

The Management of Pay as the Influence of Collective Bargaining Diminishes

ESRC Centre for Business Research, University of Cambridge, Working
Paper No.213

By

William Brown
Faculty of Economics
& Politics
University of Cambridge
Sidgwick Avenue
Cambridge
CB3 9DE

Tel: 01223 335668
Fax: 01223 335667
Email: william.brown@econ.cam.ac.uk

Paul Marginson
Warwick Business School
University of Warwick
Coventry
CV4 7AL

Tel: 0124-7652-4272
Fax: 0124-7652-4184
Email: [paul.marginson@
mail.wbs.warwick.ac.uk](mailto:paul.marginson@mail.wbs.warwick.ac.uk)

Janet Walsh
School of Management
Royal Holloway College
Egham Hill
Surrey
TW20 0EX

Tel: 01784 434455
Email: janet.walsh@rhul.ac.uk

September 2001

This Working Paper relates to the CBR Research Programme on Corporate
Governance, Contracts and Incentives

Abstract

The management of pay in Britain has changed substantially in recent years. The paper starts with a theoretical discussion of the extent to which individual employers can exercise discretion in the management of their employees' pay. It then examines the ways in which pay is used to secure productive effort. An analysis of the influence of trade unions leads on to an examination of the diminishing influence of collective bargaining in British pay determination. The implications of this are discussed for employer pay strategies, within and between firms, and internationally. It concludes with the consequences of diminishing trade union influence for the distribution of pay.

JEL Codes: J3, J5.

Keywords: wage determination; collective bargaining; remuneration management; bargaining structure; income distribution; trade union effects; employer pay strategy.

Acknowledgements

This paper is to be published in P.K. Edwards (ed.), "Industrial Relations: Theory and Practice in Britain", Oxford: Blackwell, June 2002.

Further information about the ESRC Centre for Business Research can be found on the World Wide Web at the following address:
<http://www.cbr.cam.ac.uk>

1. Introduction

The management of pay is of fundamental importance to the conduct of industrial relations. The employment relationship is formed around the payment of labour, and it is the most conspicuous focus of labour's collective concern. This chapter discusses the strategies adopted by employers in fixing pay in Britain. These strategies have undergone fundamental changes in recent years as the influence of trade unions has diminished, and as competitive pressures have increased and become more international. But pay is also the price of labour, and as such is the subject to market forces encompassing far wider terrains than those of any single employer. How far do these forces constrain the employer's discretion?

This chapter starts by looking at how much discretion individual employers have over pay. Because conventional economic theory implicitly denies that employers have any distinct role, we look at economic explanations for the substantial pay differences that are actually to be found between similar firms. We then develop a richer explanation by drawing attention to the uses of pay manifest in the differing ways in which employers try to secure productive effort from their workforces. For much of the last century their discretion was greatly modified by trade unions. But in recent years the consequent institutions of collective bargaining have seen substantial decline and change. We discuss the implications of this for employer pay strategies, and also the ways in which these strategies are increasingly transcending national frontiers. The chapter concludes with discussion of the implications of diminishing trade union influence for the distribution of pay.

2. The Dispersion of Pay

A fundamental question when considering how much discretion employers have over their employees' pay is why it is, in practice, that workers who are performing similar jobs for different employers in the same labour market are typically paid at different rates. The starting point for the orthodox economic analysis of pay is the work of Hicks (1932) in his application of marginalist economic theory to the labour market. Wages, he argued, are determined by the interaction of the forces of labour supply and labour demand in a competitive labour market with the result that, at the equilibrium wage for particular occupational group, no firm will wish to hire any more workers. Moreover, because the equilibrium wage is assumed to be equivalent to the contribution to revenue of the last (or marginal) worker employed in each firm, the competitive process by which such a wage is determined serves also to secure an efficient allocation of labour between different firms. Consequently, within a given labour market, wage differentials between firms for a given type of labour will not be sustainable for long. Any firm paying above the competitive wage will make a loss and will eventually be driven out of business. Any firm paying below the competitive wage will find itself unable to recruit and retain its workforce.

An important departure from this competitive model of wage determination arises from the effect of trade unions. Hicks portrayed unions as monopoly suppliers of labour able to raise wages above the competitive level. In an otherwise competitive economy the consequence of unions' effect on wage levels will be that employment will contract in the unionized sector, and the displaced workers will eventually find employment in non-union firms which will lower their wage offers in the face of excess labour supply. There is the implication that, in aggregate, output and income will fall because the allocative efficiency of the competitive labour market has been impaired. But introducing the

effects of unionism does not, by itself, assist an explanation of inter-employer wage differences.

The question of inter-firm wage dispersion is important because, contrary to the expectations implied by the competitive model of wage determination, empirical studies have repeatedly found that this pay dispersion is substantial and sustained. Within the same local labour market – that is, where there are no spatial barriers to labour mobility – it is normal to find a range of earnings across firms for workers in similar occupational categories at a given point in time. The magnitude of these inter-plant pay differentials is substantial. Similarly substantial pay dispersion is apparent in different economies, despite their having very different wage fixing institutions. A comparison of the labour markets of Chicago, Coventry and Adelaide found the inter-plant coefficient of variation of standard earnings of, for example, fork-lift truck drivers to be, respectively, 15, 13 and 11 percent (Brown *et al.* 1980).

Additional evidence of the distinctive role played by the firm in pay determination comes from studies, not of pay levels, but of pay changes. The pay rises achieved by individual workers in a given year in the same labour market are commonly more in line with pay rises received by other occupations within the same firm than with those received by other individuals in the same occupation in other firms (Nolan and Brown, 1983). In this British study of highly unionised workers, their pay rises appeared to be determined more by the competitive circumstances confronting their employers in their product market than by those confronting them as individuals in their local occupational labour market. Evidence from a more industrially diverse Australian sample suggested that this dominance of the firm-specific effects was a feature of manufacturing industry rather than of industries with more fluid labour markets such as building or retailing. Within

manufacturing it was particularly strong for larger firms in more monopolistic industries (Brown *et al.* 1984).

Another firm-related finding that has eluded straight-forward market-related explanation is the consistent relationship between firm size and pay levels. There is evidence from several countries that the average earnings of workers in particular occupation categories tend to increase with the size of establishment and, in the case of multi-plant enterprises, with the size of the parent company (Weiss and Landau 1984; Thomson and Sanjines 1990). The sources of these size effects are likely to be connected with other size-dependent aspects of labour management (Marginson 1984). Findings of this sort led the authors of the early American studies to question the competitive model of wage determination. Lester (1952) concluded that wage setting in local labour markets was characterized by a substantial ‘range of indeterminacy’ within which employers could select a stable point consistent with their chosen style of labour management, largely untroubled by short-term fluctuations in the labour market. This range of indeterminacy has been estimated to be of the order of 20 per cent of average earnings in one British study (Blanchflower *et al.* 1990).

Evidence on inter-firm wage dispersion draws attention to the extent to which employers may deliberately seek to shelter their workforces from the effects of the external labour market. An example is the creation of so-called ‘internal labour market’ structures. These are coherent wage and career structures internal to the firm by means of which employers use organizational rather than market relationships to motivate labour. They are characterized by ports of entry at lower job grades, by on-the-job training, by internal promotion, and by seniority systems in which pay and job security are related to length of service (Doeringer and Piore 1971). Later we shall consider how the circumstances of internal labour markets are changing.

3. Economic Explanations of Pay Dispersion

Economists have responded to the challenge posed by the findings on pay dispersion with several different approaches (Groschen 1991). Three of these approaches remain within the orthodox framework of competitive equilibrium. One approach suggests that labour may be 'sorted by ability' so that differences in earnings reflect different productive capacities of workers, either innate or acquired. But while such considerations may account for earnings differentials between individual workers, they do not thereby explain differences between firms. Even controlling for the fact that different firms may employ workers with different productive capacities leaves an important element of the inter-firm wage differential unexplained (Abowd *et al.* 1999). Another approach seeks to explain wage dispersion by the absence of perfect information to workers about job opportunities so that their job search is costly. Hence workers may take a job at a wage rate less than that prevailing elsewhere, thereby giving rise to a range of wages for similar jobs at any one time. But, again, random variations in search behaviour or wage offers cannot account for the persistence of inter-firm pay differentials.

An approach that does imply firm-specific effects is that there may be 'compensating differentials' of non-wage factors. It starts with the observation that the wages that are paid do not fully reflect employees' net compensation because they leave out a range of other factors that affect the return to employment. Positive factors include such things as fringe benefits and good working conditions, whereas negative factors cover dirty or dangerous working conditions and unsociable hours. This theory suggests that, once these compensating differentials have been taken into account, returns to employment should be similar across all firms in the labour market. Unfortunately for the theory, however, evidence from a variety of studies finds that wages tend to be positively, not negatively, correlated with the provision of fringe

benefits and good working conditions (Mackay et al., 1971; Freeman, 1989). Firms that pay relatively well also tend to provide relatively good non-pay conditions.

These approaches to pay dispersion do not explain why particular employers might choose to pitch their wage offers higher or lower in the range of indeterminacy than others. They are cast as passive recipients of labour market conditions. This weakness is addressed by three approaches that have attracted considerable attention in recent years: ‘monopsony’ models, ‘insider-outsider’ models and ‘efficiency wage’ models.

Monopsony models of the labour market address the question of how some firms are able to pay at levels below the competitive rate without losing their workforce to competitors. In the simplest case this arises where a single employer is a monopoly purchaser of a given type of labour within a local labour market. Workers find it costly to go elsewhere to find work, hence the employer is able to exercise ‘monopsony’ power in the labour market, and to pay less than the competitive rate. Even if firms are unable to attract sufficient numbers of workers at such rates of pay, they may nonetheless choose to operate with a permanent stock of vacancies because this represents a lower cost option than that of raising the pay rate to attract additional workers. One important implication is that a statutory minimum wage may actually result in an increase in employment, because it forces monopsony employers to raise their wage rates and thereby fill existing vacancies (Card and Krueger 1995; Stewart 2001). Further work has underlined the extent to which many labour markets could be subject to ‘dynamic monopsony’ (Card and Krueger 1995), because of the difficulties workers face in gaining accurate information about alternative jobs and the costs incurred in leaving one job and starting another.

The central presupposition of ‘insider-outsider’ models is that firms enjoy a degree of product market power, and hence possess the ability to extract an economic rent from consumers over and above the costs of producing goods and services. Workers can obtain a share of this rent if they are able to deploy bargaining power. Such power is said to derive either from the possession of firm-specific skills (which are therefore costly for the firm to replace) or from union organization (which enables workers to exercise monopoly power over the supply of labour). Wages are consequently determined by two sets of influences: ‘outsider’ reflecting the interaction of supply and demand in the labour market, and ‘insider’, reflecting the relative bargaining power of the employer and workers within the firm. Providing the forces shaping the ‘insider’ influences can be shown to be firm-specific, then an explanation can be developed of the employer effect on wages (Lindbeck and Snower 1986; Carruth and Oswald 1989).

Empirical evidence provides some support for ‘insider-outsider’ models expressed in terms of worker bargaining power. Analysis of the 1984 Workplace Industrial Relations Survey (Blanchflower *et al*, 1990), for example, found, first, that the presence of a pre-entry closed shop is associated with relatively high manual earnings and, second, that the ability of skilled workers to extract a rent appears to be less dependent on trade union organization than is the case for semi-skilled or unskilled workers. But how far the sources of ‘insider’ bargaining power might depend upon union organization rather than upon employer circumstances was questioned by Stewart (1990). He was able to demonstrate that, providing firms possess a degree of product market power, semi-skilled workers in non-union plants are as likely to benefit from a wage mark-up above competitive levels as their counterparts in unionized plants.

This suggests that it may be fruitful to consider Slichter’s notion of the firm’s ‘ability to pay’ (Slichter, 1950). According to this, those

firms that possess a degree of product market power are more likely to pay above competitive wage levels because of their ‘super-normal’ profits. Given the usual economic assumption of profit maximization, however, conventional theory does not explain why employers should choose to pay over the competitive rate, unless coerced by union pressure. The sixth approach offers an explanation.

‘Efficiency wage’ theories share the central proposition that workers’ productivity will, in part, be determined by the level of wages (Akerlof, 1984; Akerlof and Yellen, 1986). The payment of a wage in excess of competitive levels can, by eliciting extra productivity from workers, result in increments to output from which the revenue offsets the extra wage costs incurred. From this perspective, pay is an important element in securing productive efficiency – that is, the maximization of outputs from labour effort – as distinct from allocative efficiency. Various sources of this increased productivity have been suggested. They include the coercive pressure on workers who would face an increased cost of job loss where their jobs are paid above market levels; the motivational effects stemming from greater worker commitment to high-paying employers; the savings in direct supervision costs associated with increased trust between employer and employee; and the savings associated with reduced labour turnover.

The pay-off between higher pay and increased productivity that is implied by efficiency wage theories suggests that a competitive market might tolerate a spread of inter-firm differences in pay levels as a result of either deliberate or random choices by employers. Empirical tests of efficiency wage theory are so far inconclusive (Groschen 1991). They will remain so until the factors underlying the decisions of employers to position themselves differently in terms of the pay-productivity pay-off can be specified more clearly. Despite this, there is considerable value in the central proposition that pay should be seen to play a part not

only as a market price for labour, but also as a means by which managements can elicit productive effort from their workforce.

4. The Employer's Role in Pay Determination

The discussion so far has described how economists' conceptions of pay have shifted, somewhat uncertainly, to focus increasingly on the distinctive role played by the firm as the employer of labour. Starting from the undeniable fact of substantial inter-firm pay dispersion, so unsatisfactory for an orthodox labour market theory, attention has moved to consider the pay-fixing behaviour of firms when they possess a degree of product market power, when they bargain with trade unions, and when they can use pay to elicit productivity (Rubery, 1997). This admission that the employer may have a distinctive role in pay determination is, however, only a starting point. Before discussing the many aspects of the role it is necessary to establish four important empirical points about the competitive constraints under which labour is managed and paid. The first is that, in a world of imperfect competition, the influences of the product market are in contest with those of the labour market in determining pay, and employers have to mediate between them. Second, the degree of discretion offered to an employer by product market conditions is permissive and not imperative. The third point is that a firm's choice of pay and employment strategy is constrained by its broader production strategy. Finally, within a firm's employment strategy, it is misleading to isolate pay from other complementary instruments of motivation and control.

The first point concerns the tensions that arise between the allocative and the productive properties of pay. So long as employers have to recruit and retain labour they cannot wholly free themselves from the influences of the external labour market. If pay for a particular skill falls too far out of line with the external market, labour turnover may rise. But, in the context of an internal

labour market, raising the pay of one group may have disruptive effects on established differentials with other groups in the firm's workforce. While such disruption may have costly consequences in terms of morale or strike action, it may be prohibitively expensive to solve the problem by conceding a uniform pay rise for all groups. This was, for example, a common issue in highly unionised petrochemical refineries where traditional notions of internal equity dictated that all time-served craftsmen should be paid on the same rate even though the earnings of their various trades in the outside labour market might be very different. In recent years, however, the decline of traditional apprenticeship, the weakening of trade unions and recourse to outsourcing has provided employers with greater discretion. It is now commonplace to find once privileged groups, such as delivery drivers in the newspaper industry, being paid what are typically termed 'market rates', much inferior to their traditional rates, and comparable with those of the world outside.

The second important point about employer discretion is that it is not mechanically moulded by product market circumstances. The influence of the product market over wages tends to be coercive downwards, but permissive upwards. An employer's monopoly strength is thus not necessarily reflected in relatively high wages. American studies have shown how companies in strong market positions have often been able to resist conceding high wages over long periods because, for example, the relatively few employers in the product market have found it relatively easy to combine to resist union demands (Levinson 1966; Ozanne 1968). Similarly, if an employer's monopoly strength *is* reflected in relatively high wages, one should not conclude that this is necessarily the result of a deliberate employer strategy. A study of British engineering firms demonstrated that some of them paid relatively high wages over periods of many years simply because their piece-work payment systems were hopelessly out of management's control. Their product markets were undemanding, with the consequence

that their managements had never been forced to undertake the difficult and potentially very costly task of regaining control (Brown, 1973).

The third point is that a firm's policy on employment and pay will be influenced by broader strategic choices. The management of a firm is a complex, skilled activity. Variations in productivity and labour performance are not simply reducible to differences in factor inputs (Clark 1980; Hodgson 1982). Even firms in direct competition with each other may adopt very different approaches to production and to labour control. Firms whose production is based on high value added, where competition tends to be quality-based, are likely to emphasize high standards of work performance, an ability to work with discretion, and low labour turn-over. This, in turn, is likely to be reflected in levels of pay that are high relative to those prevailing locally because of the potential costs of employee disaffection (Ramaswamy and Rowthorn 1991). This will contrast with firms whose competitive strategy is based on the production of low value added, standardized goods where competition tends to be cost- rather than quality-based. It will contrast again with firms whose production is relatively capital intensive, which will tend to provide relatively good terms of employment, including pay, in order to ensure uninterrupted production.

Fourth and finally, pay is usually used not as an isolated device, but as part of a package of complementary devices to elicit worker productivity. A central source of such differences in productivity lies in the variable nature of the output of labour. Labour cannot simply be hired and blithely set to work. In practice, managements have to devise an integrated bundle of coercive and motivational devices to elicit productive effort from the workers they have hired. Pay is usually an important component of this, but to varying extents. Its importance is likely to be greater where, for

example, the work is intrinsically unrewarding, and less so where there is, for example, a strong vocational element.

In sum, a combination of factors prevents employers from being simply the passive recipients of pay rates from the labour market. Employers differ in the compromises they make in protecting internal wage structures from the external labour market. They operate in product markets that offer them different degrees of discretion, and they respond to that discretion in different ways. They adopt different competitive strategies in their productive markets. They use pay to different extents and in different ways in trying to win productivity from their workforces. The key to understanding the dispersion of pay between firms thus lies in investigating management's active use of pay as a means of securing productive effort. We address this by first looking at the management of payment systems and structures, before moving on to discuss the much wider issues involved in pay bargaining with trade unions.

5. Managing Pay as a Motivator

Payment systems are sets of rules with which employers link pay rates not only to job descriptions, but also to any of a great variety of indicators related to issues such as employees' competence, performance, and career expectations. For as long as there has been employment, payments systems have been the object of endless experimentation. Why is the choice and management of payment systems intrinsically difficult, and why is pay so fickle a motivator?

A recurrent theme in the literature on pay is the stability of relative pay levels over prolonged period of time (Phelps Brown and Hopkins 1981). Authors who have been actively involved in the bargaining process have long commented on the dominance of custom in shaping conceptions of 'fair' relative pay levels, and

thereby contributing to this stability (Clay 1929). Relative pay is closely linked to social status and thereby to employee perceptions of self-esteem. Consequently, for both employer and employee, one enters a motivational minefield when one strays from the pattern of relative pay that, whatever its origins may have been, has become consolidated by custom. This is a major reason why relative pay levels generally respond sluggishly, if at all, to changes in the relative demand for different occupations in a labour market.

If we look inside the firm, the stability of the pay structure becomes even more important. Employees' sensitivity to relative pay is all the more acute because they are in daily contact with the people in their comparative reference groups. The closer the point of comparison, the closer it is watched. Unless they accept that some rationale of 'fairness' underlies the disturbance of established internal pay differentials, employees are liable to become distressed, demotivated and thereby less productive. This applies whether or not trade unions are present, although their presence tends to precipitate a more robust reaction.

It is, consequently, important for employers to avoid discordant disruptions of internal pay structures. If there are managerial reasons to introduce alterations, it is important that it is done on some sort of basis of rational justification. This is commonly done by means of a 'job evaluation' procedure. Although these come in many types, they generally combine systematic job analysis with some degree of employee involvement in establishing acceptable relative pay levels. Job evaluation generally incorporates a procedure to review alterations to job content so as to maintain the acceptability of the structure of relative pay under changing circumstances (Quaid, 1993). The maintenance of an acceptable internal pay structure is, in large part, a political exercise. When correctly used, job evaluation provides a means of maintaining and legitimizing a negotiated order. It provides a means for

establishing criteria with which to assess the 'fairness' of relative pay, with implicit conceptions of fairness that are specific to the individual firm or bargaining unit.

What makes the management of an internal pay structure so demanding is that external changes, in technological, organizational and in market circumstances, alter relative power relationships within the workforce. This, in turn, affects employees' relative pay aspirations and their conceptions of fairness (Brown and Sisson 1975). In brief, it is not simply that a stable internal pay structure is a precondition for a well-motivated workforce from management's point of view, although that is a useful starting point. The particularly demanding management skill is achieving an acceptable level of stability when changing circumstances alter what is acceptable.

The danger that mismanaged pay will demotivate a workforce is all the greater when the payment system has some sort of performance related component. Payment by results and performance related pay systems are notoriously fickle and often short-lived. They are difficult to monitor, often have dysfunctional side-effects, and can generate demotivating pay anomalies. There has been an increase in the use of performance related pay schemes in recent years, partly following declining trade union influence. Their success depends on the extent to which the main desired aspects of performance can be both measured and linked to pay in a way that the worker perceives to be fair. This is often very difficult in practice. But whether at the level of the individual worker or of the enterprise, incentive pay schemes usually remain a relatively minor, if highly sensitive, part of a wider motivational package.

Important in understanding this paradoxically minor role that incentive payment schemes play in eliciting productivity is the fact that the main vehicle of long-term, sustained productivity growth is technological change. The introduction of an incentive scheme

may achieve a step improvement in labour productivity. If it is successful it may even sustain productivity at that higher level for some time, but it cannot on its own continue to raise it. It is technological change that has brought the sustained and continuing improvements in labour productivity that we have witnessed in industrial societies over the past hundred or more years. Much (perhaps most) technological innovation affects labour productivity in an almost stealthy way through small improvements in materials, controls, organisation, and so on. This changes jobs piecemeal, incrementally and irregularly. Managers tend to cope with this by manipulating grading structures pragmatically, with fresh job grades being created and old ones being suppressed with the passage of time.

Furthermore, this varied and elusive character of technological innovation means that there may be little association between the actual productivity improvement achieved and the worker's perception of the increased difficulty and stress, if any, associated with it. The pay rises that accompany technologically driven innovation in practice owe much more to the scale of social and psychological disruption that the innovation has caused the workers involved, and to the consequent need to buy their consent. Consequently the size of ostensibly productivity related pay increases typically bears little relationship to any actual improvement in the productivity of the workers involved (Brown and Nolan 1988).

In summary, pay plays a complex part in the productive use of labour and if not managed astutely can be a powerful demotivator. This is true whether or not workforces are organized in trade unions. The presence of unions does, however, have a very distinctive impact on the management of pay. Whether or not workers are unionized may not influence their sense of grievance when a sensitive pay differential is adversely and perversely altered, but it does affect their ability to take action over it.

Managements deal with trade union action through collective bargaining, to which we now turn.

6. The Restructuring of Collective Bargaining

‘Collective bargaining’ is the term used when employers deal directly with the trade unions representing their employees in order to regulate the conduct and terms of their work. The Webbs originally conceived of collective bargaining as an essentially economic activity in which workers substitute a group negotiation over wages for individual bargains. Flanders (1975) argued that it was best seen as a political rather than an economic process, observing that the conclusion of a collective agreement does not bind anyone to buy or sell any labour. It sets out the terms and conditions that will prevail if and when labour is engaged. He considered a more appropriate term for collective bargaining to be the joint regulation of work. Pay rates are only a part of the resulting web of rules, which usually also covers issues such as job descriptions, hours of work, and often, explicitly or by implication, working practices, disciplinary standards and effort levels. Collective bargaining is thus concerned with the joint governance not only of pay but also, to a greater or lesser degree, of many other important determinants of labour productivity.

In Britain collective bargaining had, until the 1980s, enjoyed official support, with successive governments throughout the century upholding at least the principle of extending its coverage. Just what proportion of the workforce was covered by a collective agreement at any time has been less clear, with survey data only becoming available in the 1960s. Until the 1980s the percentage coverage of collective agreements was substantially greater than the percentage coverage of trade union membership, but this gap has narrowed substantially since the 1980s and, in aggregate terms, had vanished by 1998. The first row of Table 1 provides data,

some based on estimates, of collective bargaining coverage of employees in Great Britain since 1960. These overstate bargaining coverage for the whole workforce because they relate to establishments of 25 or more employees, and smaller establishments have become increasingly less likely to be covered by any collective agreement. It will be evident that coverage declined dramatically after about 1980.

What structure underlies this collective bargaining coverage? A fundamental strategic issue for any employer intending to establish agreements with trade unions concerns the choice of bargaining unit, by which is meant the categories of employees that are to be covered by a particular collective agreement. This has far-reaching managerial and economic implications because of the substantial standardization of wage rates and conditions of employment that is implied across all those employees included in a single bargaining unit.

The most critical question facing employers is whether they should bargain as a united group, with an industry-wide agreement, or whether they should bargain independently, concluding agreements that are exclusive to some or all of their own employees. The attraction of industry-wide bargaining arrangements comes from their potential to encompass whole product markets at regional or national level. From the early days of collective bargaining both unions and employers have appreciated the chance this offers to pass on some of the cost of wage rises in price rises, traditionally referred to as 'taking wages out of competition'. For unions, industry-wide bargaining has the attraction of establishing the notion of the 'rate for the job' and of encouraging the identification of their members with their wider occupational and labour market collective interests beyond the individual firm. It avoids some of the vulnerability of a workforce that bargains with its firm in isolation. For employers, besides the

protection against being picked off by unions separately, there are additional benefits that have strong productivity implications. These are, first, that industry-wide agreements tend to reduce the influence of the union within the workplace and thus limit union impact upon detailed job control. Second, industry-wide agreements, with their accompanying standardization of job descriptions, make easier the industry-wide management of training which helps deal with the problem of 'free-riding' employers who do not train.

Until the 1960s there were few open challenges to this argument in the British private sector. Although there were some exceptions of companies that had their own 'single-employer' agreements, the overwhelming majority of employees were covered by industry-wide ('multi-employer') agreements. Elsewhere in Europe such agreements were to prove their resilience for many years to come, but in Britain post-war full employment was already placing them under excessive strain. At workplace level across much of the private sector there was a growing if covert challenge reflected in the 'wage drift' of earnings away from the rates decreed by increasingly unrealistic industry-wide agreements. Informal workplace bargaining was tending to sap management control over work. In 1968 the Royal Commission under Lord Donovan, having pointed out the weakness of some of the larger industry-wide agreements, argued that for many employers the best solution would be to break away into single-employer, or what is now commonly called 'enterprise', bargaining.

This provided official blessing to an emerging trend that came to dominate British collective bargaining. It is summarised with public and private sectors combined in the second and third rows of Table 1. In the 1960s there was still a strong majority of employees who relied upon multi-employer (industry-wide) agreements. By the end of the 1990s this had been reversed. Not only had coverage fallen substantially, but only about a third of

that coverage came from multi-employer agreements. In the public sector, because of centralised funding, multi-employer arrangements have continued to be important. But in the private sector the shift from multi-employer agreements was particularly marked; by 1998, the coverage of such agreements was one fifth that of enterprise bargaining.

Why should there have been so widespread a move to enterprise bargaining when the arguments for industry-wide agreements once seemed so strong? Employer solidarity has always had shallower roots in Britain than in most other European countries. Britain has generally had weaker wage agreements and training arrangements and has had none of the employer association sanctions and strike insurance schemes that are often to be found elsewhere. In any case, both the advantages and the feasibility of an agreement constrained by national frontiers diminish when international trade brings international product markets. For an ever-increasing range of private sector goods and services, wages can no longer be ‘taken out of competition’ by an employer organisation based within a single country. Furthermore, the shift of much of the public sector into private ownership, out-sourcing, or decentralised trusts, agencies and the like has broken or weakened the national agreements that once regulated public employment.

The positive reasons for adopting enterprise (‘single-employer’) bargaining come less from any benefits on the wages front than from the potential it offers employers to improve labour’s productivity in the light of their particular business circumstances. It allows employers to cultivate internal labour markets. When much skill acquisition is on-the-job, and when technological change is constant and incremental, there are advantages in having fluid job titles, predictable career trajectories, and stable internal salary structures. Enterprise bargaining fits in with the more individualistic treatment of employees that is associated with the

decline of manual employment and it provides a ready base for enterprise related incentive schemes.

The changing structure within which bargaining is conducted in Britain is, however, the less dramatic feature of Table 1. More remarkably, the last row shows the rapid growth in the proportion of the workforce covered by no collective bargaining at all. If we take account of small workplaces not covered by the Table, it can be estimated that within a thirty year period the proportion of British employees unprotected by collective agreements of any sort rose from about a fifth to over two-thirds. The two developments are, however, linked. Employees working for many smaller employers previously covered by multi-employer agreements have *de facto* moved outside the collective bargaining system with the ending of those agreements, because of the absence of trade union organisation at their place of work. Furthermore, some larger employers have taken the opportunity provided by the move to single-employer bargaining to experiment with non-union, and therefore non-collective bargaining, arrangements when opening new sites (Marginson *et al.* 1993). What more precisely is the nature of this withdrawal from collective bargaining, and what is taking its place?

7. Withdrawal from Collective Bargaining

Until the 1980s it was almost unheard of for employers to withdraw from collective bargaining or, as it is usually termed, to 'derecognize' trade unions. It was common enough for unions to fail to win recruits in a workplace, or to succeed in that but to fail to gain recognition from management for bargaining purposes. And even then the employer not infrequently chose to follow the terms of the relevant multi-employer agreement. But once collective bargaining had become established it was generally felt not to be worth the effort and acrimony involved in unravelling

arrangements and scrapping agreements. In the early 1980s, despite the government's hostility to collective bargaining, acts of derecognition were rare and were generally confined to a narrow range of industries (Claydon 1989). But by the end of the decade it was becoming more widespread, although in many cases negotiating rights were withdrawn not as a deliberate management strategy but through lack of support from employees (Millward *et al.* 1992), and this gathered pace until the prospect of a Labour government in the late 1990s.

More important than derecognition in accounting for the retreat from collective bargaining was the fact that both new and existing employers opening 'green-field' sites became less willing to grant recognition (Millward *et al.* 2000: 103-08). The proportion of young workplaces with 25 or more employees (defined as those less than 10 years old) granting recognition to trade unions more than halved between 1980 and 1998, from six out of every ten to under three. By contrast, recognition rates amongst older workplaces (more than 10 years old) declined less markedly comparing 1998 with 1980 (Machin 2000: 634-35). Amongst large companies, a 1992 survey found that only a minority of those that currently recognised trade unions at some or all of their existing sites had granted unions recognition at new sites. Since decisions on union recognition were also reported to be highly centralised within the large companies concerned this implies a distinct shift in employer policy (Marginson *et al.* 1993).

Even those employers still recognising trade unions for collective bargaining have seen a change in recognition in the form of a diminution of trade union influence and a consequent narrowing of the collective bargaining agenda. For a start, the association between recognition and trade union membership diminished. The density of trade union membership in workplaces with recognised unions fell from 78 per cent in 1980 to 56 per cent in 1998. Furthermore, within workplaces where unions were recognised for

at least a part of the workforce, the proportion of workers covered by collective bargaining declined; from 86 per cent in 1984 to 67 per cent in 1998 (Millward *et al.* 2000). But more important was the fact that the nature of recognition changed. The scope of bargaining - the range of issues affected by bargaining - diminished. By the late-1990s many workplaces with trade union recognition had ceased to have formal negotiations over pay, relying instead upon consultation with unions over the minor details of pay settlements within strict budgetary limits (Brown *et al.* 1998).

The diminishing scope of recognition is even greater if we look at non-pay issues. WIRS surveyors concluded that 'when we were able to compare the scope of bargaining between one survey and another the indications were that its scope had declined within the unionized sector. Broadly speaking, fewer issues were subject to joint regulation in 1990 than in 1980....' (Millward *et al.* 1992: 353). The 1998 WERS survey corroborates this picture. For example, where trade unions were recognised, the proportion of managers reporting that they negotiated over employee recruitment fell from 43 per cent in 1980 to 3 per cent in 1998 (Brown *et al.* 2000).

The arrival of a government in 1997 that was more sympathetic to trade unions, and the subsequent passing of the 1999 Employment Relations Act, has tended to reverse the trend towards complete withdrawal from collective bargaining, and even encourage 'rerecognition' of unions in many firms. But this reversal appears to be very much on terms laid down by employers, and at the time of the writing it is unlikely to lead to substantial changes in pay fixing arrangements (Oxenbridge *et al.* 2001).

How, then, was pay being fixed in Britain by the late 1990s? Table 2 draws on the 1998 WERS survey to categorise pay fixing arrangements by industrial sectors, showing the proportion of

employees (in workplaces with 10 or more) covered. It is evident that collective bargaining covered 61 per cent of the public sector workforce, but only 24 per cent of the private sector. Multi-employer bargaining arrangements remain of significance only in the public sector (particularly local government, education and health). In the public sector too, statutory pay review bodies are important in determining pay, accounting for over one in five of employees. Where collective bargaining is on a single employer basis, in both the public and the private sectors it is evident that arrangements at higher levels of organisations covering a number of sites are more important, in terms of numbers of employees covered, than arrangements based on individual workplaces. In other words, centralised bargaining within organisations is more prevalent than decentralised site-by-site negotiations.

For 50 per cent of all employees, and 66 per cent of the private sector, management fixed pay unilaterally. In the absence of collective bargaining it appears that relatively more employees are covered by decentralised than centralised pay setting arrangements within organisations. Even so, 30 per cent of all private sector employees have their pay unilaterally set centrally within the organisation (management at a higher level) as compared with 36 per cent whose pay is unilaterally set by management at the workplace. Strikingly, despite the considerable rhetoric and attention devoted to the individualisation of the employment relationship, negotiation of pay with individual employees was a rarity, accounting for less than 5 per cent of employees in the private sector.

The reality for the vast majority of employees who work in the private sector in Britain is that management, not trade unions, now determine their pay. In 1998 only one in five workplaces in the private sector engaged in collective bargaining, whereas four in five had pay set unilaterally by management (Cully *et al.* 1999). No new institutional arrangement has emerged in the place of

collective bargaining through which individual employees can jointly determine their pay with their employer. Personal contracts, in which individual employees negotiate their pay with management, are found in only a small minority of that large proportion of private sector workplaces where there is no collective bargaining (Cully *et al.* 1999). In practice, 'individualisation' means that trade unions are procedurally excluded from fixing pay and conditions, not that employees each receive substantively non-standard, pay and conditions packages (Brown *et al.* 1998). The absence of any structure of employee representation in the great majority of non-union workplaces is reflected in the finding from a survey of the electrical engineering and insurance sectors, that non-union employee representatives were consulted by management when setting pay in just 5 per cent of cases (Cully and Marginson 1995). We now turn to how, in an era of diminished trade union influence, pay setting is managed and controlled.

8. Management control and co-ordination of pay setting arrangements

How are pay setting arrangements managed? There are two main dimensions to this: first, the control of pay within the firm and, second, how pay is positioned in relation to other employers. The question of internal control is especially important in large multi-site, multi-divisional firms. The growing fragmentation of pay setting arrangements in the private sector since 1980 has increasingly been offset in multi-site organisations by substantial co-ordination or control of local pay determination by management at corporate and divisional offices. A study of large companies operating in the UK in 1992 found that half conducted pay negotiations at site level in at least part of the enterprise. Yet two-thirds of these reported that higher, corporate management were involved in local level negotiations, either directly participating or,

more commonly, by establishing parameters within which local managers had to negotiate (Marginson *et al.* 1993).

Even where local management within large organisations appears to enjoy autonomy over pay setting, it usually has to operate within a corporate framework of budgetary control. The same survey of large UK companies found that the corporate finance function was extensively involved in setting and negotiating the payroll budgets that shape pay settlements. Moreover, when asked about the assumptions on pay, productivity and employment on which payroll budgets are based, corporate finance managers in over one-half of these large companies were able to give precise estimates of the assumptions employed (Marginson *et al.* 1993). Local managers engaged in decentralised pay setting probably have discretion over the trade-off between pay, productivity and headcount within their part of the business, but the budgetary constraints of the trade-off are either set by or negotiated with corporate headquarters.

Controlling pay within the firm is one matter; positioning pay levels and pay increases competitively with regard to other firms is quite another, especially in the absence of the sectoral agreements which once provided at least a common reference point for pay. An initial expectation would be one of greatly increased diversity in pay and in pay settlement levels, since the rationale of decentralised pay setting at enterprise level is to tie pay more closely the particular business requirements. To some extent this appears to have been fulfilled. A study of pay settlements that the CBI monitored over the period 1980 to 1994 suggested that dispersion did increase after 1990. But annual settlements remained the norm, and the use, and apparent impact, of comparisons with other firms remained significant and strong in the 1990s, although now driven less by union pressures than by employer 'bench-marking' (Ingram *et al.* 1999).

Another study compared two sectors where multi-employer bargaining arrangements have ceased to operate (engineering and retail distribution) with two sectors where national agreements over pay remain in force (printing and the health service), finding there to be still a recognizable annual pay round and no significant difference in variation in average pay between, for example engineering and printing (Arrowsmith and Sisson 1999). In other words, a sector effect on pay setting lived on in the sectors that had abolished national bargaining arrangements. In part this 'convoy' effect arises from the similar nature of product markets, labour requirements and technology within sectors. But it also reflected the durability of established ways of doing things; the shadow of the respective national agreements was clearly evident in the payments systems and job structures found amongst firms in the engineering and retail sectors.

Information on other employers' pay levels and movements becomes particularly important in a context of decentralised pay setting in providing an alternative set of benchmarks for management (Arrowsmith and Sisson 1999). In a survey of pay determination arrangements in electrical engineering and insurance, Cully and Marginson (1995) found that four out of every five workplaces used information on other employers' levels of pay. The most common means were national salary surveys, employers' association reports and other industry-specific salary surveys. A majority of workplaces also participated in local salary surveys. Beyond such surveys firms also participate in industry and local networks, and in informal discussion with other companies. Decentralised pay setting appears to have encouraged these information and networking arrangements.

9. Pay determination in the face of growing European economic integration

Given increasingly international product markets, and given the transnational character of the operations of many large companies in Britain, are employers beginning to set their pay levels by reference to what employers in other countries are doing? Within the European Economic Area, are there signs that economic integration is stimulating particular European practices such as cross-border pay comparisons and pay structures? Are trade unions driving forward developments as well as management?

Pay determination arrangements are almost universally single-employer based, either at company or site level, in the sectors where competition is most clearly international in scope and production is increasingly integrated across borders, such as chemicals, engineering, food manufacturing and banking and financial services. Amongst the multinational companies (MNCs) which dominate these sectors, the collection of data on labour-related aspects of performance, including pay, productivity and labour costs, by MNCs' international corporate or business headquarters is widespread. This is particularly the case for MNCs with integrated production systems or which network services across borders, and where personnel managers from operations in different countries are in frequent contact and regularly meet together (Marginson *et al.* 1995). Such data are deployed by international management in the form of inter-plant comparisons to exert pressure on local management and workforces to deliver performance- and flexibility-enhancing measures in local negotiations. This arises in a European, and sometimes global, context where sites are competing for production mandates and future investment from the MNC. However, such inter-plant comparisons appear to be primarily brought to bear in bargaining

over working practices and working time arrangements, and much less so on pay as such (Coller 1996; Mueller and Purcell 1992).

Such international benchmarking of employee performance appears to be reasonably common in the engineering sector, but unusual in printing and rare in retail (Arrowsmith and Sisson 2001). The latter two sectors are much less exposed to international competition than the first. In engineering, although international comparisons of pay were more widespread, they had relatively little influence on pay settlements amongst companies in the sector. Of considerably greater significance was the use by companies of international comparisons of overall labour costs. Arrowsmith and Sisson (2001) conclude that British employers appear to be engaged in two processes in managing pay in an international context. First, pay settlements (and employee expectations) themselves continue to be shaped by local and national considerations. Second, labour costs are then aligned with international benchmarks through parallel adjustments both to the numbers employed and to changes in working practices and working time arrangements, sometimes negotiated and other times not.

An earlier study of British-based multinationals found that many were using common job evaluation systems for white-collar and managerial employees across Europe, indicating that there may be advantages in harmonising career and control structures within a company. But this is a quite separate matter from that of harmonising pay levels. The multinationals surveyed were acutely aware that differences in pension arrangements, taxation and social security represented a substantial impediment to any such harmonisation, differences that remain even after economic and monetary union (Walsh *et al.* 1995). Firms were generally hostile to the idea of European co-ordination of pay bargaining across

their companies, partly because of the risk of comparability claims from trade unions. Five years later, managers interviewed in nine multinational companies operating in the UK largely echoed these views and concerns (Sisson *et al.* 1999). Intensified use of cross-border comparisons in negotiations over working practices and working time were anticipated by managers, especially in the automotive sector, but movement towards common rates of pay in different European countries was seen to remain a 'distant prospect' for most types of employee. The exceptions were said to be managers themselves and some groups of technical staff.

Trade unions for their part are deploying cross-border comparisons of working time and working practices in company and site negotiations amongst some of the more internationally integrated multinational companies. For example, this was evident in UK claims in the late 1990s for reduced working time at the major automotive manufacturers, where explicit comparisons were drawn with practice at company plants in other European countries (Sisson *et al.* 1999). However, as on the management side, the use of international comparisons does not appear to have extended to negotiations over pay. British trade unions are involved in developing bargaining co-operation and the exchange of bargaining data and relevant information with their counterparts in other European countries (Sisson *et al.* 1999). But the UK is unlikely to be at the forefront of sustained moves by Europe's trade unions to develop a cross-border dimension to pay bargaining across the European Economic Area. This is for two reasons. First, the UK remains outside the single currency, and national and local settlements are therefore unlikely to be particularly influenced by the greater wage transparency that the introduction of the Euro is bringing about. Second, is the difference between the sector-based, multi-employer bargaining structures which still prevail in most other EEA countries and the single-employer pay determination arrangements that now predominate in the UK. For trade unions,

the meshing of these two types of structure that the development of a European dimension to pay bargaining must entail represents a substantial future challenge.

10. Collective Bargaining and Wage Inequalities

We now return to the issue of income distribution with which we started. What have been the consequences of diminishing trade union influence over pay? The contraction of collective bargaining in Britain has been accompanied by a marked growth in wage inequalities, reversing moves towards greater equality in the distribution of earnings that characterized the post-War period up to the late 1970s. Wage inequality rose dramatically in the 1980s with the result that by the end of the decade the gap in earnings between the highest and lowest paid male workers was greater than it had been over a century ago (Machin 1996; Johnson 1996). A growth in the spread of earnings has occurred at both the bottom and top of the wages distribution. Consequently, while those employees at the bottom decile of the earnings distribution have received relatively modest rises in real wages, those in the top decile have experienced dramatic increases in the level of their real earnings. The Low Pay Commission, for instance, estimated that real hourly wages for those employees in the bottom decile of the wages distribution had risen by 20 per cent since 1978 compared with 66 per cent for those in the top decile (LPC 1998:189).

If unearned incomes are taken into account, including, for example, income from share options received in payment, the picture becomes even starker. The top 1 per cent of income recipients saw their share of total income in the UK, which had been falling steadily since the 1910s, double from about five per cent to about ten per cent between 1980 and 1998 (Atkinson 2001). It is consistent with the view that an important dynamic in the contemporary pay fixing system may be ‘top down’ pay pull whereby the interlocking membership of company directors’ pay

review bodies may be pulling up top salaries through self-serving and self-reinforcing awards (McCarthy 1993).

Many countries experienced growing earnings inequalities in the 1980s and 90s. Apart from Britain and the United States, however, the increase in inequality was quite modest. Indeed, Machin's (1999) analysis of trends in male wage inequality from the late 1970s to the mid 1990s suggests that the dispersion of earnings widened dramatically in Britain and the US, but that the structure of wages in other countries, notably in continental Europe, remained relatively stable. While a variety of factors may underlie rising wage inequalities, the weakening of the collective institutions of pay determination appear to have been crucial in the British context. Wage bargaining serves to compress the structure of earnings for employees both within and across firms, occupations and industries. This is commonly referred to as the 'sword of justice' effect of trade unions (Freeman and Medoff 1984). The tendency of trade unions to encompass lower waged employees within the scope of collective agreements, as well as their efforts to tie pay rates to jobs rather than individual productivity or performance criteria, have typically led to a compression of the wages distribution. Accordingly, a range of studies have indicated that trade unions in Britain have, through collective bargaining, served to 'equalise' earnings (see Metcalf 1982; Stewart 1987; 1991; Ingram 1991; Gosling and Machin 1995). As a result, the earnings of unionised workers have been less dispersed than those of their non-unionised counterparts. Moreover, such effects have been buttressed by legislative mechanisms – such as the Fair Wages Resolution repealed in 1983 - that have extended the terms of collective bargaining agreements to firms not directly involved in such agreements.

This 'equalising' impact of trade unions has been undermined by falling membership and by the withdrawal by employers from collective bargaining. Studies have sought to measure the effect.

Drawing on WIRS data, Gosling and Machin (1995) found a considerable widening of the gap in the spread of earnings across union and non-union plants between 1980 and 1990, estimating that around 15 per cent of the rise in the dispersion of semi-skilled earnings between 1980 and 1990 was attributable to the decline in unionisation (Gosling and Machin 1995). Machin's analysis of the British Household Panel Survey from 1983 and 1991 attributed between 20 and 37 per cent of the rise in wage inequality to falling unionisation (Machin 1997). It also suggested that while wage inequality among individuals rose within both the union and the non-union sector, the spread of earnings increased at a faster rate in the non-union sector. The increase in the relative size of the non-union sector over this period appears therefore to have been an important determinant of the overall rise in wage inequality.

Such findings are consistent with the international evidence. In the context of the United States, Card (1991) and Freeman (1993) found that declining unionisation accounted for approximately one fifth of the rise in male wage inequality between the 1970s and 1980s. For Australia, Borland (1996) found that the decrease in union density over the period 1986 to 1994 explained approximately 30 per cent of the increase in the dispersion of male weekly earnings and 15 per cent of the rise in female earnings dispersion. As in Britain, the main cause of the increase in wage inequality was a rise in the spread of earnings for non-union employees.

All this suggests that the weakening of trade unions has had a substantial effect on the distribution of earnings. If we now turn to the bargaining structures within which trade unions operate, it appears that the decentralisation of wage determination has served to widen wage differentials. Rowthorn (1992) compared labour market performance in seventeen OECD countries between 1973 and 1985 and concluded that countries with highly decentralised wage-setting arrangements have generally been associated with

high earnings dispersion. Such findings are reinforced by Blau and Kahn's (1996) analysis of international trends in male wage inequality. In accounting for the higher level of earnings dispersion in the US compared to other OECD countries, they emphasise the role of institutional forces, including the coverage of collective bargaining, union pay policies and government labour market policies, in determining international differences in wage inequality. The decline of collective bargaining and of trade unions has had profound consequences for the structure of pay and the depth of wage inequality.

11. Conclusion

In this chapter we have described the demise of the system of multi-employer bargaining over pay in Britain, a structure of pay setting which continues to prevail in many other west European countries, and its replacement by company-based systems for determining pay. We have also shown how, in a growing proportion of these company-based arrangements, pay is not determined through collective bargaining with trade unions but unilaterally by management. The influence of collective bargaining on pay has diminished considerably.

Explanations of pay rooted in the efficient workings of the labour market, which tend to dominate accounts in economics texts, have been shown to be partial and incomplete. It was argued that the factors determining the level at which employers set their pay awards, and whether in large organisations pay is determined at the level of the wider group or individual site, are closely connected to management's competitive strategy in the product market. Accordingly, any future 'Europeanisation' of pay setting is likely to arise from the further integration of product markets that economic and monetary union brings, and not through the imminent creation of a European labour market.

Changes in the structure and coverage of collective bargaining, and declining trade union influence in wage setting, have permitted a marked increase in wage inequality in Britain since 1980. Statutory measures to support union recognition for collective bargaining, and the introduction of the National Minimum Wage, constitute important changes to the institutional landscape of pay determination in Britain. Whether their longer-term effects will serve to reverse the rise in wage inequality remains an open question.

TABLES

Table 1 - Employees covered by collective bargaining for pay fixing and principal level of pay bargaining: GB establishments of 25 or more employees, 1960-1998

| | 1960 | 1970 | 1980 | 1984 | 1990 | 1998 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| collective bargaining | <i>80%</i> | <i>80%</i> | <i>75%</i> | <i>70%</i> | <i>54%</i> | <i>40%</i> |
| <i>of which</i> | | | | | | |
| industry level (multi-employer) | <i>60%</i> | <i>50%</i> | <i>43%</i> | <i>37%</i> | <i>31%</i> | <i>14%</i> |
| enterprise level (single-employer) | <i>20%</i> | <i>30%</i> | <i>32%</i> | <i>33%</i> | <i>23%</i> | <i>26%</i> |
| no collective bargaining | <i>20%</i> | <i>20%</i> | <i>25%</i> | <i>30%</i> | <i>46%</i> | <i>60%</i> |

Public and private sectors; estimates in italics.

Sources : Beatson, 1993; Millward et al., 1992; Milner, 1995; Millward et al. 2000; Brown et al., 2000

Table 2 - Coverage of different pay fixing arrangements, overall and by sector and industry (*per cent of employees*)

| <i>Industry group</i> | <i>Collective bargaining more than one employer</i> | <i>Collective bargaining higher in organisation</i> | <i>Collective bargaining at workplace</i> | <i>Set by management higher in organisation</i> | <i>Set by management at workplace</i> | <i>Negotiated with individual employees</i> | <i>Other (eg. pay review bodies)</i> | <i>% of total employees by industry</i> |
|---------------------------|---|---|---|---|---------------------------------------|---|--------------------------------------|---|
| All employees | 15 | 13 | 7 | 24 | 26 | 3 | 10 | 100 |
| Public sector | 40 | 17 | 4 | 12 | 3 | 0 | 22 | 31 |
| Private sector | 4 | 12 | 8 | 30 | 36 | 4 | 5 | 69 |
| Manufacturing | 5 | 13 | 18 | 16 | 43 | 2 | 2 | 23 |
| Electricity, gas & water | 9 | 69 | 7 | 7 | 2 | 0 | 2 | 1 |
| Construction | 26 | 5 | 2 | 28 | 20 | 3 | 15 | 3 |
| Wholesale & retail | 6 | 11 | 1 | 48 | 24 | 3 | 3 | 15 |
| Hotels & restaurants | 6 | 2 | 1 | 46 | 31 | 8 | 5 | 4 |
| Transport & communication | 15 | 32 | 8 | 20 | 19 | 2 | 3 | 6 |
| Financial services | 2 | 32 | 4 | 28 | 27 | 1 | 15 | 4 |
| Other business services | 2 | 5 | 1 | 30 | 45 | 7 | 8 | 10 |
| Public administration | 36 | 28 | 2 | 12 | 1 | 1 | 17 | 8 |
| Education | 36 | 7 | 3 | 14 | 11 | 1 | 28 | 10 |
| Health | 28 | 11 | 6 | 17 | 15 | 1 | 20 | 14 |
| Other services | 19 | 6 | 6 | 30 | 27 | 2 | 8 | 3 |

Notes: Data weighted, based to population of Great Britain, workplaces with 10 or more employees. The first seven rows do not add up to 100 per cent due to rounding errors.

Source: Brown *et al.*, 2000, from WERS98

References

- Abowd, J., Kramarz, F. and Margolis, D. 1999: High Wage Workers and High Wage Firms *Econometrica* 67, 2, 251-333.
- Akerlof, G. 1984: Gift Exchange and Efficiency Wage Theory: Four Views, *American Economic Review* (Papers and Proceedings), 74, 2, 79-83.
- Akerlof, G. and Yellen, J. 1986: *Efficiency Wage Models of the Labor Market*, Cambridge: Cambridge University Press.
- Arrowsmith, J. and Sisson K. 1999: Pay and Working Time: Towards Organisation-based Employment Systems? *British Journal of Industrial Relations* 37, 1: 57-75.
- Arrowsmith, J. and Sisson K. 2001: International Competition and Pay, Working Time and Employment: Exploring the Process of Adjustment, *Industrial Relations Journal* 32, 2: 136-53.
- Atkinson, A. B. 2001: Top Incomes in the United Kingdom over the Twentieth Century, mimeo., Nuffield College, Oxford.
- Beatson, M. 1993: Trends in Pay Flexibility, *Employment Gazette*, September, 405-28.
- Blanchflower, D., Oswald, A. and Garrett, M. 1990: Insider Power in Wage Determination, *Economica*, 57, 2, 143-70.
- Blau, F.D. and Kahn, L.M. 1996: International Differences in Male Wage Inequality: Institutions versus Market Forces, *Journal of Political Economy*, 104, 4, 791-837.

- Borland, J. 1996: Union Effects on Earnings Dispersion in Australia, 1986-1994, *British Journal of Industrial Relations*, 34, 2, June, 237-48.
- Brown, W. 1973: *Piecework Bargaining*, London: Heinemann.
- Brown, W. and Sisson, K. F. 1975: The Use of Comparisons in Workplace Wage Determination, *British Journal of Industrial Relations*, 13, 1, 23-53.
- Brown, W., Hayles, J., Hughes, B. and Rowe, L. 1980: Occupational Pay Structures Under Different Wage Fixing Arrangements: A Comparison of Intra-occupational Pay Dispersion in Australia, Great Britain and the United States, *British Journal of Industrial Relations*, 18, 2, 217-30.
- Brown, W., Hayles, J., Hughes, B. and Rowe, L. 1984: Product and Labour Markets in Wage Determination: Some Australian Evidence, *British Journal of Industrial Relations*, 22, 2, 169-76.
- Brown, W. and Nolan, P. 1988: Wages and Labour Productivity: The Contribution of Industrial Relations Research to the Understanding of Pay Determination, *British Journal of Industrial Relations*, 26, 3, 339-61.
- Brown, W., Deakin, S., Hudson, M., Pratten, C., Ryan, P. 1998: *The Individualisation of the Employment Contract in Britain*, Research Report No 5, London: DTI.
- Brown, W., Deakin, S., Nash, D., Oxenbridge, S. 2000: The Employment Contract: From Collective Procedures to Individual Rights, *British Journal of Industrial Relations*, 38, 4, 611-629.

- Card, D. 1991: *The Effect of Unions on the Distribution of Wages: Redistribution or Relabelling?*, Princeton University Industrial Relations Section Discussion Paper 287.
- Card, D. and Krueger, A. 1995: *Myth and Measurement: the New Economics of the Minimum Wage*, Princeton: Princeton University Press.
- Carruth, A. and Oswald, A. 1989: *Pay Determination and Industrial Prosperity*, Oxford: Oxford University Press.
- Clark, K. B. 1980: The Impact of Unionization on Productivity, *Industrial and Labor Relations Review*, 33, 4, 451-69.
- Clay, H. 1929: *The Problem of Industrial Relations and Other Lectures*, London: Macmillan.
- Claydon, T. 1989: Union Derecognition in Britain in the 1980s, *British Journal of Industrial Relations*, 27, 2, 214-24.
- Coller, X. 1996: Managing Flexibility in the Food Industry: a Cross-National Comparative Case Study in European Multinational Companies, *European Journal of Industrial Relations* Vol 2, No 2, 153-172.
- Cully, M. and Marginson, P. 1995: Pay Determination in Unionised, Contractual and Unilateral Workplaces, Report prepared for the Employment Department.
- Cully, M., Woodland, S., O'Reilly, A., and Dix, G. 1999: *Britain at Work*, London: Routledge.
- Doeringer, P. B. and Piore, M. J. 1971: *Internal Labor Markets and Manpower Analysis*, Boston: Lexington.

- Flanders, A. 1975: *Management and Unions: The Theory and Reform of Industrial Relations*, London: Faber.
- Freeman, R. 1989: *Labour Markets in Action*, New York: Harvester Wheatsheaf.
- Freeman, R. 1993: How Much has Deunionization Contributed to the Rise in Male Earnings Inequality, in S. Danziger and P. Gottschalk (eds) *Uneven Tides: Rising Inequality in America*, New York, Russell Sage Foundation.
- Freeman, R. and Medoff, J. 1984: *What Do Unions Do?* New York: Basic Books.
- Forth, J. and Millward, N. 2001: The Impact of Unions on Pay Levels in Lower Skilled Jobs, *National Institute Economic Review*, April, No 176, 76 – 90.
- Gosling, A. and Machin, S. 1995: Trade Unions and the Dispersion of Earnings in British Establishments 1980-90, *Oxford Bulletin of Economics and Statistics*, 57, 167-84.
- Gregg, P. and Yates, A. 1991: Changes in Trade Union and Wage Setting Arrangements in the 1980s, *British Journal of Industrial Relations*, 29, 3, 361-76.
- Groshen, E. 1991: Five Reasons Why Wages Vary among Employers, *Industrial Relations*, 30, 3, 350-81.
- Hicks, J. 1932: *The Theory of Wages*, London: Macmillan.
- Hodgson, G. 1982: Theoretical and Policy Implications of Variable Productivity, *Cambridge Journal of Economics*, 6, 3, 213-26.

- Ingram, P. 1991: Ten Years of Manufacturing Wage Settlements: 1979-89, *Oxford Review of Economic Policy*, 7, 1, 93-106.
- Ingram, P., J. Wadsworth, and D. Brown 1999: Free to Choose? Dimensions of Private Sector Wage Determination 1979-1994, *British Journal of Industrial Relations*, 37:1, 33-49.
- Johnson, P. 1996: The Assessment: Inequality, *Oxford Review of Economic Policy*, 12, 1, 1-14.
- Lester, R. A. 1952: A Range Theory of Wage Differentials, *Industrial and Labor Relations Review*, 5, 4, 483-500.
- Levinson, H. M. 1966: *Determining Forces in Collective Wage Bargaining*, New York: Wiley.
- Lindbeck, A. and Snower, D. 1986: Wage Setting, Unemployment and Insider-Outsider Relations, *American Economic Review*, 76, 2, 235-9.
- Low Pay Commission 1998: *The National Minimum Wage: First Report of the Low Pay Commission*, Cmnd. 3276, London: HMSO.
- McCarthy, W. E. J. 1993: From Donovan Till Now: Or Twenty-five Years of Incomes Policy, *Employee Relations*, 15, 6, 3-20.
- Mackay, D., Boddy, D., Brack, J., Diack, J. and Jones, N. 1971: *Labour Markets Under Different Employment Conditions*, London: Allen & Unwin.
- Machin, S. 1996: Wage Inequality in the UK, *Oxford Review of Economic Policy*, 7, 49-62.

- Machin, S. 1997: The Decline of Labour Market Institutions and the Rise in Wage Inequality in Britain, *European Economic Review*, 41, 647-57.
- Machin, S. 1999: Wage Inequality in the 1970s, 1980s and 1990s, In P. Gregg and J. Wadsworth (eds) *The State of Working Britain*, Manchester: Manchester University Press.
- Machin, S. 2000: Union Decline in Britain, *British Journal of Industrial Relations* 38, 4, 631-45.
- Marginson, P. 1984: The Distinctive Effects of Plant and Company Size on Workplace Industrial Relations, *British Journal of Industrial Relations*, 22, 1, 1-14.
- Marginson, P., Armstrong, P., Edwards, P., Purcell, J. and Hubbard, N. 1993: The Control of Industrial Relations in Large Companies: An Initial Analysis of the Second Company Level Industrial Relations Survey, Warwick Papers in Industrial Relations, 45. IRRU, University of Warwick.
- Marginson, P., Armstrong, P., Edwards P. and Purcell J. 1995: Extending Beyond Borders: Multinational Companies and the International Management of Labour, *International Journal of Human Resource Management* Vol 6, No 3, pp702-19.
- Marginson, P. and Sisson, K. 1998: European Collective Bargaining: a Virtual Prospect?, *Journal of Common Market Studies* Vol 36, 4, 505-28.
- Metcalf, D. 1982: Unions and the Distribution of Earnings, *British Journal of Industrial Relations*, 20, 163-69.

- Millward, N., Stevens, M., Smart, D. and Hawes, W. R. 1992: *Workplace Industrial Relations in Transition*, Aldershot: Dartmouth.
- Millward, N., Bryson, A., and Forth, J. 2000: *All Change at Work?*, London: Routledge.
- Milner, S., 1995: The Coverage of Collective Pay setting Institutions in Britain 1895-1990, *British Journal of Industrial Relations*, 33, 69-92.
- Mueller, F. and Purcell, J. 1992: The Europeanisation of Manufacturing and the Decentralisation of Bargaining, *International Journal of Human Resource Management* Vol 3, No 1, pp15-24.
- Nolan, P. and Brown, W. 1983: Competition and Workplace Wage Determination, *Oxford Bulletin of Economics and Statistics*, 45, 3, 269-87.
- OECD 1993: *Employment Outlook*, Paris.
- Oxenbridge, S., Brown, W., Deakin, S., and Pratten, C 2001: *Collective Representation and the Impact of Law*, British Universities Industrial Relations Association conference paper.
- Ozanne, R. 1968: *Wages in Practice and Theory*, Madison: University of Wisconsin Press.
- Phelps Brown, E. H. and Hopkins, S. V. 1981: *A Perspective of Wages and Prices*, London: Methuen.
- Quaid, M. 1993: *Job Evaluation: The Myth of Equitable Assessment*, Toronto: University of Toronto Press.

- Ramaswamy, R. and Rowthorn, R. 1991: Efficiency Wages and Wage Dispersion, *Economica*, 58, 4, 501-14.
- Rowthorn, B. 1992: Corporatism and Labour Market Performance, in J. Pekkarinen, M. Pohjola and B. Rowthorn (eds) *Social Corporatism: A Superior Economic System?*, Oxford University Press, Oxford.
- Rubery, J. 1997: Wages and the Labour Market, *British Journal of Industrial Relations*, 35:3, 337-362.
- Sisson, K., Marginson, P., Arrowsmith, J. Edwards T. and Newell, H. 1999: The Industrial Relations Impact of Economic and Monetary Union in the UK, Report prepared for the European Foundation for the Improvement of Living and Working Conditions, December.
- Slichter, S. 1950: Notes on the Structure of Wages, *Review of Economics and Statistics*, 32, 1, 80-91.
- Stewart, M. 1987: Collective Bargaining Arrangements, Closed Shops and Relative Pay, *Economic Journal*, 97, 140-56.
- Stewart, M. 1990: Union Wage Differentials, Product Market Influences and the Division of Rents, *Economic Journal*, 100, 4, 1122-37.
- Stewart, M. 1991: Union Wage Differentials in the Face of Changes in the Economic and Legal Environment, *Economica*, 58, 155-72.
- Stewart, M. 2001: Estimation of the Individual-level Employment Effects of the Introduction of the National Minimum Wage, Final Report to the Low Pay Commission, April.

Thomson, A. and Sanjines, C. 1990: Earnings by Size of Company and Establishment, in M. Gregory and A. Thomson (eds), *A Portrait of Pay, 1970-82*, Oxford: Clarendon Press.

Walsh, J., Zappala, G. and Brown, W. 1995: European Integration and the Pay Policies of British Multinationals, *Industrial Relations Journal* Vol 26, No 2, 84-96.

Weiss, A. and Landau, S.J. 1984: Wages, Hiring Standards and Firm Size, *Journal of Labor Economics*, 2, 4, 477-500.