be arrested or reversed. This implies that employers should have little ground for opposing union recognition on the basis that granting it might lead to unacceptably higher wage costs. Correspondingly, unions are likely to gradually lose the legitimacy of their appeal for new members on the grounds that they generally achieve higher pay levels.

The vast majority of unionised workplaces in Britain will continue to be those where union recognition was achieved voluntarily at some time in the past, without recourse to the law. In this shrinking but still substantial part of the economy, a gradual decline in the impact of unions on wage levels seems likely. Since the existing union impact is most apparent in the middle part of wage distribution, this decline is likely to reinforce the current trend towards greater wage dispersion and income inequality. A widening of the gender pay gap is also possible, since union representation is associated with practices, such as analytical job evaluation, which are in turn associated with smaller pay differences between men and women. Both these matters bear on more general considerations of public policy.

A final implication of the research concerns the types of non-union consultative and information-sharing practices that are currently being considered under European Union auspices. In so far as they have a similar impact to corresponding practices in Britain that are introduced voluntarily by employers, the research implies that they will have no detectable impact on pay levels or the growth of jobs.

Notes

Chapter 1

1 Unless the written agreement contains a statement that it is intended to be a legally enforceable contract. This is very rare.

2 There is, for example, no requirement for binding arbitration.

3 Import penetration in manufacturing increased steadily year on year from 37 per cent in 1989 to 46 per cent in 1996 (Central Statistical Office, 1993, p. 219; Office of National Statistics, 1999, Table 18.2). The percentage of private sector establishments owned or controlled by foreign organisations increased from 8 to 13 per cent (Millward *et al*., 2000, pp. 32–4).

4 Based on regional rates of unemployment derived from claimant counts given in *Labour Market Trends.* Comparable earlier figures are not available.

5 Based upon unemployment rates (ILO definition) by previous occupation for the United Kingdom, derived from the relevant Labour Force Surveys, reported in *Labour Market Trends.* Comparable earlier figures are not available.

6 The questionnaire was distributed to all employees where there were less than 25.

Chapter 2

1 The transfer of employment to a new site or to another workplace in the *same* organisation is not included in this definition, nor is a simple change of ownership such as a take-over.

2 The low level of unionisation in the private sector supports this view. Only one private sector industry (electricity, gas and water supply) out of 14 industries has over a half of its workforce belonging to trade unions (Bland, 1999).

3 A 1992 survey of large, multi-site companies showed that many of those with recognised unions in their existing workplaces set up new workplaces without recognising unions in them. This was more common where existing bargaining arrangements were decentralised (Marginson *et al*., 1993).

4 The data are therefore confined to workplaces with at least 25 employees in 1990, this being the sampling population for WIRS 1990.

5 Our measures of union strength included the proportion of workers in union membership, the existence of a closed shop, the presence of an on-site representative, and the existence of formal agreements restricting management's ability to organise non-managerial staff.

6 Non-union communication channels consisted of non-union appointments to joint consultative committees, the presence of briefing groups, regular meetings between senior management and the workforce, problem-solving groups and the presence of non-union representatives where there were no union members.

7 Those that were significant in the analysis were: the size of the workplace in 1990, the trend in employment in the previous year, the age of the workplace, the proportions of the workforce female and part-time, and three individual industries.

Chapter 3

1 Many earlier studies of employment change in Britain have relied upon retrospective information on changes in workplace employment levels, and have sought to explain change by reference to characteristics observed at the end of the period in question. However, if one were to find an association between the contraction of workplace employment and strong unionism in such a study, questions would inevitably arise over the true direction of causality.

2 We experimented with the use of statistical methods that adjust for the 'selective' nature of the sample available to us – see Bryson (2001) for details. However, we were unable to find a sufficiently robust solution that could be used extensively throughout this chapter and reported with confidence.

3 See Chapter 2, note 6 above.

Chapter 4

1 The method was originally developed by Stewart (1983b) and used to show how the union effect on wages changed over the 1980s (Stewart, 1995). The current work extends that methodology to situations where the pay bands vary across observations. See the Appendix in Forth and Millward (2000a).

2 To be characterised as having 'high involvement management', a workplace had to have at least two out of three 'task practices' (teamworking, functional flexibility and quality circles), two out of four 'individual supports' (briefing groups, information disclosure, performance appraisal and human relations training) and two out of three 'organisational supports' (internal recruitment, job security and financial participation). Further details are given in Forth and Millward (2000a).

3 Since the information available is simply provision or non-provision of the benefit, the statistical procedure used was logistic regression.

4 This is also the case for managers, but they were excluded from the relevant questions in WERS 1998.

5 The survey fieldwork preceded the introduction of the National Minimum Wage of £3.60 in April 1999.

Chapter 5

1 In 68 per cent of workplaces, the same type of arrangement is used for all occupational groups present (Forth and Millward, 2000b).

2 Being derived from a nationally representative sample of workplaces, they come far closer to a comprehensive sample of pay settlements than the other British source used in research, the CBI Pay Settlements Databank.

3 The distribution of the size of increases greater than zero and less than 7.5 per cent approximates to a normal distribution and is therefore amenable to Ordinary Least Squares regression. The base is 1,079 observations.

4 The actual coefficient was –0.093, which is not significant, even at the 10 per cent level.

5 Increases achieved for core employees in single-union situations were not significantly different from those in non-union situations.

Chapter 6

1 Up to 23 March 2001, the Central Arbitration Committee had granted statutory recognition in five cases covering approximately 1,400 employees. In two of these cases, the bargaining units covered at least 70 per cent of employees; in the other three, the proportion was not calculable on the available data, but was probably much smaller.

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