

**PSI RESEARCH DISCUSSION PAPER 8**

**Union Effects on Workplace Governance  
1983–1998**

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Please note: An Appendix of tables to accompany this text is available on  
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## Abstract

This paper addresses the question: what impact do trade unions have on workplace governance, and how has this changed during two decades of union decline? Using nationally representative data on employees in the British Social Attitudes Surveys (BSAS) 1983–1998, we assess associations between measures of unionisation and employee perceptions of three aspects of workplace governance: the employee relations climate; managers' treatment of employees and unions; and managerial performance. The paper provides broad support for the three hypotheses explored in the paper. First, employees' perceptions of workplace governance are better where there is a balance of power between unions and management at the workplace. Secondly, employees' perceptions of workplace governance are better where management supports union membership, and are poorest where they actively discourage membership. Thirdly, employees' perceptions of union effectiveness are positively associated with employees' perceptions of good workplace governance.

A further hypothesis, namely that perceptions of governance will have deteriorated since the 1980s in unionised workplaces due to the weaker position of unions in the workplace, and to declining support for unions among employers, was not supported. Perceptions of workplace governance had deteriorated since the 1980s. However, these trends were apparent among employees in unionised and non-unionised workplaces. There was no evidence to suggest that the trend was associated with a diminution in union power, managers' changing attitudes to unions, or the perceived effectiveness of unions.



# 1. INTRODUCTION

This paper addresses the question: what impact do trade unions have on workplace governance, and how has this changed during two decades of union decline? Using nationally representative data on employees in the British Social Attitudes Surveys (BSAS) 1983–1998, we assess associations between measures of unionisation and employee perceptions of three aspects of workplace governance:

- the relationship between management and employees at their workplace, which we shall refer to as ‘the employee relations climate’;
- management’s treatment of employees and unions; and
- managerial performance.

The motivation for the paper is twofold. Until recently, most analyses of attitudes towards workplace governance in Britain were based on data about workplaces gathered primarily from managerial respondents, such as the long-running series of Workplace Industrial Relations Surveys (WIRS) (Ferne, Metcalf and Woodland, 1994; Fernie and Metcalf, 1995; Wood and de Menezes, 1998; Moreton, 1999). This began to change in the late 1990s, with analyses of BSAS (Bryson and McKay, 1997) and the Workplace Employee Relations Survey 1998 (WERS98) (Cully *et al.*, 1999; Scholarios *et al.*, 1999; Bryson and Wilkinson, 2001). Analyses of WERS98 emphasise the importance of adding to the body of knowledge about employees’ perceptions by showing that there is substantial discordance between the perceptions of managerial respondents and those of other employees, with the former proving more positive in their outlook (Cully *et al.*, 1999; Bryson and Wilkinson, 2001). The analyses presented in this paper extend earlier research on employee perceptions by exploring union effects on a wider range of governance measures, and by assessing the impact of unions over time.

The second motivation for the paper is to provide a context in which to appraise the impact of the statutory procedure for union recognition contained

in the Employment Relations Act, which has been in effect since 6 June 2000. In its White Paper, the government argued that effective unions are conducive to good employee relations. Moreover, it claimed that harmonious employee relations based on partnership between workers and their employer improve both the working lives of individuals and the performance of organisations. However, it also argued that these benefits may be jeopardised if, against the wishes of their employees, employers refuse to recognise a union for pay bargaining and worker representation. Accordingly, the legislation compels employers to recognise trade unions where a majority of employees so wish.<sup>1</sup> Our data pre-date the legislation, when employers were at liberty to decide whether or not to recognise unions, so it is not possible to infer directly from our results whether the new statutory provisions will improve workplace governance.<sup>2</sup> Even if we were to find that the presence of recognised trade unions was associated with good employee relations, we would have to acknowledge that forcing employers to recognise a union against their wishes could well sour employee relations rather than improve them. Indeed, some critics of the new legislation have pointed to the failure of previous statutory arrangements for union recognition introduced in the early 1970s, suggesting that it demonstrated that compelling employers to deal with trades unions will be damaging to the conduct of employee relations (Confederation of British Industry, 1998). However, our analysis can shed light on two issues that are fundamental to any consideration of the links between unions and workplace governance, irrespective of the statutory environment. The first is whether the presence of recognised unions has a beneficial effect on governance and, if so, under what circumstances. As discussed below, evidence has emerged recently that the influence of unions is diminishing even where, at least nominally, they continue to be granted recognition rights. There are theoretical grounds for suspecting that this development will adversely affect workplace relations. The second issue we can illuminate is whether the impact of unions depends on how management reacts to them. We contend that good employee relations can only be fashioned with the support of management and workers: it is not simply a gift to be bestowed by one side or the other, no matter how willing they may be.

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1 Under the legislation, employers with more than 20 employees are required to recognise unions for bargaining on pay, hours and holidays if a majority of relevant workers demonstrate support for it. To achieve recognition, a union must show in a secret ballot that it has the support of 40 per cent of those working in the bargaining unit, as well as a majority of those voting. Alternatively, the union can demonstrate that more than half of the workers in the unit are union members.

2 For an attempt to do so using historical and international comparative analysis, see Wood and Godard (1999).



The rest of the paper is set out as follows. Section 2 discusses trends in unionisation and employer and employee orientations to unions which might have a bearing on union influence over workplace governance. Section 3 outlines theoretical links between unions and workplace governance and the three hypotheses tested in the paper. In Section 4 we introduce the BSAS data used in our analyses. Section 5 discusses our analytical approach. Results are presented in Section 6, and Section 7 gives conclusions.

## 2. BACKGROUND

The fifteen years covered by our data were a period of continuous decline for trade unions. The unionised sector shrank due to falls in membership and a rapid drop in the number of employers recognising unions for collective bargaining (Millward *et al.*, 2000). These trends are reflected in our BSAS data: the number of employees saying they were currently a union member fell from one-half to one-third between 1983 and 1998 (Appendix Table A1),<sup>3</sup> while the number saying there was a union or staff association recognised for pay bargaining purposes at their workplace fell from two-thirds to one-half (Appendix Table A2).<sup>4</sup> But the issue at the heart of this paper is: what influence do unions have where they retain a foothold in the workplace? We focus on three aspects of unionisation which, according to theories discussed in Section 3, influence both the size and direction of union effects on workplace governance. These are union strength, employee assessments of managerial support for unions, and the effectiveness of unions as perceived by employees.

Unions' influence in the workplace derives from their bargaining power, and stems from their ability to disrupt the supply of labour in pursuance of their members' interests. But it also comes from the union's role as the representative 'voice' of employees in the resolution of workplace grievances and disputes. Both sources of influence depend on the credibility of the union in claiming to represent the workforce. This seems to have diminished since the early 1980s for, even where unions continue to be recognised for bargaining

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3 The table presents membership rates for union membership only, and for membership of unions and staff associations. The union membership figures for 1989 onwards correspond very closely to those obtained using the Labour Force Survey (Hicks, 2000), although there is a small increase in membership between 1990 and 1991 in the BSAS data which is not apparent in the LFS.

4 Throughout the paper we distinguish between staff associations and staff association membership, on the one hand, and unions and union membership on the other, in our analyses of the BSAS98 data. However, in our repeat cross-section analyses, union and staff association measures are combined.

**Table 1:** *Employee perceptions of union power, 1989–1998*

	1989	1998
Far too much	*	*
Too much	4	2
Right amount	52	45
Too little	32	41
Far too little	6	6
DK/Can't say	6	5
Weighted	822	753
Unweighted	852	714

Source: BSAS. Based on responses to the question: 'Do you think that the (trade unions/staff association/trade unions or staff association) at your workplace (has/have) too much or too little power? Please use a phrase from this card.' Base is employees working 10 or more hours per week in workplaces with a recognised union or staff association.

Note: \* means under 0.5 per cent.

purposes, there has been a decline in the proportion of employees whose terms and conditions are set by collective bargaining and the proportion who are union members (Millward *et al.*, 2000; Bryson and Wilkinson, 2001). The only data available on employees' perceptions of union power over time are from BSAS for 1989 and 1998. They confirm that, since the late 1980s, there has been a decline in the perceived power of unions at the workplace (Table 1).

Unions' loss of organisational and bargaining strength may explain the absence of a general union wage mark-up (Stewart, 1995; Forth and Millward, 2000) and, by 1998, the disappearance of negative union effects on workplace financial performance usually attributed to the monopoly power of unions (Addison and Belfield, 2000; Bryson and Wilkinson, 2001).

However, the decline in these 'average' union effects for some workplace outcomes is by no means the whole story. First, some average union effects remain powerful. For instance, unionised workplaces had slower growth rates than non-unionised workplaces in the 1990s, *ceteris paribus*, suggesting that union effects are not benign (Bryson, 2001). Secondly, many workplaces still have 'strong' unions with high membership, high bargaining coverage and on-site lay representation (Millward *et al.*, 2000: 179–183). One might expect the 'returns' to well-organised, or strong, unions to be relatively greater now that average union strength has declined. Forth and Millward (2000) confirm this in their analyses of the union wage premium. They found that, by 1998, there was no general union premium, but there was a sizeable mark-up in workplaces with high bargaining coverage. Thirdly, as discussed in greater detail below, even weak unions may still have appreciable effects on employee perceptions of workplace governance.

**Table 2:** *Employee perceptions of management attitudes to union membership at their workplace, 1989–1998*

	1989			1998		
	No recog	Recog	Total	No recog	Recog	Total
Encourages	*	18	10	1	11	6
Accepts	4	52	32	8	54	30
Discourages	18	5	10	17	5	11
Not an issue	75	23	45	68	27	48
Don't know	2	2	2	6	2	4
Not answered	1	*	1	*	0	*
Weighted	607	825	1432	791	753	1544
Unweighted	607	855	1462	714	714	1428

Source: BSAS.

Note: based on responses to the question: 'How would you describe the management's attitude to trade unions at the place where you work? Would you say that management encourages trade union membership, accepts it or would accept it, discourages trade union membership, or isn't it really an issue at your workplace?' Based on employees working 10 or more hours per week.

Note: \* means under 0.5 per cent.

What has caused the general decline in the 'take-up' of unions among its customers, namely employees, and employers, lies beyond the scope of this paper.<sup>5</sup> However, as discussed in Section 3, employer support for unions and employee perceptions of the job done by unions may be important in explaining the effects of unions on employee perceptions of workplace governance. Trends in these two factors provide useful background to the discussion of their effects on workplace governance below.

Where employers are at liberty to choose whether they recognise trade unions, unions are heavily reliant on the support, or at least acquiescence, of management to conduct their business in representing members. This was the case for the period up to 1998 for which we have data.<sup>6</sup> However, BSAS data support evidence from other employee surveys (Gallie *et al.*, 1998: 107) that employer endorsement of union membership among its employees has fallen since the mid-1980s (Table 2). Survey evidence from managers in workplaces recognising unions shows that, while management endorsement of union membership rose in the 1980s, partly offsetting the decline in the closed shop, endorsement of membership declined markedly in the 1990s, along with a decline in the closed shop (Millward *et al.*, 2000: 145–149). Interestingly, Table 2 shows that the decline in managerial support for union membership

5 For discussion of this issue, see Millward *et al.*, 2000; Metcalf, 2000; Machin, 2000.

6 Although statutory rights to recognition under the Employment Relations Act 1999 (footnote 1) diminish reliance on employers for formal recognition, in practice it is likely that unions will remain reliant on employer support if they are to make effective representations on behalf of their members.

was confined to unionised workplaces. Union derecognition was relatively rare over the period (Millward *et al.*, 2000: 103–104). Instead, where employers continue to recognise unions, they appear to be capitalising on changes in the labour market and the legal framework which have strengthened their bargaining power *vis-à-vis* employees to refashion their relationship with organised labour. In 1998, a clear majority of managers in workplaces recognising unions expressed a preference for consulting directly with employees rather than with unions (Appendix Table A3). This is consistent with case studies uncovering instances in which recognised unions are by-passed in managerial decision-making (Marchington and Parker, 1990; Darlington, 1994), and evidence from the 1998 Workplace Employee Relations Survey (WERS98) on ‘the extent to which worker representatives were excluded altogether from the province of many workplace issues’ (Cully *et al.*, 1999: 105). These considerations may lead us to suspect that managers are less constrained than they were in the 1980s in pursuing corporate goals, sometimes at the expense of employees. Consequently, other things being equal, employee representations to management may be less influential in the governance of the workplace.

The declining allegiance of employees to unions is amply illustrated by the decline in membership since the early 1980s, presented in Appendix Table A1. Between one-fifth and one-quarter of current non-members said they used to be a union member, a proportion that has not differed greatly since the early 1980s (Appendix Table A4). This indicates that unions are not losing members at a greater rate in the 1990s than they were in the 1980s. However, there is evidence that they are less successful in attracting new members (Machin, 2000). Consequently, the proportion of employees who have never been union members has risen from 28 per cent in 1983 to 44 per cent in 1998. Could it be that membership levels have fallen as employees perceive unions as increasingly ineffectual? This might not be surprising given the evidence presented above on managerial attitudes to unions in the 1990s. In fact, the evidence is that employees do not regard unions as increasingly ineffectual. As Table 3 indicates, among employees in unionised workplaces, there has been no decline in perceptions of union effectiveness as measured by whether employees think the union is doing its job well or not.

### 3. THEORETICAL LINKS BETWEEN ASPECTS OF UNIONISATION AND EMPLOYEE PERCEPTIONS OF WORKPLACE GOVERNANCE

In this section we outline some of the mechanisms by which unions may influence employee perceptions of workplace governance, review some of the

**Table 3:** *Percentage of employees agreeing that union is doing its job well, 1983–1998*

Cell percentages												
Year	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1996	1998
All	60	63	57	61	62	57	61	61	58	55	59	62
Members	63	67	61	64	66	63	63	63	60	61	64	67
Non-members	51	52	49	53	52	42	56	56	55	42	50	55
Wtd base	522	475	516	933	837	819	728	724	681	843	825	753
Unwtd base	531	493	530	945	864	848	753	694	628	790	763	714

Source: BSAS. Based on responses to the question: ‘On the whole, do you think (trade union(s)/staff association(s) at this workplace do(es) its job well or not?’ % of ‘yes’ responses calculated on base including ‘Don’t knows’. Base is employees working 10 or more hours per week in workplaces with a recognised union or staff association.

empirical evidence, and set out the hypotheses tested in the remainder of the paper.

There are at least three routes by which unions may positively influence employees’ perceptions of workplace governance as conceived in our opening paragraph. First, unions may influence employees’ perceptions by operating as an effective check on management, making it more accountable to its employees for the actions it takes. Aware that employees will seek redress through the union against arbitrary or unfair managerial behaviour, employers are more likely to adopt formal procedures (Millward *et al.*, 2000: 156–157) and to abide by them. As a consequence, employees may view their management as more responsive and more competent, and view the employee relations climate more positively, where unions are present.

Secondly, unions may influence employee perceptions of the way their workplace is governed by delivering tangible benefits to employees in the form of better terms and conditions, or an improved working environment. If unions secure improved wages or conditions for employees, they may feel better about where they work, whether they attribute this to the actions of the union or not. If they do attribute these benefits to the actions of the union – that is, they perceive their union to be working effectively on their behalf – the impact on perceptions of workplace governance may be greater as employees feel ‘dual commitment’ towards union and employer, as discussed below.

Thirdly, the union may improve employee perceptions of workplace governance if it delivers for the employer, that is, if it can act as an effective ‘agent’ for the employer. One can see the relationship between employer and union as a pseudo-contractual one, in which the employer (the ‘principal’ in the contract) engages with the union as its agent in reducing the employer’s

costs in maintaining and enforcing desired levels of worker effort. From this perspective, it makes little sense for employers to render unions ineffectual, since unions require influence if they are to deliver the co-operation of workers.

With these mechanisms in mind, we turn to the hypotheses which form the basis for our subsequent investigation.

*First hypothesis: Employees' perceptions of workplace governance are better where there is a balance of power between unions and management at the workplace. The reduced power of unions since the 1980s will have led to deterioration in perceptions of workplace governance in the presence of unions.*

Union effects on workplace governance are uncertain, *a priori*, because they may have offsetting influences on workplace relations arising from their dual function in bargaining on behalf of members for improved pay and conditions, on the one hand, and in representing the 'voice' of workers to management on the other. The pursuit of their members' economic goals through the deployment of their monopoly power may result in conflict and discord, and a perception that management is not performing well. However, if management concedes to better terms and conditions in the face of union bargaining power, this may make employees more inclined to view their workplace climate more positively. But again, if the process of negotiation results in discord, or if constraints on management's ability to work efficiently promote employee perceptions of managerial incompetence, this may colour employee perceptions of the climate in spite of the better conditions they enjoy.

By giving 'voice' to workers' concerns and grievances, and by helping to represent those concerns and grievances to management, unions may significantly increase worker motivation and organisational commitment. In turn, this may improve perceptions of good workplace governance and contribute to collaborative management–employee relations (Freeman and Medoff, 1984). However, unions will only be able to operate as an effective 'voice' where they have sufficient authority in the workplace to act as a legitimate representative of workers. Where unions represent a minority of workers, they may lack influence over sections of the workforce. Consequently, their ability to work constructively with employers may be hampered by their inability to deliver worker support for change. Equally, their ability to disrupt production is diminished. These considerations may explain why employers are less likely to listen to the union if only a minority of employees back it than if the union represents a majority voice – even where the employer has chosen to recognise the union (Cully *et al.*, 1999: 105–106).

Certainly, genuine co-operation between management and employees seems unlikely if the latter have no access to independent sources of power to represent them and protect their interests. For example, Marshall (1992) argues that co-operative relations cannot be maintained where there is a substantial power imbalance between management and unions because the stronger party will opt for unilateral control over co-operation. Unions need to be 'strong enough' to influence employer and employee perceptions of the union's legitimacy in representing workers' interests, predisposing them to take greater account of what the union is saying. While weak unions may be unable to wield monopoly power, they may also be unable to act as an effective voice for employees. So the employee relations climate might well be relatively poor in the presence of weak unions.

In short, we might anticipate that workplace governance is viewed most positively where unions are neither too strong nor too weak. There is already some empirical work that confirms this expectation. Assessing managerial perceptions of the employee relations climate, Fernie and Metcalf found that the climate 'is worse where the strong and weak versions of unionisation exist than it is in non-union workplaces or those with middling union strength' (1995: 401). However, analyses of *employee* perceptions of the employee relations climate using WERS98 provide mixed evidence on the impact of union strength. Perceptions of climate were poorer in unionised workplaces than in non-unionised workplaces, *ceteris paribus* (Bryson and Wilkinson, 2001). They were still poorer where unionised workplaces had an on-site lay union representative, where we would expect unions to have a stronger 'voice' and greater organisational strength.<sup>7</sup> Similarly, they were poorer where a high proportion of workers were union members.<sup>8</sup> However, there was little to indicate that climate is best where there is a balance of power between unions and management.

Below, we test whether these findings from WERS98 hold among employees using another 1998 data set, BSAS98, and a similar climate measure. But we extend the analysis to other measures of workplace governance and establish whether the impact of union strength has changed over time. Our hypothesis is that, since an increasing percentage of employees believe unions have 'too little power' in the workplace relative to management, the average union effect on employee perceptions of workplace governance will have deteriorated since the late 1980s. However, where employees believe the

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<sup>7</sup> See Millward *et al.*, 2000, and Bryson and Wilkinson, 2001, for a discussion of this link.

<sup>8</sup> In their analyses of WERS98, Scholarios *et al.* (1999) also show a negative association between higher union density and employee perceptions of employee relations, *ceteris paribus*. Their dependent variable is a composite measure incorporating employee perceptions of management/employee relations and employee perceptions of management.

balance of power is ‘about right’, we expect perceptions of workplace governance to remain good.

*Second hypothesis: Employees’ perceptions of workplace governance are better where management actively support union membership, and are poorest where management actively discourages membership. Furthermore, the decline in managerial support for union membership where unions are recognised will have led to deterioration in perceptions of workplace governance in the presence of unions since the 1980s.*

There is little reason to believe that unions can deliver a harmonious employee relations climate alone. What management says and does is likely to matter just as much. The acts or omissions of one party may be able to sour employee relations, but no matter how constructive a union wishes to be, or how strong it may be organisationally, a co-operative environment is likely to require that management engages constructively with the union, and vice versa. Only then can the ‘space’ for collaboration (or what is sometimes termed ‘concertation’ (Hyman, 1997: 323)) be created. In this sense, ‘the extent to which a union is a liability or an asset [for the employer] depends crucially on how management responds to it’ (Freeman and Medoff, 1984: 5).<sup>9</sup> Thus, a co-operative environment is likely to require that management engage constructively with the union, unless it can devise non-union employee involvement strategies that mean the union is not seen as an issue at all. Managerial support for a union, strong or otherwise, may signal employer interest in the concerns of workers, a signal which may lead to more positive attitudes to management.

We hypothesise that employees’ perceptions of workplace governance are best where management supports union membership, and are worst where management discourages membership. Bryson and Wilkinson’s (2001) analysis of matched employer–employee data from WERS98 broadly supports this contention. Where management said they recommended union membership to their employees, and where employees thought their management was ‘in favour’ of union membership, employees’ perceptions of the employee relations climate were more favourable, all things being equal. Where employees thought management was ‘not in favour’ of union membership (as opposed to being in favour or neutral), climate was poorer. However, not all the evidence pointed in the same direction. The survey asks the main manager

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<sup>9</sup> Similar arguments apply to other workplace outcomes such as financial performance. Thus, the behaviour of one party may be responsible for poor financial performance but, as Denny and Muellbauer (1988: 6) argue: ‘it is not the independent effect of trade unions but the interaction of unions and management that can cause improved economic performance’.



responsible for employee relations at the sampled workplace about management's attitudes towards union membership, a question mirroring the one put to employees. When this information was matched into the employee data, employees only viewed climate as better when the managerial respondent said that union membership was 'not an issue'. It may be that employers make union membership a 'non-issue' where they adopt alternative policies for consultation and communication.

Again, we test whether these findings from WERS98 hold among employees in BSAS98, extending the analysis to other measures of workplace governance, and establishing whether the impact of managerial support for unions has changed over time. Our hypothesis is that the decline in managerial support for union membership where unions are recognised will have led to deterioration in perceptions of workplace governance in the presence of unions since the 1980s. However, where managers continue to be supportive of unions, we anticipate positive perceptions of workplace governance in the 1990s, as in the 1980s.

*Third hypothesis: Employees' perceptions of union effectiveness are positively associated with employee perceptions of good workplace governance.*

When management recognises a union for bargaining purposes, it offers unions the opportunity to influence workplace outcomes. The degree to which unions can actually affect those outcomes depends upon the effectiveness with which they can capitalise on such opportunities.

According to Deery *et al.* (1995), the perception that a union is effectively protecting and advancing its members' interests can result in positive perceptions of the employee relations climate. The authors equate union effectiveness with 'union instrumentality', defined as 'the degree to which the union achieves the valued goals of employees' (Deery *et al.*, 1995: 9). Deery and colleagues suggest that 'where a union is perceived to be more effective or instrumental in achieving valued goals for its members it could be hypothesised that those employees would hold more positive attitudes about the industrial relations climate' (Deery *et al.*, 1995: 4). The paper provides empirical evidence in support of this contention based on a large automotive manufacturer in Australia.<sup>10</sup> However, research by the same team in a large government utility in Australia found that the union and employer 'could

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<sup>10</sup> Boxall and Haynes (1997: 571) argue that unions can 'satisfy worker needs in a neo-liberal environment only through a successful engagement with employers. Putting the point negatively, a union that understands worker needs, but can't shift employer behaviour, is ineffective.'

most appropriately be seen as being in competition for the commitment of their organisational members' (Deery *et al.*, 1994: 594).

Furthermore, *ceteris paribus*, union commitment was significantly reduced when employees perceived the employee relations climate as positive. This prompts the authors to suggest that 'adversarial relationships actually underpin a number of the aspects of union commitment' (Deery *et al.*, 1994: 593). Deery *et al.* (1999: 535) seek to account for these divergent findings in terms of 'the strategies and actions of management and union officials'. They suggest that the 'critical determinant of the relationship between employee relations climate and organisational and union outcomes may be the role that each party plays in delivering particular benefits to employees' (*op. cit.*).

Although union instrumentality may influence perceptions of climate by engendering greater employee allegiance to both the union and the employing organisation ('dual commitment'), thus resulting in more co-operative and harmonious management–employee relations, this is not the only mechanism by which union instrumentality may improve perceptions of workplace governance. It may also occur because perceptions of union effectiveness are associated with perceptions of a fairer, more challenging and satisfying work environment. This, in turn, can positively influence perceptions of the employee relations climate (Deery *et al.*, 1999: 546).

Bryson and Wilkinson (2001) present evidence of the association between employees' perceptions of union effectiveness and the employee relations climate using WERS98. They use two proxies for union effectiveness, namely whether employees thought unions at their workplace took notice of members' problems and complaints, and perceptions of whether 'unions are taken seriously by management at this workplace'. They found that both measures of effectiveness were positively associated with better perceptions of climate, *ceteris paribus*.

Gallie *et al.* (1998: 72–86) find that employees perceive supervision to be tighter, and technical and bureaucratic methods of management control to be more evident where unions are perceived as having greater influence. The authors suggest that 'a reasonable inference, then, is that intensive control systems were preferred by organisations where managerial power was contested' (Gallie *et al.*, 1998: 85). It may be that, where unions contest 'the terrain' with management, employee perceptions of the working environment actually deteriorate, in which case perceptions of the employee relations climate may also deteriorate. This line of reasoning cautions against a simple assumption that effective unionism will translate into better climate.

We hypothesise that employees' perceptions of union effectiveness are positively associated with employee perceptions of good workplace governance. Some of our measures of union effectiveness are similar or identical to

those used in WERS98, so we can compare results for 1998 across the two data sets. We also have repeat cross-section data on how well employees thought unions were doing their job. By this measure, there is no obvious trend in employees' perceptions of union effectiveness since the early 1980s (see Table 3). This implies that union effects may be relatively stable over time, even if the balance of power in the workplace has shifted towards management, as employees seem to think (Table 1). On the other hand, the impact of union effectiveness may change over time, even though union effectiveness has not varied significantly over the period, if the link between positive (negative) perceptions of climate and effective (ineffective) unions has strengthened over time.

#### 4. DATA

Our data are the British Social Attitudes Surveys for the period 1983–1998. A survey has been conducted for each year over the period, except 1988 and 1992. The survey is carried out to the highest technical standards and yields a representative sample of adults aged 18 or over living in private households in Great Britain (see Jowell *et al.*, 1999 for details). We exploit the data to the full with analyses for the whole period coupled with cross-sectional analyses of a special 1998 trade union module containing particularly rich information on union-related issues (Bryson, 1999). Our analyses are restricted to employees working at least ten hours per week, a cut-off used to filter respondents on questions relevant to employees. With weighting to account for complex survey design, survey results can be generalised with confidence to the population of employees in Britain working at least 10 hours per week.<sup>11</sup> The full data set comprises almost 17,000 employees.

Relative to other data sets, BSAS has very extensive data on employees' attitudes to issues that may also affect their perceptions of workplace governance, as well as extensive information on the socio-economic characteristics of individuals and their households. However, one difficulty in relying wholly on employee data gathered as part of a general attitude survey is that information on workplace characteristics is necessarily limited, even though in our case it is more complete than is true of most individual level surveys. Thus, for example, we have no information on union density; that is, the proportion of employees at a respondent's workplace who belong to a

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<sup>11</sup> Our sample is not directly comparable with the employee sample in WERS98 because the BSAS analyses are based on employees working at least 10 hours per week, a threshold which does not apply in WERS98. Furthermore, WERS98 only contains employees working in workplaces with at least 10 employees, whereas there is no such lower threshold in BSAS.

union. Nor do we have information on some features of workplace participation, consultation and representation, such as the existence of joint consultative committees, which are known to affect perceptions of the employee relations climate (Cully *et al.*, 1999). That said, our analyses are able to draw on many of the factors shown to be significant in analyses of the WERS, together with other factors, such as information about respondents' political attitudes, which WERS did not collect.<sup>12</sup>

Another problem with relying purely on the accounts of individual employees about features of their workplace is measurement error due to incomplete knowledge. In particular, non-union members have a lower awareness of the presence of unions at their workplace. Appendix Table A5 uses matched employer–employee data from WERS98. It shows lack of awareness about unions was widespread: one in ten union members in workplaces with recognised unions said there was no union present, as did 24 per cent of non-members in workplaces with recognised unions. Where employees are unaware of a union, it is likely that the union is less effective than in a workplace where employees are aware of its presence, so we should bear this in mind when interpreting the results.

### Measures of workplace governance

We present analyses of employees' perceptions on three aspects of workplace governance: the employee relations climate; treatment of employees and unions by management; and managerial performance. Others have used composite indexes when analysing employee perceptions of workplace governance (Dastmalchian, Blyton and Adamson, 1989; Guest *et al.*, 1999; Scholarios *et al.*, 2000). Although there are advantages to moving away from reliance on a single-item scale, we have chosen to analyse each item separately because our aim is to understand the relationship between unionisation and these three conceptually distinct aspects of workplace governance.

For each we have repeat cross-section data available for most or all years including 1998, plus some measures only available in the special 1998 module referred to above.

*The climate of employee relations:* Our main indicator of the employee relations climate is the response to the question: 'In general, how would you describe relations between management and other employees at your workplace?' The question has been asked in each survey since 1983. Most

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<sup>12</sup> WERS98 relies on a relatively short self-completion questionnaire, whereas BSAS data are based on a lengthy face-to-face interview supplemented by self-completion data.

employees in Britain view relations between management and other employees at their workplace to be good, with roughly half saying they were 'quite good' and another quarter considering them 'very good'.<sup>13</sup> However, there has been a deterioration in employees' perceptions of climate since the beginning of the series (Appendix Table A6). The trend is apparent among employees in non-unionised and unionised workplaces, but throughout the period perceptions of climate have been poorer among employees in unionised workplaces (Appendix Tables A7 and A8 respectively).

Our second measure of the employee relations climate, only asked of employees completing a self-completion questionnaire in the 1998 survey, is based on responses to the statement: 'At my workplace, management and employees are always at loggerheads'. Almost two-thirds of employees disagreed with this statement, the percentage being a little higher in non-unionised workplaces than in unionised workplaces (Appendix Table A9).

*Management's treatment of employees and unions:* Our main indicator of management's treatment of employees is asked of employees completing a self-completion questionnaire in the 1998 survey. It is based on responses to the statement: 'Managers at my workplace usually keep their promises to the employees'. Almost half of employees agreed with this statement, but they were less likely to do so if they worked in a unionised workplace (Appendix Table A10).

The only repeat cross-section data available in BSAS regarding employees' perceptions of the way management treats employees is how strongly they agree or disagree with the statement: 'Management will always try to get the better of employees if it gets the chance'. This is available for each year since 1985, except 1997. Over that period, around six in ten employees agreed or agreed strongly with the statement, but there is no strong trend (Appendix Table A11). Although we analyse this measure, it relates to employees' perceptions of management in general, rather than management at their own workplace. It may therefore tell us more about the respondent's general attitude to management rather than circumstances at their workplace, so it is not ideal for our purposes.

BSAS98 provides our measure of the way in which management treats unions at their workplace. Where employees said there was a union or staff association present at their workplace they were asked how strongly they agreed or disagreed with the statement that 'the trade unions (staff association(s)) at my workplace are usually ignored by management'. One-fifth (21

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13 Although the question is virtually identical to the question asked of employees in WERS98, the pre-coded responses are different, so that results are not directly comparable (Bryson and Wilkinson, 2001).

per cent) agreed or agreed strongly, with 54 per cent disagreeing or disagreeing strongly.<sup>14</sup>

*Perceptions of managerial performance:* We have a single measure of employee perceptions of managerial performance, available throughout the series. It is based on responses to the question: ‘In general, would you say your workplace was very well managed, quite well managed or not well managed?’ Over the series, just over a quarter of employees say ‘very well managed’, a half ‘quite well managed’ and one-fifth to one-quarter ‘not well managed’ (Appendix Table A12). However, employees have become more critical of management since the early 1980s on this measure.

### Measures of trade unionism

*Union strength:* Throughout the series employees were asked whether there was a union or staff association recognised ‘for negotiating pay and conditions of employment’ at their workplace. Union recognition for pay bargaining purposes is the basis for union influence in the workplace. Although rights to represent members in grievance procedures and other matters, and rights to negotiate over non-pay issues are important in building a membership base and allow unions some influence over workplace matters, these rights rarely exist without the right to negotiate over pay (Millward, 1994: 30–33). Since payment is generally regarded as ‘the most conspicuous focus of collective concern for labour’ (Brown *et al.*, 1998: 123), unions which are not recognised for pay bargaining purposes can only address issues of peripheral interest to workers collectively. For all years except 1998, this is our only measure of union presence at the respondent’s workplace (other than the individual respondent’s union status).<sup>15</sup> In those years, we are therefore unaware of unions that may be present but are not recognised for pay

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14 This measure is the obverse of the WERS98 measure based on employee responses to the statement that ‘unions are taken seriously by management at this workplace’, discussed in Section 3.

15 See Appendix Table A2 for the trend in union recognition as indicated by BSAS. Concerned that respondents may not fully understand the meaning of the phrase ‘recognised by the management for negotiating pay and conditions’, BSAS98 asks those who said there was a recognised union or staff association ‘Can I just check, does management recognise these unions or staff associations for the purposes of negotiating pay and conditions of employment?’ Of the 714 unweighted cases saying ‘yes’ to the first question, 24 said ‘no’ to the check question and 14 said ‘don’t know’. Using the weighted data, this adjustment reduces the percentage of employees saying they worked in a workplace recognising unions from 48.8 per cent to 46.0 per cent. Since the check question was not asked in earlier BSAS we use the unadjusted data to retain consistency.

bargaining. However, in 1998, to identify instances where unions were *present* but not recognised, those responding negatively to the question were asked: ‘Are there any trade unions or staff associations that are active at your workplace?’

This second question gives us a measure of non-recognised unions. We would expect recognised unions to be stronger than non-recognised unions, because recognition is a clear indication that the union has a formal role in representing workers in pay and conditions negotiations, a role that has been legitimised by the employer. In addition, there is a very strong association between union recognition and union density which a number of studies have shown to be the most significant indicator of union strength and influence (Cully *et al.*, 1999). There is a clear indication of the differences in union strength across recognised and non-recognised unions in Appendix Table A13, which shows that employees believe recognised unions are less likely to be ignored by management. We use this distinction between recognised, and active but non-recognised unions in our cross-sectional analyses for 1998.

Another indicator of union strength available only in 1998 is the presence of a worker representative at the workplace. Those in workplaces with unions or staff associations were asked: ‘Do you know who the (union/staff association) representative is at your workplace or is there not one based where you work?’

Similarly, those in non-unionised workplaces were asked whether there were any other worker or staff representatives at their workplace and, if so, whether they knew whom the representative was. The presence or otherwise of a representative is a good proxy for the organisational strength of a union on the ground. There is an association between the presence of an on-site representative and higher union density. Moreover, the presence of a representative indicates at least some organisational capacity on the ground. We can therefore assume that, on average, union strength is greater in workplaces with an on-site representative than it is in those without an on-site representative.<sup>16</sup>

Furthermore, WERS98 provides evidence that worker representatives are attaching increasing importance to ‘dealing with problems raised by the treat-

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16 The industrial relations literature draws important distinctions between lay representatives of unions and paid officials of unions based on-site. The British Social Attitudes data make no distinction, but we can assume that paid officials are confined to the largest workplaces and constitute only a small proportion of the representatives identified in our data. On-site worker representation is not the only means by which workers in multi-site organisations may be represented. In one-third of workplaces with 25 or more employees with recognised unions but no on-site representative, there is access to a representative based at another workplace in the organisation (Cully *et al.*, 1999).

ment of employees by management, and to resolving disputes' (Cully *et al.*, 1999: 201), as opposed to the more 'traditional' activities of maintaining wages and benefits. If they are effective in this role, we might expect the presence of representatives on-site to contribute to more positive perceptions of workplace governance.

Our repeat cross-section data on union strength are the data presented in Table 1 above relating to employees' perceptions of union power at their workplace in 1989 and 1998.

*Management support for union membership:* Our measure of management support for union membership is the data contained in Table 2 for 1989 and 1998.

Analysts have frequently used management support for union membership as a measure of union strength, sometimes combining it with the incidence of the closed shop since the recommendation of union membership by management may not differ substantially in practice from closed shop arrangements (Wright, 1996). However, management endorsement is an ambiguous measure of union strength because, although it may assist in the recruitment of members, thus strengthening a union, it may be a sign that a union is not wholly independent of management, and may even be reliant on management support for its position. Therefore, union strength and management support for a union are conceptually different. A union may be strong without management support. Where it is strong in the face of management opposition, the employee relations climate may be conflictual. Where it is strong and has management support, climate may be better.

*Union effectiveness:* We use three measures of union effectiveness based on questions asked of employees working in workplaces with unions or staff associations present. All are 'evaluative' in that they seek to measure directly the contribution of the union or staff association to the workplace.

Our repeat cross-section measure, available for all BSAS except 1995 and 1997, is employee perceptions as to whether the union is doing its job well, presented in Table 3 above.

We supplement this with two measures available only in 1998. The first is whether respondents agreed or disagreed that 'union(s)/staff association(s) at your workplace take notice of members' problems and complaints'.<sup>17</sup> Union members are more positive about the union's responsiveness to employees' needs than non-members while, not surprisingly, more non-members simply don't know how effective the union is (Appendix Table A14).

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<sup>17</sup> The wording and scaling of this question are virtually identical to the WERS98 measure discussed in Section 3.



The second measure of union effectiveness only available in 1998 is the extent to which workers agree or disagree with the statement that their union or staff association ‘makes things run more smoothly at work’. Rather than a measure of the extent to which unions deliver for individual workers, this question is an indication of another mechanism by which unions might effect a better employee relations climate, namely by simply contributing to the better running of the workplace. The measure indicates one reason as to why the presence of unions might contribute to an improved employee relations climate, thereby making it easier to make inferences as to which is cause and which effect. Two-fifths of workers agree or strongly agree that unions make things run more smoothly, with union members more likely to say so than non-members (Appendix Table A15).

*Individual union membership:* It is a standard finding in the British and American literatures that unionised workers express greater dissatisfaction with management than non-unionised workers (Freeman and Medoff, 1984; Gallie *et al.*, 1998; Bryson, 1999; Bryson 2000). Freeman and Medoff offer an explanation for this in the greater politicisation of unionised workers. They suggest that unionised workers are more prone to express their voice ‘loudly’ to ensure that it is heard, resulting in ‘voice-induced complaining’ (1984: 142) which they distinguish from ‘true’ dissatisfaction.<sup>18</sup> They also suggest that ‘some of the critical attitude of union workers is due to their greater awareness of problems and willingness to speak out’ (1984: 142). As Gallie *et al.* (1998: 113–114) point out: ‘unionism as an oppositional form of representation may highlight organisational inefficiencies and colour perceptions of management competence’. In addition, as Freeman and Medoff note (1984: 141), *ceteris paribus*, the stock of dissatisfied workers will be greater in unionised workplaces because dissatisfied workers are less likely to quit in unionised workplaces than they are in non-unionised workplaces (Bryson and McKay, 1997).

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18 Evidence in support of ‘voice-induced complaining’ among union members comes from studies showing that, although union members have poorer perceptions of workplace governance than non-members, they also have lower quit rates (Freeman and Medoff, 1984: 142; Gallie *et al.*, 1998: 113–116; Cully *et al.*, 1999: 273–274). We tested this proposition using BSAS98 by comparing individuals’ perceptions of the employee relations climate with their perceptions of whether they were likely to quit their jobs voluntarily over the next year. If union members were more prone to ‘voice-induced complaining’, we would expect the association between the perception of a poor climate and expected quit rates to be weaker among union members than it is among non-members. In fact, the evidence does not support the proposition. Our data confirm that union members have the expected lower quit rates. But the association between the likelihood of a voluntary quit and poorer perceptions of the employee relations climate at the workplace was just as strong among union and non-union members (both were significant at a 99 per cent confidence level).

It is therefore important to control for individual union membership status, since we wish to distinguish perceptions of workplace governance associated with individual union membership from ‘workplace effects’ associated with the unionisation of the workplace. This is discussed further in Section 5. We identify union members by responses to the question: ‘Are you now a member of a trade union or staff association?’

### Control variables

Our analyses control for a wide range of individual, job and workplace-related characteristics to minimise estimation bias arising from omitted variables. To allow for comparability across models, we use the same sets of controls for our dependent variables whenever possible. Our baseline estimates for the period 1983–1998 use controls which are available for every year. However, as noted below, some data are only available for a sub-set of years. In these instances, we test the sensitivity of results to the inclusion and exclusion of these additional controls for the years where they are available. Some controls are only available for 1998, which is why, when we present analyses for the 1998 cross-section, our baseline model is different from the 1998 equivalent in the time-series.

Appendix Table A16 defines the variables and shows their incidence in the pooled repeat cross-section data and Appendix Table A17 does the same for the 1998 cross-section. We introduce these controls below, with the exception of the union variables discussed above.

*Demographic characteristics of respondents:* Our analyses incorporate gender, age and ethnicity, all of which have been associated with employee perceptions of management in previous studies (Bryson and McKay, 1997; Gallie *et al.*, 1998; Bryson and Wilkinson, 2001). More highly educated workers often have higher expectations of involvement, and may therefore be particularly critical of management where participation is denied. We therefore include individuals’ highest educational qualification in analyses of the period 1985–1998 (BSAS did not collect these data in 1983 or 1984).

*Job-related characteristics:* In our repeat cross-section analyses we control for two aspects of individuals’ jobs: their occupational class (based on the Hope-Goldthorpe schema) and whether or not they were working part-time.<sup>19</sup> We incorporate years working continuously with the current employer in our

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<sup>19</sup> Part-time status is based on respondents’ self-definition. In the 1998 cross-sectional analysis we replace this with a categorical variable identifying hours. It is not possible to use this variable in repeat cross-section analysis because the question wording was changed in 1996 to distinguish between total hours worked and contractual hours worked. Prior to 1996 the question did not make the distinction, so it is not possible to construct a consistent time-series. In addition, hours worked were not collected in 1983.

analyses of the 1998 cross-section to capture individuals' attachment to their workplace.<sup>20</sup>

*Workplace-related characteristics:* As noted earlier, one difficulty in relying wholly on employee data gathered as part of a general attitude survey is that information on workplace characteristics is necessarily limited. Nevertheless, we are able to control for industrial sector and workplace size,<sup>21</sup> both of which have been significantly associated with employee perceptions of workplace governance in recent studies (Bryson and Wilkinson, 2001; Bryson, 2000). Bryson and Wilkinson (2001) show that the determinants of employee perceptions of the employee relations climate differ markedly across the public and private sectors. So we use information on whether the workplace is publicly or privately owned to perform separate analyses on employees' perceptions in the public and private sectors.

*Attitudes:* Some have argued that 'attitudes to work and to trade unions can be formed from experiences both inside and outside the workplace' (Deery and Walsh, 1999: 263) and that patterns in employees' attitudes may be attributed, not only to aspects of their employment relationship but to 'differences in personal underlying values' (Cully *et al.*, 1999: 165). Some of these experiences may be captured, in part, by demographic characteristics. However, BSAS also contains direct measures of the value set that employees bring with them to work. We test the sensitivity of our results to the incorporation of this value set using the BSAS left-right index, available since 1986. The index, based on general attitudes to distributive justice, helps control for differences across individuals which are not directly related to their work experiences, but which may affect their orientation to work.<sup>22</sup>

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20 These data were only collected from 1991 onwards, so do not appear in the repeat cross-section analyses. As noted earlier, this variable may be endogenous with respect to perceptions of workplace governance since those least satisfied with their situation are likely to leave. However, we retain it in our analyses to control for the union effect in raising average tenure. Thus our results are net of union effects in increasing the stock of dissatisfied workers arising from the fact that unions raise tenure.

21 Data on workplace size are not available in the 1983 survey.

22 The left-right scale is an additive index drawing on responses to five statements to which the respondent is invited to 'agree strongly', 'agree', 'neither agree nor disagree', 'disagree' or 'disagree strongly'. These are: 'Government should redistribute income from the better-off to those who are less well off'; 'Big business benefits owners at the expense of workers'; 'Ordinary working people do not get their fair share of the nation's wealth'; 'There is one law for the rich and one for the poor'; 'Management will always try to get the better of employees if it gets the chance'. This well tried and tested index measures an underlying ('latent') attitudinal dimension relating to employees' perceptions of distributive justice. Those with lower scores on the continuous scale running from 1 to 5 are more likely to favour government economic intervention and the reduction of inequality than are those with higher scores. Union members are significantly more likely to be 'left-wing' (have a lower score) on the index than non-members, and there is a strong and significant association between being on the 'left' of the index and negative perceptions of the employee relations climate (Bryson, 1999).

Research has established strong associations between individuals' attitudes towards aspects of their own job – pay, job security, their say at work – and perceptions of governance at their workplace (Bryson and McKay, 1997; Deery *et al.*, 1995; Dastmalchian *et al.*, 1989). Those viewing their own position more (less) favourably are likely to view their working environment more (less) favourably. It may even be that the effects of unionisation on perceptions of governance are themselves mediated through satisfaction with the job and terms and conditions. However, although analysts frequently include individuals' perceptions of their own jobs in models estimating perceptions of workplace governance, it is not possible to discern the direction of causation in cross-sectional analyses. So it is not really possible to 'explain' perceptions of workplace governance by reference to employees' satisfaction with their own situation (although the latter may explain some of the variance in the former). We therefore omit employee attitudes towards their own work situation from our analyses.<sup>23</sup> However, it seems reasonable to link employee perceptions of general conditions at their workplace with their perceptions of climate and management. In particular, there is a well-developed literature linking perceptions of distributive justice at the workplace with perceptions of the employee relations climate. BSAS contains a useful question on distributive justice at the workplace: 'Thinking of the highest and lowest paid people at your place of work, how would you describe the gap between their pay, as far as you know?'<sup>24</sup> We test the sensitivity of our results to the inclusion of this variable in our 1998 analyses.

*Region:* We group data from the ten standard regions into seven regions, separately identifying Greater London. These identify where the employee lives, rather than where the workplace is located.

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23 It may be that union effects are mediated by factors such as employees' perceptions of the say they have at work. If unions influence perceptions of 'say at work', and thus perceptions of workplace governance, then part of the union effect is mediated by perceptions of the say employees think they have. However, if it is assumed that organisational practices such as union recognition influence 'say', but not vice versa, then the intermediate variables can be omitted from the model without biasing estimates of the total effects of unionisation on perceptions of governance.

24 If employees are unable to distinguish between their own situation and the workplace situation, this measure would not be particularly useful. In fact, although there was a correlation between lower wages and a belief that the workplace pay gap was too large, it was not particularly strong (one-tailed Spearman's Rank coefficient 0.147,  $p < .000$ ).

## 5. ANALYSIS

### The sample

Our sample are employees working 10 hours or more taken from BSAS between 1983 and 1998. As well as cross-sectional analyses for 1998, which use the richer data available in the special trade union module for that year, discussed earlier, we run repeat cross-section analyses where the data are available.

Others have confined their analyses of employees' perceptions of workplace governance to non-managerial employees, perhaps because managers are overwhelmingly positive in their assessment of governance as they lie on one side of the management–employee line, while non-managerial employees lie on the other (Cully *et al.*, 1999: 276–283). We adopt an alternative approach, analysing the perceptions of all employees with non-missing data. After all, most managers experience 'being managed' or supervised. Our models include occupational controls to account for more positive perceptions further up the occupational hierarchy.

### Modelling procedures

The outcome variables discussed in Section 2 are all categorical indicators defined in terms of ordered responses. We use ordered probit estimators to model the relationship between these dependent variables and sets of independent variables. In ordered probits, an underlying unobservable score is estimated as a linear function of the independent variables and a set of unknown 'threshold' parameters, or cut points. The probability of observing outcome  $i$  corresponds to the probability that the estimated linear function plus random error is within the range of the cut points estimated for the outcome.

All models are run on data weighted by the inverse of the respondent's sampling probability. As well as allowing the results to be generalised to the population from which the sample is drawn, the use of probability weights also guards against estimation bias which can arise through differential sample selection probabilities.<sup>25</sup> We employ the Huber-White robust variance estimator that produces consistent standard errors in the presence of heteroscedasticity. This procedure uses pseudo-likelihood methods, the point estimates being those from a weighted 'likelihood' which is not the distribu-

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<sup>25</sup> Differential sampling fractions can result in standard estimator biases (Skinner, 1997). The weights account for all variation in sampling probabilities, thus eliminating differential sampling probability as a possible source of estimation bias.

tion function for the sample. Thus, standard likelihood-ratio tests are not valid (Skinner, 1989; STATA Manual, Release 6, Volume 4, 1999).

### *Time and business cycle*

One of our main objectives is to identify changes in union effects over the course of the BSAS series. To do this, we pool our cross-sections and interact union variables with time. In most analyses, we capture time with dummies for each year. However, when controlling for business cycle effects we revert to a linear trend.<sup>26</sup> We use the unemployment-vacancy ratio in each year to control for business cycle effects.<sup>27</sup>

### *Tackling limitations to the analysis*

Unionisation is not randomly distributed across individuals or workplaces. If there are what Freeman and Medoff (1984: 23) term ‘pre-union differences’ between unionised workplaces (or individuals) and non-unionised workplaces which are unobserved or unobservable that sort them into or out of unionised status, and these differences are correlated with the outcome of interest, then estimates of union voice effects will be biased. As Freeman and Medoff put it: ‘This uncaptured “pre-union difference” may explain part of the outcome difference that we attribute to unionism’ (1984: 23). It is possible to account for these selection processes by modelling the likelihood that an individual is a union member, or works in a unionised workplace. However, in this paper we have simply incorporated a wide range of factors that we know influence employee perceptions of management to minimise the problem of omitted variables bias. We also test whether our findings hold across sub-samples where we might expect systematic differences in the association between unions and perceptions of management (within the unionised and non-unionised sectors, the public and private sectors, and among union members and non-members).

The cross-sectional nature of our data presents a second difficulty, namely the direction of any causal link between unionisation and employee perceptions of workplace governance. Unionisation may even be endogenous if it is a response to perceptions of management. For instance, employees may

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26 Occasionally we also include non-linear time dummies alongside the linear trend to account for non-linear trends. In the pooled repeat cross-section with linear time and business cycle controls, employee observations are not independent of one another, because they are clustered according to the year of interview. We adjust our estimates accordingly to obtain accurate standard errors.

27 We experimented with three measures capturing business cycle effects: the unemployment rate (the number defined as unemployed according to the ILO definition divided by the total economically active), the employment rate (the total in employment and self-employment divided by the total of working age) and the unemployment–vacancy ratio.

become union members because employee relations are poor at their workplace. Similarly, an employer may grant union recognition to assuage workers complaining of poor treatment by their employer. In these cases, our results may overstate the negative impact of membership and recognition on perceptions of workplace governance. Although endogeneity problems may be tackled through instrumentation, we do not attempt this here. Instead, we simply point to the relative durability of union recognition (Millward *et al.*, 2000: 120–121). This gives us some confidence that measures of workplace unionisation pre-date individuals' perceptions of management at the time of the survey interview. The problem may be more serious when considering individual union membership status since, as noted earlier, many non-members report being union members in the past.<sup>28</sup> In recognition of this, as well as running separate models for members and non-members, we test the sensitivity of results to the inclusion and exclusion of individual union membership status. We also try to account for some of the underlying differences between members and non-members that are unobservable in most data sets by testing the sensitivity of our results to interactions between union membership and individuals' underlying value set as measured by our left-right scale, discussed above.

## 6. RESULTS

In this section, we present results from the multivariate analyses described in Section 5.<sup>29</sup> This section is split into three, dealing with three areas of workplace governance in turn: the employee relations climate; management's treatment of employees and unions; and managerial performance. Each subsection follows the same format. First, we present evidence for the 1998 cross-section, assessing the average effect of unions, followed by analyses incorporating union strength, management support for unions, and union effectiveness in 'delivering' for workers. Then we establish whether these union effects have changed over time, using pooled repeat cross-section data.

### Employee perceptions of the employee relations climate

We begin our investigation of employee perceptions of workplace governance with analyses of employees' responses to the question: 'In general, how would you describe relations between management and other employees at your

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<sup>28</sup> See Cappelari, Lucifora and Piccirilli (2000) for a good example of how to account for the endogeneity of individual union status.

<sup>29</sup> Full models are available from the author on request.

workplace?’ Responses are scored along a four-point scale from ‘very good’ to ‘not at all good’. Descriptive information presented in Appendix Tables A7 and A8 shows that employees in unionised workplaces had poorer perceptions of the employee relations climate than employees in non-unionised workplaces throughout the BSAS series. In 1998, employees in non-unionised workplaces were twice as likely to say their climate was ‘very good’. To establish whether there is a truly independent association between unionisation and perceptions of climate we ran ordered probit models, as described in Section 5 (page 29), which enable us to hold constant a range of factors while analysing the relationship between unionisation and climate. Our dependent variable runs from 0 (‘very poor’) to 3 (‘very good’) so negative coefficients indicate poorer perceptions of climate.

Appendix Table A18 presents six models for all employees in employment in 1998. Model (1) contains a union recognition dummy only, and confirms that employees perceive climate as poorer in the presence of recognised unions. Earlier we suggested that, by providing effective ‘voice’ for workers’ concerns, the presence of an on-site worker representative might improve employees’ perceptions of the employee relations climate. In practice, the presence of an on-site worker representative is associated with poorer perceptions of climate (model (2)), supporting findings using WERS98 (Bryson and Wilkinson, 2001). The introduction of an on-site worker representative dummy substantially reduces the union recognition coefficient, although this remains large and significant.

As noted earlier, the richness of the BSAS98 data permits us to distinguish between recognised unions, recognised staff associations, and unions that are not recognised for pay bargaining. When making this distinction, we find that poorer perceptions of climate were only apparent in the presence of a *recognised* union (model (3)). Recognition for bargaining purposes *per se* is not associated with poorer perceptions of climate; rather, it appears to be something that applies only to recognised *unions*. The fact that it applies to *recognised* unions, as opposed to unions which have no bargaining power, suggests that the bargaining power of the union is a key factor. This union recognition effect is robust to the inclusion of controls for demographic characteristics, qualifications, the nature of the job, type of employer, and region (model (4)).<sup>30</sup> However, the effect of on-site worker representation is no longer statistically significant.

As expected, union members had significantly poorer perceptions of the employee relations climate than employees who had never been members

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<sup>30</sup> This specification is the product of much experimentation. Squared terms for age and job tenure were rejected on the basis of Wald tests for joint significance.



(model (5)). The perceptions of staff association members and ex-union members were not significantly different from those of 'never members'. The inclusion of union membership status substantially reduces the size of the union recognition coefficient, making it statistically insignificant. The fact that the union membership effect appears to dominate the workplace union recognition effect might suggest that the union recognition effect in model (4) is simply picking up the more critical attitude of union members, who tend to be concentrated in unionised workplaces. Model (6) seeks to distinguish between the 'membership effect' and 'workplace effect' by distinguishing between employees according to their membership status and whether they worked in a unionised workplace. If there is a 'membership effect', then union members should have poorer perceptions of climate than non-members, holding workplace recognition constant. If there is a 'workplace effect', those working in workplaces with recognised unions should have poorer perceptions of climate than those who are not, holding membership constant.

Model (6) confirms the significance of workplace *and* membership effects. Employees working in workplaces with recognised unions and on-site representation had significantly poorer perceptions of the employee relations climate than the reference category, namely non-union members working in workplaces without union recognition and without an on-site worker representative.<sup>31</sup> This was so whether they were union members or not, confirming the presence of a union workplace effect. However, union recognition was not associated with poorer perceptions of climate in the absence of on-site representation. If we accept on-site representation as a proxy for organisational strength, this indicates that the negative effect of unionisation was confined to stronger unions.<sup>32</sup>

Among employees working in unionised workplaces with on-site representation, the perceptions of union members were significantly poorer than the perceptions of non-members, confirming the presence of a 'membership effect' as well.<sup>33</sup>

We tested the sensitivity of these findings on union membership to the incorporation of the BSAS left-right index, discussed in Section 4 (page 27). The index, based on general attitudes to distributive justice, helps control for

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31 An adjusted Wald test confirms the joint significance of the eight-way variable based on union recognition, on-site representation and individual union membership ( $F(7, 1410) = 2.97$ ,  $\text{Prob} > F = 0.0043$ ).

32 This is confirmed by a simpler model which replaces the eight-way variable with one distinguishing no recognition, recognition with no on-site representative, and recognition with on-site representation. The recognition effect without on-site representation was not significant ( $-0.05$ ,  $t=0.38$ ) but recognition with on-site representation was negative and significant ( $-0.23$ ,  $t=2.43$ ).

33 The coefficient is  $-0.196$ ,  $t=1.96$ .

differences across individuals which are not directly related to experiences of their own workplace, but which may affect their orientation to work. Those with lower scores on this index are more likely to favour government economic intervention and the reduction of inequality than are those with higher scores. Not surprisingly, union members were significantly more likely to be left-wing, that is to have a lower score, than were non-members.<sup>34</sup> Furthermore, there was a strong and significant association between being on the ‘left’ of the index and negative perceptions of the employee relations climate. When added to Model (5) in Appendix Table A18 the index was significant (0.24,  $t=4.16$ ). The union membership coefficient fell a little but remained significant at a 90 per cent confidence level. We also interacted a dummy variable identifying those scoring below the median on the index with the union membership variables. Both main effects were negative and significant (union membership  $-0.33$ ,  $t=2.58$ ; low-scorers on the index  $-0.28$ ,  $t=2.98$ ), but the interaction was positive and insignificant. So the union membership effect holds, having controlled for individuals’ value sets.

We also tested the sensitivity of our union membership finding to employees’ perceptions of distributive justice at their workplace using the pay gap question described in Section 4 (page 28). As anticipated, those viewing the gap between the lowest and highest paid as ‘too big’ or ‘much too big’ had poorer perceptions of the employee relations climate. However, the union membership effect remained strong with its introduction into Model (5) of Appendix Table A18.<sup>35</sup> Its interaction with union membership status also made no significant difference to our results (the main effect for union membership being  $-0.26$ ,  $t=1.99$ , and the pay gap effect being  $-0.46$ ,  $t=5.48$ : the interaction was positive and insignificant).

Finally, we split our sample into employees working in the private and public sectors. We find that the effects identified in the whole sample model are confined to the public sector (Appendix Table A19). Model (6) replicates Model (6) in Appendix Table A18, but for the public sector only. It confirms that perceptions of climate were poorer among employees in workplaces with recognised unions and on-site worker representation, whether the employee was a union member or not. Although the coefficient for members is larger than the one for non-members, it is not significantly so. Model (3) is the same model for the private sector: there are no union effects.

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34 Union members’ mean score was 2.38, compared to 2.58 for non-members ( $F=25.53$ ,  $p<0.000$ ).

35 The pay gap dummy was significant ( $-0.44$ ,  $t=6.30$ ) but the union membership effect remained significant ( $-0.21$ ,  $t=2.16$ ).

In conclusion, in our whole sample models, there is a clear union membership effect whereby union members had poorer perceptions of climate than non-members. However, there is also a ‘workplace effect’ whereby recognised unions were associated with poorer perceptions of the employee relations climate. This workplace effect was only apparent in the presence of an on-site worker representative, that is, where unions were organisationally strong. Separate sectoral analyses reveal that the effect is confined to the public sector.

To give some idea of the size of these union effects we calculate changes in the estimated probability of having good or poor climate for employees in unionised and non-unionised workplaces arising from infinitesimal change in each independent, continuous variable, and for switches in the value of discrete variables.<sup>36</sup> Relative to a union non-member in a workplace with no recognised union and no on-site worker representative, a union member in a workplace with a recognised union and on-site worker representative was 7.8 per cent more likely to report employee relations that were ‘not very good’, while a non-member in similar circumstances was 4.2 per cent more likely to do so, *ceteris paribus*.

*Perceptions that management and employees were at loggerheads in 1998*

It is possible that perceptions of the employee relations climate were poorer in the presence of unions because their role in representing workers, either in pay negotiations or grievance procedures, occasioned a more adversarial environment. If this were so, we might expect to pick this up through employees’ responses to the statement: ‘At my workplace, management and employees are always at loggerheads’. We ran identical analyses to those reported above for our measure of management–employee relations. Without controls, union recognition was associated with an increased perception that management and employees at the workplace were always at loggerheads (0.16,  $t=2.34$ ). However, once controls were added, this effect disappeared. Nor were there any effects associated with other measures of worker representation or union membership. This remained the case in our separate analyses for the public and private sectors. It seems unlikely, then, that perceptions of a poorer employee relations climate in the presence of recognised unions with on-site representation were due to a more adversarial environment.

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<sup>36</sup> These marginal effects are generated from Model (6) in Appendix Table A18 using Tamas Bartus’s MARGIN program for STATA. I thank him for providing me with the program. The marginal effects are calculated using the delta method. Rather than computing the marginal effects at the means of the variables or at values specified by the user, ‘MARGIN’ calculates the average of partial and discrete changes over the observations. Taking the average of discrete changes enables a straightforward interpretation of marginal effects for dummy variables. See Tamas Bartus’s MARGIN.HLP file for further details.

*Union power and the employee relations climate in 1998*

We can directly test our hypothesis that employee perceptions of climate are better where there is a balance of power between unions and management at the workplace with responses to the question: ‘Do you think that the (trade union/staff association/trade union or staff association) at your workplace (has/have) too much or too little power?’<sup>37</sup> Descriptive analyses appear to confirm the hypothesis (Bryson, 1999). To establish whether there was an independent association between perceptions of union power and climate we replaced our ‘objective’ measures of unionisation in Appendix Table 18 with the union power variable, retaining the same set of control variables. The results are presented in Appendix Table A20.

Model (1), run for our whole sample, shows that those who thought that their workplace union or staff association did not have enough power had a less favourable view of their employee relations climate than those without a union or staff association at their workplace, and a less favourable view than those who thought the union had the right amount of power.<sup>38</sup> As anticipated, there was no significant difference between the perceptions of those who thought that their workplace union had the right amount of power and those who worked in a non-unionised environment. Contrary to expectations, climate was not poorer in the small number of cases where unions were thought to have ‘too much power’.

The same finding emerges from an analysis based on the unionised sector alone (Model (2) in Appendix Table A20). Where unions were perceived as having ‘too little power’, the employee relations climate was perceived as significantly poorer than where unions were perceived as having the ‘right amount’ of power. The finding also holds irrespective of union membership status, as indicated by the results in Models (3) and (4), which are run on members and non-members in the unionised sector respectively. This is in spite of the fact that perceptions of union power differed across members and non-members (Bryson, 1999). The findings also hold for the private and

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37 The question was asked of all those with a union or staff association at their workplace, whether it was recognised for pay bargaining or not. See Bryson (1999) for a discussion of the relationship between ‘objective’ union measures of strength and employee perceptions of union strength. Table 1 is restricted to instances in which the union or staff association was recognised for pay bargaining because this restriction applied in 1989. For modelling purposes, we collapse the two categories distinguishing those who thought unions had ‘too much power’ or ‘far too much power’ due to small sample sizes for the latter. Those who said ‘Don’t know’ or did not answer are represented by the TUPOWMIS dummy variable.

38 The marginal effect of having a union with too little power, relative to having no union at all, is to increase the probability of having a climate that is ‘not very good’ by 8.9 per cent.

public sectors (models (5) and (6) respectively), though the size of the effect is more pronounced in the public sector.<sup>39</sup>

Our analysis can not identify the direction of causation. It is plausible that people view unions as lacking power *because* employee relations at their workplace are poor, rather than vice versa. But the central point is that weak unions appear to be bad for employee relations. Where the power balance between union and employer is perceived to be about right, unions need have no adverse effect on the employee relations climate. In this sense, the ‘power’ effect brings unionised workplaces into line with non-unionised workplaces. This is an important finding since, as we noted at the outset, some have argued that the government’s new statutory recognition procedure may result in an increase in the number of weak unions with recognition.

*Did the attitudes of management to union membership influence the employee relations climate in 1998?*

Our measure of managerial attitudes to unions, presented in Table 2, is available for employees in unionised and non-unionised workplaces. The multivariate analyses presented in Appendix Table A21 support the contention in our second hypothesis that employees’ perceptions of climate were better where employees said management supported union membership, and were poorest where they said management discouraged membership. Relative to employees who said management’s attitudes to unions were ‘not an issue’ at the workplace, those who said management ‘encourages trade union membership’ were significantly more likely to view climate positively, whereas those who said that management ‘discourages trade union membership’ had significantly poorer perceptions of climate (Model (1)).<sup>40</sup> This was so controlling for a range of factors, including workplace union recognition and individual union membership, both of which were independently associated with poorer perceptions of climate. The effects of managerial attitudes to unions are apparent when confining the analysis to employees working in unionised workplaces (Model (2)) and when the analysis is run on members and non-members separately within unionised workplaces (Models (3) and (4) respectively). They also hold in the private and public sectors (Models (5) and (6) respectively).

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39 We added our ‘objective’ measures of worker representation (UNIREC, SAREC, ACTIVE, REP) to the models presented in Appendix Table A20. Across all six models, perceptions of employee relations were significantly better where unions were perceived as having the right amount of power relative to instances in which they were thought to have too little power.

40 The marginal effect of discouraging membership relative to membership not being an issue is to increase the probability of having a climate that is ‘not very good’ by 11.9 per cent.

Employees were asked about the attitudes of management to union membership even where there were no unions present. Once again, perceptions that employers were discouraging union membership were detrimental to the employee relations climate.<sup>41</sup>

We tested whether the effects of management attitudes to union membership differed according to the strength of the union by interacting management attitudes with a union variable distinguishing between recognition with and without on-site worker representatives. There were no significant interactions, indicating that the effects of management support held for both stronger and weaker unions.<sup>42</sup>

These findings are important for two reasons. First, the multivariate analyses challenge earlier descriptive findings (Bryson, 1999) which suggested two routes to good employee relations, namely encouragement of union membership and ensuring that membership was ‘not an issue’. *Ceteris paribus*, encouragement of membership was associated with better climate compared to instances in which membership was not seen as an issue, whether the employee was a union member or non-member, worked in a unionised or non-unionised environment, and whether the employee worked in the public or private sector. Secondly, despite delivering a better employee relations climate, union encouragement was a route pursued by small minority of employers (Bryson, 1999). Thus the results present something of a puzzle: why is it that managers do not adopt a more positive stance towards union membership, especially where they are already in place? And why is it that management often opposes union membership, incurring the costs of poorer climate as a result?

*Did the influence of unions on the employee relations climate in 1998 depend on their effectiveness?*

The multivariate analyses support the contention in our third hypothesis that perceptions of union effectiveness are positively associated with perceptions of better climate. Appendix Table A22 presents results using our first measure

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41 Relative to employees who said that employer attitudes to union membership were ‘not an issue’, those who said membership was discouraged had a significantly poorer perception of the climate at their workplace ( $-0.62$ ,  $t=4.56$ ). Encouragement was positively signed but not significant ( $0.87$ ,  $t=1.52$ ).

42 We were concerned that employees’ responses to the question about managerial attitudes to unions might simply reflect their broader political views about the value of union representation and the behaviour of employers, rather than the actual views of management at their workplace. So we checked for a link between responses on the management attitudes question and their value set, as measured by the ‘left-right’ index discussed earlier. There was no such association. Furthermore, an interaction between scores on the ‘left-right’ scale and perceptions of management’s attitudes to unions was not significant in estimating employee perceptions of climate.

of union effectiveness, namely whether employees thought the union was doing its job well or not at the workplace. It is the measure presented in Table 3. Our models distinguish those who said 'yes' from those who said 'no', as well as identifying those who said they did not know the answer to the question. Perceptions of climate did not differ significantly between those working in a workplace without a union or staff association, and those working in a workplace with a union doing its job well. However, where employees thought their union or staff association was not doing its job well, perceptions of climate were significantly poorer (Model (1)).<sup>43</sup> Among those in unionised workplaces, the association between poorer perceptions of climate and unions not doing their job well was stronger (Model (2)), and held for union members and non-members alike (Models (3) and (4) respectively). Separate sectoral analyses revealed that perceptions of climate in the private sector did not differ across employees in unionised and non-unionised workplaces, irrespective of how well unions were seen to be doing their jobs (Model (5)). However, perceptions of climate were significantly poorer among those in unionised workplaces where the union was perceived to be doing its job poorly, than they were among those with a union doing its job well ( $-0.26$ ,  $t=2.04$ ). In the public sector, perceptions of climate were poorer in the presence of unions, whether they were perceived to be doing their job well or not, although perceptions were significantly poorer where unions were not doing their job well (Model (6),  $0.55$ ,  $t=3.76$ ).<sup>44</sup>

Employee perceptions of the employee relations climate were also influenced by employee perceptions of union responsiveness to union members' problems and complaints. Using an identical set of control variables to those presented in Appendix Table A22, we replaced the measure of how well unions did their job with dummy variables measuring union responsiveness to members' problems and complaints. Our model distinguishes those agreeing that unions did take notice of members' problems and complaints, those who disagreed, those who neither agreed nor disagreed, and those who did not know.<sup>45</sup> Perceptions of climate did not differ significantly between those

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43 The marginal effect of a union not doing its job well, relative to having no union at all, is to increase the probability of having a climate that is 'not very good' by 7.6 per cent.

44 On introducing the objective measures of worker representation, the association between poorer perceptions of climate and a union not doing its job well remained strong and significant among employees in unionised workplaces, whether they were union members or not. However, differences between employees in unionised and non-unionised workplaces were no longer significant.

45 See Appendix Table A14 for a description of the question asked and the distribution of responses. For the purposes of modelling, we grouped those agreeing strongly and those agreeing into a single category, and we did the same with those disagreeing strongly and those disagreeing.

working in a workplace without a union or staff association, and those working in a workplace with a union that was viewed as responsive to members' needs. However, where employees disagreed that the union took notice of members' problems and complaints, perceptions of climate were significantly poorer.<sup>46</sup> Not surprisingly, among those in unionised workplaces, the association between poorer perceptions of climate and unions not being responsive was only significant for union members.

A similar picture emerges with our third measure of union effectiveness, based on responses to the statement that the union or staff association 'make things run more smoothly at work' (see Appendix Table A15 for the distribution of responses). Adopting an identical technique to the one described in the last paragraph, we found perceptions of climate did not differ significantly between those working in a workplace without a union or staff association, and those working in a workplace with a union that was viewed as contributing to the smooth running of the workplace. Where employees disagreed that the union assisted in the smooth running of the workplace, perceptions of climate were significantly poorer.<sup>47</sup>

*Union effects on employee perceptions of the employee relations climate over the period 1983–1998*

Now we turn our attention to *changes* in union effects on climate over the fifteen years to 1998. We do this by running ordered probit regressions on pooled repeat cross-section data, interacting union variables with time, as discussed in Section 5 (page 29). We are unable to replicate the 1998 model specifications for earlier years because they are not so rich in information about unionisation. However, information on union recognition, union membership, perceptions of union strength and effectiveness, and management attitudes to union membership are present for years other than 1998, allowing us to test our three hypotheses (see Section 4, page 22, for a discussion).

Appendix Table A23 presents models estimating changes in perceptions of the employee relations climate over the period 1983–1998, with time indicated by year dummies with the reference category being the start of the series, 1983. Model (1) without controls confirms the descriptive analysis (Appendix Table A6) in showing a deterioration in perceived climate over the period. The trend is more apparent on introducing the union recognition dummy, which is itself

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46 The marginal effect of a union not taking notice of members' problems and complaints, relative to having no union at all, is to increase the probability of having a climate that is 'not very good' by 10.3 per cent ( $t=3.94$ ).

47 The marginal effect of a union not assisting in the smooth running of things, relative to having no union at all, is to increase the probability of having a climate that is 'not very good' by 8.6 per cent ( $t=4.0$ ).



negative and significant (Model (2)). However, interactions between the year dummies and union recognition show no obvious trend, without controls or with controls (Models (3) and (4) respectively). The union recognition main effect remains strong and significant, though the coefficient is smaller once we account for union membership status (Model (5)).<sup>48</sup> Identical separate analyses for union members and non-members, and employees in unionised and non-unionised workplaces, confirmed that the deterioration in perceptions of climate held across all these groups of employees.

Although none of the interactions between union recognition and year dummies is statistically significant, the interaction terms were jointly significant.<sup>49</sup> So in Appendix Table A24 we alter our specification. Models (1) to (3) use a linear time trend, which shows a deterioration in climate over time. In Model (2), both union recognition and the linear time trend are negative and significant, but the interaction between the two is positive and significant, indicating an amelioration of the underlying negative union effect on climate over time. However, the interaction becomes insignificant on the introduction of controls (Model (3)).

The trend in Appendix Table A23 is non-linear, with perceptions of climate deteriorating in the 1990s relative to the 1980s. So, in Models (4) to (6) in Appendix Table A24 we incorporate a dummy for a non-linear time trend after 1990. In Model (5) the post-1990 dummy is interacted with union recognition. The linear time trend remains significant, with the post-1990 dummy negative, though weakly significant, indicating that there was a deterioration in perceptions of climate in the 1990s relative to the 1980s. However, the interaction term is positive and significant, suggesting that perceptions of climate worsened more rapidly in the 1990s among those in non-unionised workplaces. With controls added, the coefficient falls slightly but remains significant at a 90 per cent confidence level (Model (6)).<sup>50</sup>

The finding is confirmed when we run separate models for employees in unionised and non-unionised workplaces. Using the same set of control variables as those in Appendix Table A23, we find the linear trend is negative and significant for those in unionised workplaces ( $-0.024$ ,  $t=4.53$ ) but

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48 Sensitivity analyses included the incorporation of workplace size, qualifications and the left-right scale. These controls were not available for all years (see Section 4, page 26) so that reference years varied. However, the main union recognition effect remained significant and, although some interactions between union recognition and year dummies were significant, there was no obvious trend in the union effect over time.

49 In Model (4) the adjusted Wald test confirms their joint significance.  $F(13, 16479) = 2.23$ ,  $F=0.0065$ .

50 These findings were unaffected by business cycle controls described in footnote 31, which were usually insignificant or weakly significant. Broadly similar results to those in Appendix Table A24 were obtained when using a post-1992 dummy instead of a post-1991 dummy.

insignificant for those in non-unionised workplaces ( $-0.002$ ,  $t=0.20$ ). The post-1990 dummy, by contrast, is negative and significant for those in non-unionised workplaces ( $-0.25$ ,  $t=1.96$ ) but insignificant for those in unionised workplaces ( $-0.002$ ,  $t=0.05$ ). This indicates that perceptions of climate deteriorated in a broadly linear way over the period for employees in unionised workplaces whereas, among those in non-unionised workplaces, climate deteriorated significantly in the 1990s relative to the 1980s. We can conclude that the pattern of decline was somewhat different for employees in unionised and non-unionised workplaces, but that climate nevertheless declined for both sets of employees over the period.

*Have union effects on climate differed with union strength over time?*

In our first hypothesis, we suggested that the reduced power of unions since the 1980s may have led to a deterioration in perceptions of workplace governance in the presence of unions. Our findings above indicate that, although perceptions of climate deteriorated during the 1990s among those in unionised workplaces, this deterioration was, if anything, a little less pronounced than among those in non-unionised workplaces. This is not consistent with the possibility that the weakening of unions in the 1990s (see Table 1) had increased the rate of decline in perceptions of climate in unionised workplaces. However, it may be that reductions in union power fed through to perceptions of climate in ways we did not anticipate. As noted earlier, we have data on employees' perceptions of union power at their workplace for 1989 and 1998 only. Using the same set of controls as in Appendix Table A24, we interacted perceptions of union power with a 1998 dummy. The results confirmed the findings presented in Section 6 (page 36), with perceptions of climate being significantly poorer among employees who thought the union had too little power, relative to those who worked in a non-unionised environment. Perceptions of climate were poorer in 1998 than in 1989. However, interactions between perceptions of union power and the 1998 dummy were not significant. These findings held when we ran separate analyses for the public and private sectors, and for union members and non-members in unionised workplaces. This suggests that, although there may have been a decline in union power at the workplace over the period, it had no bearing on employees' perceptions of employer–employee relations, and cannot explain deteriorating perceptions of the employee relations climate since then among those in unionised workplaces.

*Have union effects on climate differed with changing management attitudes to union membership?*

We conducted a similar exercise to establish whether the hardening attitude of management to unions, illustrated in Table 2 and indicated in other research discussed earlier, may have contributed to deteriorating perceptions of climate. We pool the data for the only two years in which we have data on employee perceptions of management attitudes to union membership, namely 1989 and 1998. The findings replicate those presented in Section 6 (page 37) for 1998, showing employer discouragement of union membership was detrimental to climate, while encouragement of union membership was associated with better climate. But interactions between the 1998 dummy and management attitudes to union membership were not significant. According to the BSAS data in Table 2, employees only perceived a hardening of employer attitudes to unions where they were working in unionised workplaces. However, the results were no different when the analysis was confined to employees in unionised workplaces.<sup>51</sup> So, although management discouragement of union membership was associated with poorer perceptions of climate, their greater propensity to discourage membership by 1998 did not contribute to the deterioration in perceptions of climate between 1989 and 1998.

*Has the impact of union effectiveness on climate differed over time?*

Finally in this section, we turn to the impact of union effectiveness over time, as measured by whether employees thought unions were doing their job well or not. As discussed in Section 3, the impact of union effectiveness may change over time, even though union effectiveness has not varied significantly over the period (Table 3), if the link between positive (negative) perceptions of climate and effective (ineffective) unions has strengthened over time. In fact, we found no evidence of changes in the impact of union effectiveness over the period 1983–1998.

*Summary of union effects on employee perceptions of the employee relations climate*

In 1998, employees working in unionised workplaces had a poorer perception of the employee relations climate than those working in non-unionised workplaces, *ceteris paribus*. The effect was specific to unions, as opposed to staff associations, and in particular to unions recognised by employers for pay bargaining. This indicates that the effect was related to situations in which employers bargained with worker representatives over pay. However, further

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<sup>51</sup> The findings also held when running analyses separately for employees in the public and private sectors.

investigation revealed that the effect was confined to employees working in workplaces with a recognised union and a worker representative on-site. This might indicate that the effect was confined to unions that were organisationally strong. When we directly tested the effect of employee perceptions of union power at the workplace, we found that, where employees thought the power balance between union and employer was right, unions had no adverse effect on climate. This finding confirms Marshall's (1992) theory, discussed earlier, and confirms other empirical research using WERS98 (Bryson and Wilkinson, 2001). The adverse effect of unions was confined to situations in which employees thought unions were too weak. Contrary to expectations, climate was not poorer in the small number of cases where unions were thought to have too much power. This raises some doubts about interpreting the negative effect of on-site worker representation as an organisational strength effect. These effects held across union membership status and having accounted for employees' value set with the 'left-right' scale.

Employers can influence employee perceptions of the employee relations climate through their attitude to unions. Where they are supportive, perceptions of climate are better; where they oppose it, climate is poorer, whether the employee is a union member or not, works in a unionised or non-unionised environment, or in the public and private sectors.

Similarly, unions can influence perceptions of climate through their behaviour. As other research has indicated (Bryson and Wilkinson, 2001), unions are best for employee relations where they do their job well, where they have regard to their members' concerns, and where they contribute to the smooth running of the workplace. In these circumstances, perceptions of climate are not significantly different from those in similar non-unionised workplaces. Conversely, where unions are viewed as ineffective, climate is poorer than in comparable non-unionised workplaces.

Repeat cross-section analyses showed that employee perceptions of climate deteriorated over the period 1983–1998. The pattern of decline was somewhat different for employees in unionised and non-unionised workplaces, with the decline in the 1990s more pronounced among employees in the non-unionised sector. There was no evidence that union strength, employer attitudes to unions, or perceptions of union effectiveness were associated with changes in perceptions of climate.

### **Employee perceptions of management's treatment of employees and unions**

This section explores factors associated with trust in management, and management's preparedness to engage with employee representatives.

Our main focus is employees' perception that 'managers at my workplace usually keep their promises to the employees', available only in BSAS98. It is plausible that, by holding employers accountable to their employees for the actions they take, unions may increase the likelihood of employees agreeing with this statement. In fact, descriptive analyses show employees in workplaces recognising unions for pay bargaining were *less* likely to agree with this statement than employees in non-unionised workplaces (Appendix Table A10). Of course, there may be many reasons for this association. It may simply reflect value sets of unionised workers, who may be more critical of management *per se*, regardless of their own workplace circumstances. It may arise through the politicisation of unionised workers resulting in 'voice-induced complaining', or a heightened awareness of managerial shortcomings due to the information available to unionised workers. It may arise because longer workplace tenure, associated with greater dissatisfaction at work, is associated with unionisation. All of these possible causes were discussed in Section 4 (pages 22 and 26), and we seek to account for them in our multivariate analyses. It is also possible that the association arises because unions find a foothold among poorer employers where bad employment practices provide unions with a basis for organisation. We control for a range of employer characteristics, but we cannot ascertain whether poor management came *before* unionisation or not. We can only point to the relative durability of unionisation and assume that our union measures pre-date employee perceptions of workplace governance at the time of interview (see Section 5, page 29, for further discussion).

To establish whether there is a truly independent association between unionisation and perceptions that management keep their promises to employees, we ran ordered probits on the measure described in Appendix Table A10. Our dependent variable runs from 0 ('strongly disagree') to 4 ('strongly agree') so that negative coefficients indicate stronger disagreement with the statement that management 'usually keep their promises to employees'.

Appendix Table A25 presents six models for all employees in employment in 1998. Without controls, union recognition was associated with an increased perception that managers do not keep their promises (Model (1)). The negative effect of on-site worker representation accounts for some of the union effect (Model (2)). The effect is confined to recognised unions, as opposed to recognised staff associations (Model (3)). However, the effect is not significant with the inclusion of control variables (Model (4)). As anticipated, union members were less likely to trust managers than non-members (Model (5)). Model (6) distinguishes between union members in workplaces with and without union recognition. Compared to the reference category, non-members in non-unionised workplaces, members in recognised

workplaces were less likely to think managers kept their promises, but the effect was only weakly significant. However, there was a clear membership effect among employees working in unionised workplaces: union members were less likely to think that managers kept their promises.<sup>52</sup>

When added to Model (5) in Appendix Table A25, the left-right index was positive and significant (0.27,  $t=4.10$ ), indicating that those who were more ‘rightward’ leaning were more inclined to trust managers. Furthermore, its introduction reduced the union membership coefficient to insignificance. When interacted with union membership, the dummy variable identifying low scorers on the index was negative and significant ( $-0.25$ ,  $t=2.76$ ), whereas the union main effect and interaction were not significant. This is strong evidence that employees’ trust in management was accounted for in part by their broader perspectives on distributive justice, and not purely through their work experiences. Nevertheless, perceptions of distributive justice at the workplace also mattered, since those viewing the gap between the lowest and highest paid as ‘too big’ or ‘much too big’ were less inclined to trust management to keep their promises.<sup>53</sup>

Running separate analyses for employees in the private and public sectors shows membership and workplace effects differed across employees in the two sectors. In the private sector, perceptions that management kept their promises were not associated with features of worker representation. But union members were less likely than non-members to think management kept their promises, whether they worked in a workplace with a recognised union or not. In the public sector, membership effects were absent, but trust in management was lower in the presence of a recognised union, and particularly low where there was union recognition but no on-site representative.<sup>54</sup>

We can conclude from this analysis that perceptions that managers keep their promises were strongly influenced by employees’ value sets, as measured

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52 Using the SVYLC option available in STATA to compute significant differences for linear combinations of coefficients, we find that the coefficient is  $-0.20$  with a  $t$ -statistic of 2.07. This finding is confirmed when we ran separate models for employees in unionised and non-unionised workplaces. The union membership effect is only significant among employees in workplaces recognising unions ( $-0.26$ ,  $t=2.38$ ).

53 When introduced to Model (5) in Appendix Table A25, the pay gap dummy was significant ( $-0.38$ ,  $t=5.25$ ) but the union membership effect remained significant ( $-0.20$ ,  $t=1.95$ ). When interacted, both main effects were significant and the interaction was not significant.

54 Using the same controls as those used in Appendix Table A25 (with the obvious exception of the sector dummies), trust in management was not significantly different among employees in non-unionised workplaces and those working in workplaces with recognised unions and an on-site representative. However, where employees worked in a unionised workplace without on-site representation, they were significantly less likely to say that management kept their promises ( $-0.49$ ,  $t=2.07$ ).

by the left-right scale, and that this goes some way to explaining the membership effect identified. Workplace unionisation was associated with a more critical attitude towards management, but only in public sector workplaces where employees had no on-site worker representative.

*Union power and employee trust in management in 1998*

If unions are able to hold managers accountable to employees for their actions, we might expect trust in managers to be lower where the union is weak, and higher where employees believe that there is at least a balance of power between union and employer. This hypothesis, outlined in Section 3, is confirmed by the results presented in Appendix Table A26.

In the economy as a whole, employees in unionised workplaces who thought the union had ‘too little’ or ‘far too little’ power, were significantly less likely to think that managers at their workplace usually kept their promises to employees than employees in non-unionised workplaces (Model (1)). Where unionised workers thought the balance of power was ‘about right’, they were significantly *more* likely than non-unionised workers to think that managers kept their promises.<sup>55</sup> Where unions were thought to have ‘too much’ or ‘far too much’ power, trust in management was not significantly different from trust in non-unionised workplaces.

When introduced to this model, the left-right scale was positive and significant (0.23,  $t=3.50$ ) but the union power effects were unaffected. This suggests that perceptions of union power were not simply proxying the value set employees brought with them into the workplace. The power effect was strong in the unionised sector, for members and non-members alike (Models (3) and (4) respectively). It was also apparent for private sector employees in general (Model (5)). In the public sector, trust in management was not significantly different across employees in unionised and non-unionised workplaces, regardless of perceptions of union power (Model (6)). However, among employees in unionised public sector workplaces, weak unions were associated with lower trust than unions with the ‘right’ amount of power (Model (6), 0.61,  $t=4.50$ ).

*Did management attitudes to union membership influence employee trust in management in 1998?*

In models with identical controls to those estimating perceptions of climate in Appendix Table A21 (which include objective measures of unionisation and

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<sup>55</sup> The marginal effect of having a union with too little power, relative to having no union at all, was to increase the chances of disagreeing that managers kept promises by 6 per cent, whereas the marginal effect of having a union with the right amount of power was to increase those chances by 6 per cent, *ceteris paribus*.

membership status), employees were more likely to believe that managers usually kept their promises to employees where they also thought management were supportive of union membership. Trust was least evident where employees thought managers at their workplace discouraged membership. These findings held across the private and public sectors, and within unionised workplaces among both members and non-members. They were also robust to the introduction of the 'left-right' scale. The effects were quite large. In the whole sample model, the marginal effect of managers discouraging membership, relative to viewing union membership as 'not an issue', was to reduce the chances of agreeing that managers kept promises by 10.5 per cent, whereas the marginal effect of managers encouraging membership was to increase those chances by 14.9 per cent, *ceteris paribus*.

Since the question is also asked of employees in non-unionised workplaces, we ran the model on these employees separately. Once again, trust in management was greater where management supported union membership, but support for membership was very rare (only six unweighted cases). Among employees in non-unionised workplaces there was no significant difference in trust for management between employees who thought their managers discouraged membership and those who simply saw it as 'not an issue'. But where managers discouraged membership, employees were less likely to agree that managers kept their promises than where managers were accepting of union membership (0.45,  $t=2.19$ ).

It is not immediately obvious why employees were more likely to trust managers at their workplace where the employer actively encouraged union membership, and were less trusting of those who discouraged membership. One possible explanation is that management support for worker representation signals managerial openness with employees. Alternatively, managers may be more willing to keep their side of a bargain with employees where they are dealing with competent unions that they feel able to support – although this does not account for the effects among employees in non-unionised workplaces. In any event, the association between management support for (opposition to) union membership and higher (lower) employee trust in managers may partly explain the association between management support for (opposition to) union membership and better (poorer) perceptions of the employee relations climate.

*Did perceptions of union effectiveness influence employee trust in management in 1998?*

Employee perceptions of how well they thought unions at their workplace were doing their job had similar effects on employee trust in management as they did on perceptions of the employee relations climate. Using models with



identical controls to those estimating perceptions of climate in Appendix Table A22, we found that employees were less likely to believe that managers usually kept their promises to employees where the union was thought not to be doing a good job.<sup>56</sup> Where unions were thought to be doing their job well, trust in management was similar across employees in unionised and non-unionised workplaces. These findings held in models for the whole sample, members and non-members in unionised workplaces, and for the public sector. In the private sector, trust did not differ significantly between employees in non-unionised workplaces and those in workplaces with ineffective unions. However, trust in management was higher where unions were thought to be doing their jobs well, though the effect was only weakly significant.<sup>57</sup>

Our second measure of union effectiveness, unions' responsiveness to members' problems and complaints, was also associated with trust in managers. Trust in managers did not differ significantly between those working in a workplace without a union or staff association, and those working in a workplace with a union that was viewed as responsive to members' needs. However, where employees thought the union took little notice of members' problems and complaints, employees were less inclined to think that managers usually kept their promises to employees. These findings held in our separate analyses for different groups of employees, except for union non-members and employees in the public sector, where union responsiveness was not significantly associated with trust in management.

We ran identical analyses for our third measure of union effectiveness, that is, the contribution of unions to the smooth running of the workplace. Where unions were perceived to be contributing to the smooth running of the workplace, employees' trust in management was higher than where there were no unions. Where employees disagreed with the statement that unions were contributing to the smooth running of the workplace, trust in management was lower than where there were no unions, *ceteris paribus*.<sup>58</sup>

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56 In the whole sample model, the marginal effect of having a union that was not doing its job well relative to having no union at all, was to increase the chances of disagreeing that managers kept promises by 5.4 per cent.

57 Relative to employees in non-unionised workplaces, the coefficient for a union doing its job well was 0.23,  $t=1.82$ .

58 Among employees as a whole, the marginal effect of having a union which employees thought did not contribute to the smooth running of the workplace increased the probability of disagreeing that managers keep their promises by 6 per cent, relative to having no union. The marginal effect of having a union which employees thought did contribute to the smooth running of the workplace was to reduce the probability of disagreeing that management kept promises by 4.4 per cent.

### Perceptions that unions are usually ignored by management

Another aspect of the way in which management treats employees is their attitude to collective representation of employees' interests. In BSAS98, employees who said there was a union or staff association present at their workplace were asked how strongly they agreed or disagreed with the statement that 'the trade unions (staff association(s)) at my workplace are usually ignored by management'. When we ran ordered probit models on all employees in the unionised sector, features of worker representation at the workplace and individual union membership were not significantly associated with responses to this statement. Not surprisingly, employees were significantly less likely to think that managers ignored unions at their workplace where the union had the right amount or too much power, relative to instances in which they had 'too little power'. They were also less likely to be ignored where unions were thought to be doing their job well. These findings suggest that management takes greater account of unions where their power requires this, and where unions are operating effectively in the interests of their members.

#### *Union effects on managers' treatment of employees over the period 1983–1998*

As discussed in Section 4 (page 20), our only repeat cross-section data relating to perceptions of the way managers treat their employees are responses to the statement: 'Management will always try to get the better of employees if it gets the chance'. Whether employees agreed or disagreed with this statement may tell us more about employees' general attitudes to management, rather than managers at their workplace, so it is not ideal for our purposes.

Running models for 1998 using controls identical to those used in Appendix Table A18, we find membership effects dominate, with union members more likely than non-members to think managers try to get the better of them, whether they worked in workplaces with a recognised union or not. Further investigation revealed that this effect was particularly strong where there was an on-site worker representative.

Appendix Table 27 presents pooled repeat cross-section analyses for employee perceptions that management tries to get the better of employees. The linear time variable alone reveals no trend (Model (1)), consistent with the descriptive information presented in Appendix Table A11.<sup>59</sup> However, the time trend is positive and weakly significant once interacted with union recognition, suggesting that employees were more likely to agree with the statement over time (Model (2)). Those in workplaces with recognised unions were

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<sup>59</sup> The data were not collected in 1983, 1984 and 1997. Data on qualifications and workplace size were available for all the years, so they are added to the models.

more likely to agree that managers tried to get the better of employees, but the interaction with the time trend is not significant. However, the picture changes once controls are introduced (Model (3)). The positive time trend is stronger and significant at a 95 per cent confidence level, but the union recognition main effect is negative and significant, while its interaction with the linear time trend is positive and significant. This indicates that, on average, employees in unionised workplaces were less likely than those in non-unionised workplaces to think managers tried to get the better of employees, but that employees in unionised workplaces were increasingly likely to agree with the statement. The effect is robust to the inclusion of the unemployment–vacancy ratio that accounts for business cycle effects (Model (5)). The linear trend is also more precisely specified in this model. The analysis suggests that employees were increasingly likely to think that managers will try to get the better of employees if they get the chance. The presence of a recognised union reduces the likelihood of agreeing with the statement, perhaps because employees’ responses to the general statement are influenced by their own circumstances, in which unions can effectively combat such behaviour on the part of employers. However, the fact that employees in unionised workplaces were increasingly likely to think managers try to get the better of employees may signal a decline in unions’ ability to act as an effective constraint on management.<sup>60</sup>

To assess the effect of union power directly, we introduced our union power dummies to models with controls like those in Appendix Table A27.<sup>61</sup> Where employees thought unions had ‘too much’ power or the ‘right amount’, they were significantly less likely to think that managers would try to get the better of employees than in instances in which there was no union. Where unions were thought to have ‘too little’ power, employees were *more* likely to think managers would seek to get the better of employees, when compared with similar employees in non-unionised workplaces. These effects were similar in 1989 and 1998, with the exception of unions having ‘too much power’, which became statistically insignificant in 1998.

Similar analyses pooling 1989 and 1998 data showed that, *ceteris paribus*, employees were most likely to think managers would try to get the better of employees where they also thought managers at their workplace discouraged union membership. This supports our earlier finding which showed employees were less likely to trust managers who opposed union membership. Effects were similar in 1989 and 1998.

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60 Because the dependent variable is one of the items which contributes to the ‘left-right’ index we could not control for employees’ value sets using this scale.

61 Because the union power data were only available for 1989 and 1998, the linear time trend was replaced by a 1998 dummy and the unemployment–vacancy ratio control was dropped.

Union effectiveness was also associated with perceptions of managers trying to get the better of employees. Over the period 1985–1998, *ceteris paribus*, where employees thought unions were doing their job well, they were less likely to think that managers sought to take advantage of employees than employees in non-unionised workplaces. The opposite was the case where unions were thought not to be doing their job well. Interactions with a linear time trend showed employees in unionised workplaces were increasingly likely to say that managers tried to get the better of employees, but this was the case whether the union was thought to be doing its job well or not.

*Summary of union effects on managers' treatment of employees and unions*

This section has shown that, where unions were present, trust in managers was significantly higher when they had sufficient power to challenge employers, where they represented employees effectively, and where they were supported by management. In these circumstances, trust in managers was either higher than, or similar to, trust among employees in non-unionised workplaces. This suggests that unions can hold managers accountable for their behaviour, increasing employees' belief that managers keep their promises. However, where unions were weak, ineffective or faced management opposition, employees were less trusting of management than where there was no union present.

Although employees' trust in management has diminished since the early 1980s, particularly among employees in unionised workplaces, there is little evidence to suggest that this is associated with a diminution in union power, managers' attitudes to unions, or the perceived effectiveness of unions.

## Employee perceptions of managerial performance

For all the reasons outlined at the beginning of Section 6 (page 45) (worker politicisation, better information, longer job tenure, the value sets of union members and non-members), we might expect employees in unionised workplaces to be more critical of managerial performance than similar employees in similar non-unionised workplaces. Unions may also have direct positive and negative effects on workplace performance as noted earlier in the paper (for fuller accounts of the links between unions and workplace performance see Bryson and Wilkinson, 2001; Bryson, 2001). If employees link managerial performance with workplace performance, these union effects on workplace performance will influence perceptions of managerial performance.

We ran ordered probits on the measure of managerial performance presented in Appendix Table A12. Our dependent variable runs from 0 ('not well') to 2 ('very well') so that negative coefficients indicate poorer percep-

tions of managerial performance. Appendix Table A28 presents seven models for all employees in employment in 1998. Without controls, union recognition was associated with poorer perceptions of managerial performance (Model (1)), the effect being confined to recognised unions as opposed to recognised staff associations or active unions (Model (3)). The effect remains significant with the inclusion of control variables (Model (4)). As anticipated, union members had significantly poorer perceptions of managerial performance than other employees (Model (5)). When individual union membership is introduced, union recognition is no longer significant, suggesting that at least part of the effect captured by the recognition dummy relates to union members' more critical attitude to management. Model (6) identifies both membership and recognition effects. Union members in workplaces with recognised unions had poorer perceptions of managerial performance than other employees, *ceteris paribus*, including non-members in unionised workplaces (-0.24,  $t=2.41$ ). So there is a membership effect among those in unionised workplaces. Although there is a recognition effect as well, this is confined to union members.

However, when we distinguish between the various combinations of union membership, workplace recognition, and the presence of on-site worker representatives, we find that members and non-members in workplaces with recognition and on-site representation were most critical of how well their workplace was managed (Model (7)). This is evidence of a union workplace effect. However, it was confined to unionised workplaces with on-site representation.<sup>62</sup> But the effect for non-members was only weakly significant: within workplaces with recognition and on-site representation, members were more critical of management than non-members.<sup>63</sup> So membership effects were also apparent. These findings closely resemble those relating to perceptions of the employee relations climate.

Testing the sensitivity of the union membership effect to the inclusion of the 'left-right' index we split union members into those with high and low scores on the index. *Ceteris paribus*, only those scoring below the mean on the index were significantly more likely to say their workplace was not

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62 This was confirmed when we simply distinguished between no recognition, recognition with on-site representation and recognition without on-site representation. Union recognition was only negative and significant (-0.26,  $t=2.65$ ) where there was an on-site representative.

63 Relative to non-members in workplaces with recognition and on-site representation, the coefficient for members with recognition and on-site representation is -0.24,  $t=2.41$ . The marginal effect of being a union member in a workplace with union recognition and on-site representation, relative to a non-member in a non-unionised workplace with no representative on-site, was to increase the chances of believing the workplace was 'not well' managed by 14 per cent, and to reduce the chances of thinking it was managed 'very well' by 12 per cent.

managed well, relative to never-members.<sup>64</sup> This indicates that union members' perceptions of managerial performance were accounted for in part by their broader perspectives on distributive justice. However, perceptions of distributive justice at the workplace also mattered, since those viewing the gap between the lowest and highest paid as 'too big' or 'much too big' were more inclined to say that the workplace was managed 'not very well'.<sup>65</sup>

Separate analyses for employees in the private and public sectors show membership and workplace union effects differed across employees in the two sectors. In the private sector, union membership was not significant. The dominant factor in determining perceptions of managerial performance was the presence of a worker representative on-site. Using the same controls as those in model (5) in Appendix Table A28, we added a three-way variable, distinguishing employees in workplaces with no recognised union and no worker representative (the reference category) from those with a recognised union and no representative, and those with recognition and on-site representation. It showed recognition without representation was significantly associated with better perceptions of managerial performance (0.39,  $t=2.17$ ). Recognition with representation was associated with poorer performance ( $-0.20$ ,  $t=1.68$ ). This shows that it is the combination of union recognition and on-site representation, rather than union recognition *per se*, which is associated with poorer perceptions of managerial performance. This could be an effect of union strength which, by constraining management's ability to manage, may result in less efficient outcomes for the workplace. Alternatively, strong unions may have more information about the managerial process (and thus managerial shortcomings) than weaker unions, or have the organisational capacity to mobilise workers in opposition to management actions that, in other workplaces, may go unnoticed.

Applying the same model to the public sector, we found employees in workplaces with recognition but no on-site representation had perceptions of managerial performance that did not differ significantly from the perceptions of those in workplaces without recognition ( $-0.31$ ,  $t=1.21$ ). However, perceptions were poorer where there was a combination of recognition and on-site representation ( $-0.45$ ,  $t=2.46$ ). In addition, union members viewed managerial performance as poorer than non-members, *ceteris paribus*.

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64 The coefficient was  $-0.46$ ,  $t=3.71$ , whereas, relative to non-members, the coefficient for union members scoring above the median was  $-0.08$ ,  $t=0.57$ .

65 When introduced to Model (5) in Appendix Table A28, the pay gap dummy was significant ( $-0.37$ ,  $t=5.34$ ) but the union membership effect remained significant ( $-0.24$ ,  $t=2.37$ ). When interacted, both main effects were significant (although union membership was only significant at a 90 per cent confidence level) and the interaction was not significant.

We conclude from this analysis that, across the economy, perceptions of managerial performance were poorer in the presence of recognised unions, but only in the presence of on-site representation. Perceptions of how well management performed were influenced by employees' value sets as measured by the left-right scale, and this goes some way towards explaining the union membership effect identified. In the private sector, union membership was not significant, and the negative, weak effect of union recognition was confined to instances in which there was on-site worker representation. In the absence of on-site worker representation, there were indications that managerial performance was viewed more positively than among similar employees in non-unionised workplaces. In the public sector, union members viewed managerial performance as poorer than non-members, *ceteris paribus*. As in the case of the private sector, managerial performance was viewed as poorer in the presence of a recognised union where there was also on-site representation.

*Union power and employee perceptions of managerial performance*

Appendix Table A29 presents evidence of a strong association between employee perceptions of union power at the workplace and perceptions of managerial performance. In the whole sample model (Model (1)), perceptions of managerial performance were significantly poorer among employees in unionised workplaces than they were among employees in non-unionised workplaces, but only where unions were weak.<sup>66</sup> Where they have the 'right' amount of power, employees' perceptions of managerial performance were not significantly different from those among employees in non-unionised workplaces, *ceteris paribus*. This may be because unions require a certain degree of power to operate as effective agents for employers in delivering better performance, or because unions can help enforce better managerial practices, but only where they have sufficient power. The negative but insignificant coefficient for unions with 'too much' power hints at the possible deleterious effects of powerful unions capable of undermining management with their bargaining power. In the unionised sector, managerial performance excels where unions have the right amount of power (Model (2)), a perception held by members and non-members (Models (3) and (4) respectively). Among employees in the private sector (Model (5)), managerial performance was viewed more favourably where unions had the 'right' amount of power than it was where there was no union. Results were somewhat different in the public sector (Model (6)), where unions were

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66 The marginal effect of having unions with too little power, relative to having no unions, was to reduce the chances that the workplace was 'very well' managed by 13 per cent, and to increase the chances that it was 'not well' managed by 14 per cent.

associated with poorer managerial performance than in non-union circumstances, whether they had ‘too little’ power or the ‘right’ amount. However, performance was significantly poorer where unions had ‘too little’ power than where they had the ‘right’ amount ( $-0.46$ ,  $t=3.13$ ).

*Were management attitudes to union membership associated with perceptions of managerial performance?*

Using identical controls to those used in estimating perceptions of climate in Appendix Table A21, employees were more positive about how well their workplace was managed where managers were thought to be supportive of union membership, and were most negative where managers were thought to oppose union membership. To give an indication of the size of these effects, the marginal effect of managerial opposition to union membership was to increase the chances that the workplace was ‘not well managed’ by 20.7 per cent compared to instances in which membership was ‘not an issue’. Opposition to union membership reduced the chances of being managed ‘very well’ by 15.3 per cent, relative to instances in which membership was ‘not an issue’, whereas support for membership increased the chances by 13.1 per cent. These effects were independent of union recognition (itself negative though only significantly so in the public sector), on-site worker representation (negative and significant in the private sector, and among union members in unionised workplaces) and union membership (itself negative and significant). These findings held across the private and public sectors and, within unionised workplaces, across union members and non-members. Management opposition to union membership also had a deleterious effect on perceptions of managerial performance among employees in non-unionised workplaces: in separate analyses for these employees, the coefficient for managerial opposition was 0.73 ( $t=5.13$ ) relative to instances in which membership was ‘not an issue’.

There are at least three possible explanations for these associations. First, it may be that managerial support for unions does raise managerial performance. In earlier sections we found management support for union membership was associated with increased trust in management and a better employee relations climate. These are two of the mechanisms by which management support for union membership might engender better workplace performance which, in turn, reflects on perceptions of managerial performance. This is consistent with the idea that a positive attitude to unions where they exist can create an environment that is conducive to collaborative, and thus more productive, relations at the workplace. Secondly, management orientations to unions may come ‘after the fact’, in that they give support to unions where they have been effective partners, and are less fulsome in their support where



unions have not delivered for the employer. Another way of expressing this is to say that they only support union membership when they can afford to do so. In this case, we would not be justified in attributing a causal link between managerial orientations to unions and managerial performance. Thirdly, employees may simply think more favourably of managers and their performance where those managers appear supportive of worker voice.

*Were employee perceptions of union effectiveness associated with perceptions of managerial performance?*

Employee perceptions of how well they thought unions at their workplace were doing their job had similar effects on perceptions of how well the workplace was run as they did on employee trust in management, so we will not elaborate on them in detail. Using models with identical controls to those estimating perceptions of climate in Appendix Table A22, employees were more critical of managerial performance where the union was thought not to be doing a good job.<sup>67</sup> Where unions were thought to be doing their job well, perceptions of managerial performance were similar across employees in unionised and non-unionised workplaces. These findings held in models for the whole sample, members and non-members in unionised workplaces, and for the private sector. In the public sector, perceptions of managerial performance were significantly poorer among employees in unionised workplaces, whether unions were doing their job well or not. However, managerial performance was higher where unions were thought to be doing their jobs well, compared to instances in which they were not.

The findings were almost identical when using our second measure of union effectiveness, unions' responsiveness to members' problems and complaints. Where employees thought the union took little notice of members' problems and complaints, employees' perceptions of managerial performance were less favourable than where there were no unions. Where unions were responsive, perceptions of managerial performance did not differ significantly from instances in which there was no union (with the exception of the public sector, where managerial performance was viewed more negatively).

We ran identical analyses for our third measure of union effectiveness, the contribution of unions to the smooth running of the workplace. Where unions were perceived to be contributing to the smooth running of the workplace, employees' estimation of managerial performance was no differ-

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<sup>67</sup> In the whole sample model, the marginal effect of having a union that was not doing its job well relative to having no union at all, was to increase the chances of saying the workplace was 'not well managed' by 15.4 per cent.

ent from that made by employees where there were no unions. Where employees disagreed with the statement that unions were contributing to the smooth running of the workplace, employees thought managerial performance was lower than where there were no unions, *ceteris paribus*.

*Union effects on managerial performance over the period 1983–1998*

Turning our attention to *changes* in union effects on managerial performance over the fifteen years to 1998, we adopt techniques identical to those used in Section 6 (page 40) to analyse perceptions of climate over time.

Appendix Table A30 presents models estimating changes in perceptions of how well the workplace was managed over the period 1983–1998, with time indicated by year dummies with the reference category being the start of the series, 1983. (The model specifications are identical to those estimating climate in Appendix Table A23.) Model (1) without controls confirms the descriptive analysis (Appendix Table A12) in showing a deterioration in perceived managerial performance over the period. The trend is more apparent on introducing the union recognition dummy, which is itself negative and significant (Model (2)). Interactions between the year dummies and union recognition show no obvious trend, without controls or with controls (Models (3) and (4) respectively). The union recognition main effect remains strong and significant, though the coefficient is smaller once we account for union membership status (Model (5)).<sup>68</sup> Identical separate analyses for union members and non-members, and employees in unionised and non-unionised workplaces, confirmed that the deterioration in perceptions of climate held across all these groups of employees. These findings are very similar to the findings presented for employee perceptions of climate.

Although none of the interactions between union recognition and year dummies is statistically significant, the interaction terms were jointly significant.<sup>69</sup> So in Appendix Table A31 we alter our specification. Models (1) to (3) use a linear time trend, which shows a deterioration in managerial performance over time. In Model (2), both union recognition and the linear time trend are negative and significant, but the interaction between the two is positive and significant, indicating an amelioration of the underlying negative perceptions of managerial performance in unionised workplaces over time.

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<sup>68</sup> Sensitivity analyses included the incorporation of workplace size, qualifications and the left-right scale. These controls were not available for all years (see Section 4, page 26) so that reference years varied. However, the main union recognition and union membership effects remained significant. Interactions between union recognition and year dummies were never significant.

<sup>69</sup> In Model (4) the adjusted Wald test confirms they are on the margins of being jointly significant.  $F(13, 17144) = 1.71, F=0.0521$ .

However, the interaction becomes insignificant on the introduction of controls (Model (3)). Again, these findings closely parallel those for climate presented earlier.

The trend in Appendix Table A30 is non-linear, with perceptions of managerial performance deteriorating in the 1990s relative to the 1980s. So, in Models (4) to (6) in Appendix Table A31 we incorporate a dummy for a non-linear time trend after 1992. In Model (5) the post-1992 dummy is interacted with union recognition. The linear time trend remains negative and significant, with the post-1992 dummy also negative and significant, indicating that there was a deterioration in perceptions of managerial performance in the 1990s relative to the 1980s. However, the interaction of union recognition and the post-1992 dummy is positive and significant, suggesting that perceptions of managerial performance worsened more rapidly in the 1990s among those in non-unionised workplaces. With controls added, however, the coefficient for the interaction is no longer significant (Model (6)).<sup>70</sup>

Using the same set of control variables as those in Appendix Table A30, we ran separate models for employees in unionised and non-unionised workplaces. The linear trend is negative and significant for those in unionised workplaces ( $-0.012$ ,  $t=2.82$ ) but insignificant for those in non-unionised workplaces ( $-0.007$ ,  $t=0.01$ ). The post-1992 dummy, by contrast, is negative and weakly significant for those in non-unionised workplaces ( $-0.14$ ,  $t=1.63$ ) but insignificant for those in unionised workplaces ( $-0.04$ ,  $t=1.20$ ). This indicates that perceptions of managerial performance deteriorated in a broadly linear way over the period for employees in unionised workplaces whereas, among those in non-unionised workplaces, it deteriorated significantly in the 1990s relative to the 1980s. We can conclude that the pattern of decline was somewhat different for employees in unionised and non-unionised workplaces, but that perceptions of managerial performance nevertheless declined for both sets of employees over the period.

*Have union effects on managerial performance differed with union strength over time?*

Using the same set of controls as in Appendix Table A30 on pooled data for 1989 and 1998, we interacted perceptions of union power with a 1998 dummy to see if perceptions of managerial performance had shifted with perceptions of union power at the workplace. These interactions were not significant. Although there may have been a decline in union power at the workplace over the period, it had no bearing on employees' perceptions of managerial performance.

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<sup>70</sup> Business cycle controls were not significant and made no difference to the results.

*Have union effects on managerial performance differed with changing management attitudes to union membership?*

We conducted a similar exercise to establish whether the hardening attitude of management to unions may have contributed to deteriorating perceptions of managerial performance. Analyses of pooled data for 1989 and 1998 found no evidence of changing perceptions associated with changing perceptions of management support for unions.

*Has the impact of union effectiveness on managerial performance differed over time?*

Finally in this section, we turn to the impact of union effectiveness over time, as measured by whether employees thought unions were doing their job well or not. We found no evidence of changes in the impact of union effectiveness over the period 1983–1998.

*Summary of union effects on employee perceptions of the managerial performance*

Across the economy, perceptions of managerial performance were poorer in the presence of recognised unions, but only in the presence of on-site representation. This association between the combination of union recognition and on-site representation was confirmed in separate analyses for the private sector. However, in the absence of on-site worker representation, there were indications that managerial performance was viewed more positively than among similar employees in non-unionised workplaces.

The positive association between managerial support for union membership and perceptions of better managerial performance can be interpreted in a number of ways. But it was certainly the case that employees thought workplaces were better run where management were supportive of unions, and were more poorly run where managers opposed membership. This is consistent with the idea that managers can influence performance through their engagement with unions.

Managers may also be able to influence perceptions of their performance by ensuring that unions have sufficient power to make a positive contribution to the running of the workplace, since unions with the ‘right amount of power’ were associated with better managerial performance than unions with too little power. If the power balance is right, perceptions of managerial performance do not differ across employees in unionised and non-unionised workplaces.

For their part, unions can influence managerial performance by delivering for their members. They were best able to positively influence managerial performance where they were perceived to be doing their job well, where they

had regard to their members' concerns, and where they contributed to the smooth running of the workplace. In these circumstances, perceptions of managerial performance were not significantly different from those in similar non-unionised workplaces. Conversely, where unions are viewed as ineffective, managerial performance was poorer than in comparable non-unionised workplaces.

Repeat cross-section analyses showed that employee perceptions of managerial performance deteriorated over the period 1983–1998. The pattern of decline was somewhat different for employees in unionised and non-unionised workplaces, with the decline in the 1990s being particularly pronounced among employees in the non-unionised sector. There was no evidence that union strength, employer attitudes to unions, or perceptions of union effectiveness were associated with changes in perceptions of climate.

## 7. CONCLUSIONS

In this paper we have analysed data from the BSAS 1983–1998 to establish the effect of unions and union membership on employees' perceptions of workplace governance over the period. We assess effects on three aspects of workplace governance: the employee relations climate; managers' treatment of employees and unions; and managerial performance. The paper provides broad support for the three hypotheses explored in the paper. First, that employees' perceptions of workplace governance are better where there is a balance of power between unions and management at the workplace. Second, employees' perceptions of workplace governance are better where management supports union membership, and are poorest where they actively discourage membership. Third, employees' perceptions of union effectiveness are positively associated with employees' perceptions of good workplace governance.

A further hypothesis, namely that perceptions of governance will have deteriorated since the 1980s in unionised workplaces due to the weaker position of unions in the workplace, and to declining support for unions among employers, was not supported. Although we identified deteriorating perceptions of workplace governance since the 1980s, these trends were apparent among employees in unionised and non-unionised workplaces, and there was no evidence to suggest that the trend was associated with a diminution in union power, managers' changing attitudes to unions, or the perceived effectiveness of unions.

The key findings for the 1998 cross-sectional analysis are summarised in Table 4. They summarise findings for our three key dependent variables:

**Table 4:** *Summary of key findings on union effects in 1998*

	Climate			Trust			Performance		
	All	Private	Public	All	Private	Public	All	Private	Public
<b>Recognition status (ref: no recognition)</b>									
Recog:	-		-			-	-		-
<b>Combinations of recognition and on-site representation (ref: no recognised union)</b>									
Rec	+								
Rep:	-		-				-	(-)	-
Rec no rep:						-		+	
<b>Perceptions of union power at the workplace (ref: no recognised union)</b>									
Right:		(+)		+	+			+	-
Too little:	-	-	-	-			-	-	-
Too much:									
<b>Perceptions of managerial attitudes to union membership (ref: membership 'not an issue')</b>									
Support:	+	+	+	+	+	+	+	+	+
Opposed	-	-	-	-	-	-	-	-	-
<b>Perceptions of union effectiveness (ref: no recognised union)</b>									
Effective:			-		(+)				-
Ineffective	-	-	-	-		-	-	-	-

Note: - represents a significant negative effect; + represents a significant positive effect. Blank represents no significant effect. All effects significant at a 95 per cent confidence level or above, except those in parentheses which are significant at a 90 per cent confidence level.

employee relations climate, management keeping promises to employees, and how well the workplace is managed. Results for the whole sample models are presented, along with the separate analyses for employees in the private and public sectors.

On average, workplace governance was perceived as poorer among employees in workplaces with recognised unions, relative to similar employees in similar non-unionised workplaces, or else there was no significant difference. However, this is only half the story, since managers and unions have the opportunity to influence both the size and direction of union effects on governance.

The positive association between managerial support for union membership and perceptions of better workplace governance can be interpreted in a number of ways. But it is certainly the case that employees thought that workplaces had better climate, more trustworthy managers, and were better

managed where managers supported union membership. Perceptions were poorer across all three dimensions of workplace governance where managers opposed union membership. This was equally true among employees in unionised and non-unionised workplaces. This suggests that management can influence employee perceptions of workplace governance for better or for worse through their engagement with unions. The results present something of a puzzle: why is it that managers do not adopt a more positive stance towards union membership, especially where unions are already in place? And why is it that management often opposes union membership, incurring the costs of poorer workplace governance?

Management can also influence employees' perceptions of workplace governance by ensuring that unions have sufficient power to make a positive contribution to the running of the workplace, since unions with the 'right amount of power' were associated with better workplace governance than those with 'too little power'. If the power balance is 'right', perceptions of workplace governance were similar to, or better than, perceptions of employees in non-unionised workplaces. These findings raise another puzzle: why is it that employers so often retain union recognition, but preside over a decline in union strength and influence at the workplace? Since weak unions are particularly bad for employee perceptions of workplace governance, failure to take action in support of unions may lead to a deterioration in governance.

For their part, unions are best able to contribute to better workplace governance where they are perceived to be doing their job well, where they have regard to union members' problems and complaints, and where they contribute to the smooth running of the workplace. In these circumstances, perceptions of workplace governance are generally no different from those of employees in non-unionised workplaces. However, where unions are viewed as ineffective, workplace governance is poorer than in comparable non-unionised workplaces. The question this poses for unions is: what distinguishes effective unions from ineffective ones, and what conditions are conducive to effective unionism?

The central question for government raised by this paper is: will the new statutory framework for union recognition support union effectiveness, or will it bring into being unions that do not receive the support of management, or are otherwise weak or ineffective? The answer to this question will go some way towards explaining the likely impact of the statutory recognition procedure on workplace governance.

Note: Please access the Appendix of tables to accompany this text from the PSI web site, [www.psi.org.uk/publications](http://www.psi.org.uk/publications).

## Bibliography

- Addison, J. T. and Belfield, C. (2000) 'The Impact of Financial Participation and Employee Involvement on Financial Performance: A Re-estimation Using the 1998 WERS', *Scottish Journal of Political Economy*, Vol. 47, No. 5, 571–583
- Boxall, P. and Haynes, P. (1997) 'Strategy and Trade Union Effectiveness in a Neo-liberal Environment', *British Journal of Industrial Relations*, 35(4), 567–591
- Brown, W., Deakin, S., Hudson, M., Pratten, C. and Ryan, P. (1998) *The Individualisation of Employment Contracts in Britain*, Department of Trade and Industry Employment Relations Research Series 4, London, HMSO
- Bryson, A. (1999) 'Are unions good for industrial relations?' in R. Jowell, J. Curtice, A. Park and K. Thomson (eds.) *British Social Attitudes: the 16th Report – Who shares New Labour values?*, Aldershot, Ashgate
- Bryson, A. (2000) *Have British Workers Lost Their Voice, or Have They Gained A New One? An Analysis of Matched Employer–Employee Data*, London, Policy Studies Institute Discussion Paper No. 2
- Bryson, A. (2001) *Employee Voice, Workplace Closure and Employment Growth: A Panel Analysis*, London, Policy Studies Institute Discussion Paper No. 6
- Bryson, A. and McKay, S. (1997) 'What about the workers?' in R. Jowell, J. Curtice, A. Park, L. Brook, K. Thomson and C. Bryson (eds.) *British Social Attitudes: the 14th Report*, Aldershot, Dartmouth
- Bryson, A. and Wilkinson, D. (2001) *Collective bargaining and workplace performance: An investigation using the Workplace Employee Relations Survey 1998*, London, Department of Trade and Industry Research Paper
- Cappelari, L., Lucifora, C. and Piccirilli, G. (2000) 'Union Activism, Workers' Satisfaction and Organisational Change', paper to the Applied Econometrics Association LXXIth International Conference, Helsinki, Proceedings, Session 1
- Confederation of British Industry (1998) *Human Resources Report No. 16*, London, CBI
- Cully, M., Woodland, S., O'Reilly, A. and Dix, G. (1999) *Britain at Work: As Depicted by the 1998 Workplace Employee Relations Survey*, London, Routledge.



- Darlington, R. (1994) 'Shop stewards' organisation in Ford Halewood: from Beynon to today', *Industrial Relations Journal*, 25(2), 136–49
- Dastmalchian, A., Blyton, P. and Adamson, R. (1989) 'Industrial Relations Climate: Testing a Construct', *Journal of Occupational Psychology*, 62: 21–32
- Deery, S. J., Iverson, R. D. and Erwin, P. J. (1994) 'Predicting Organisational and Union Commitment: The Effect of Industrial Relations Climate', *British Journal of Industrial Relations*, 32(4), 581–597
- Deery, S. J., Erwin, P. J. and Iverson, R. D. (1995) 'Union Management, Co-operation, Dual Allegiance and Organisational Performance', Department of Management and Industrial Relations, University of Melbourne, Working Paper No. 89
- Deery, S., Erwin, P. and Iverson, R. (1999) 'Industrial Relations Climate, Attendance Behaviour and the Role of Trade Unions', *British Journal of Industrial Relations*, 37(4), 533–558
- Deery, S. and Walsh, J. (1999) 'The Decline of Collectivism? A Comparative Study of White-Collar Employees in Britain and Australia', *British Journal of Industrial Relations*, 37(2), 245–269
- Denny, K. and Muellbauer, J. (1988) *Economic and Industrial Relations Explanations of Productivity Change: Some Evidence for the British Manufacturing Sector, 1980–1984*, mimeo, Nuffield College, Oxford
- Department of Trade and Industry (1998) *Fairness at Work*, Cmd 3968
- Fernie, S. and Metcalf, D. (1995) 'Participation, Contingent Pay, Representation and Workplace Performance: Evidence from Great Britain', *British Journal of Industrial Relations*, 33(3), 379–415
- Fernie, S., Metcalf, D. and Woodland, S. (1994) 'Does HRM Boost Employee–Management Relations?', Centre for Economic Performance Working Paper No. 548
- Forth, J. and Millward, N. (2000) *The Determinants of Pay Levels and Fringe Benefit Provision in Britain*, National Institute of Economic and Social Research Discussion Paper No. 171
- Freeman, R. and Medoff, J. (1984) *What do Unions do?*, New York, Basic Books
- Gallie, D., White, M., Cheng, Y. and Tomlinson, M. (1998) *Restructuring the Employment Relationship*, Oxford, OUP
- Guest, D., Michie, J., Conway, N. and Sheehan, M. (1999) 'Partnership and Performance: An Analysis Using the 1998 Workplace Employee Relations Survey', paper for BJIR/WERS98 Conference, Cumberland Lodge
- Hicks, S. (2000) 'Trade Union Membership, 1998–1999: An Analysis of Data from the Certification Officer and Labour Force Survey', *Labour Market Trends*, July, 329–337

- Hyman, R. (1997) 'The Future of Employee Representation', *British Journal of Industrial Relations*, 35(3), 309–336
- Jowell, R., Curtice, J., Park, A., Brook, L. Thomson, K. and Bryson, C. (1997) *British Social Attitudes: the 14th Report. The End of Conservative Values?*, Ashgate, Dartmouth
- Jowell, R., Curtice, J., Park, A., and Thomson, K. (1999) *British Social Attitudes: the 16th Report. Who Shares New Labour Values?*, Ashgate, Dartmouth
- Labour Market Trends (1997) 'Membership of trade unions in 1995 based on information from the Certification Officer', *Labour Market Trends*, February, 39
- Machin, S. (2000) 'Union Decline in Britain', *British Journal of Industrial Relations*, 38(4), 631–645
- Marchington, M. and Parker, P. (1990) *Changing Patterns of Employee Relations*, Hemel Hempstead, Harvester Wheatsheaf
- Marshall, R. (1992) 'The Future Role of Government in Industrial Relations', *Industrial Relations*, 31(1), 31–49
- Metcalf, D. (2000) *British Unions: Dissolution or Resurgence Revisited*, mimeo, Centre for Economic Performance, London School of Economics
- Millward, N. (1994) *The New Industrial Relations?*, London, Policy Studies Institute
- Millward, N., Bryson, A. and Forth, J. (2000) *All Change at Work? British Employment Relations, 1980–98, as portrayed by the Workplace Industrial Relations Survey Series*, London, Routledge
- Moreton, D. (1999) 'A model of labour productivity and union density in British private sector unionised establishments', *Oxford Economic Papers*, 51, 322–344
- Scholarios, D., Ramsay, H. and Harley, B. (1999) 'High Noon on the High Road: Testing Inside the Black Box of "High Performance" Work Systems', paper for BJIR/WERS98 Conference, Cumberland Lodge
- Skinner, C. J. (1989) *Introduction to Part A in Analysis of Complex Surveys*, in Skinner, C. J., Holt, D. and Smith, T. M. F. (eds.) New York, John Wiley and Sons
- Skinner, C. (1997) *The use of sample survey weights in the regression analysis of the Workplace Industrial Relations Survey Data*, University of Southampton, mimeo
- STATA (1999) *Manual Release 6, Volume 4*, STATA Press, College Station, Texas
- Stewart, Mark (1995) 'Union Wage Differentials in an Era of Declining Unionization', *Oxford Bulletin of Economics and Statistics*, 57(2), 143–66

- Wood, S. and Godard, J. (1999) 'The Statutory Union Recognition Procedure in the Employment Relations Bill: A Comparative Analysis', *British Journal of Industrial Relations*, 37: 203–245.
- Wood, S. and de Menezes, L. (1998) 'High Commitment Management in the UK: Evidence from the Workplace Industrial Relations Survey, and Employers' Manpower and Skills Practices Survey', *Human Relations*, 51(4), 485–515
- Wright, M. (1996) 'The Collapse of Compulsory Unionism? Collective Organization in Highly Unionized British Companies, 1979–1991', *British Journal of Industrial Relations*, 34(4), 497–513

Note: Please access the Appendix of tables to accompany this text from the PSI web site, [www.psi.org.uk/publications](http://www.psi.org.uk/publications).

## Appendix

**Table A1:** *Percentage of employees in union and staff association membership, by year*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
% union	49	47	43	42	40	39	36	37	35	35	32	31	30	29
% union/sa	49	47	47	46	46	44	40	43	40	40	36	36	34	33
Wted	803	762	830	1521	1342	1432	1260	1256	1239	1552	1568	1662	581	1544
Unwted	817	778	857	1532	1381	1462	1307	1236	1144	1447	1448	1534	546	1428

Source: BSAS. Based on responses to the question: 'Are you now a member of a trade union or staff association?' by employees working 10 hours or more per week. The question did not refer to staff associations in 1983 and 1984.

**Table A2:** *Percentage of employees working in workplaces recognising unions/staff associations, by year*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
%	66	63	62	62	62	58	58	58	56	54	55	50	50	49
Wted	803	762	830	1521	1342	1432	1260	1256	1239	1552	1568	1662	581	1544
Unwted	817	778	857	1532	1381	1462	1307	1236	1144	1447	1448	1534	546	1428

Source: BSAS. Based on responses to the question: 'At your place of work are there unions, staff associations or groups of unions recognised by the management for negotiating pay and conditions of employment?' by employees working 10 hours or more per week.

**Table A3:** *Management preference for direct consultation, 1998*

	No recognition %	Union recognised %
Strongly agree	40	18
Agree	47	36
Neither agree nor disagree	11	23
Disagree	2	22
Strongly disagree	1	2
Wted	1389	795
Unwted	986	1203

Source: Workplace Employee Relations Survey 1998. Based on responses to the statement: 'We would rather consult direct with employees than with unions.' Basis in managerial respondents in British workplaces with 10 or more employees.

**Table A4:** *Percentage of employees who were union members in the past, by year*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
%	22	23	19	21	21	19	21	22	19	22	20	21	23	
Wted	803	762	830	1521	1342	1432	1260	1256	1239	1568	1662	1544		
Unwted	817	778	857	1532	1381	1462	1307	1236	1144	1448	1534	1428		

Source: BSAS. Based on responses to the question: 'Have you ever been a member of a trade union or staff association?' Not asked in 1994 and 1997. The series presented is confined to previous membership of unions. Base is employees working 10 hours or more per week who were not union members at the time of the survey interview.

**Table A5:** *Awareness of unions at the workplace, 1998*

	Member, union recognised	Member, no union recognised	Non-member, union recognised	Non-member, no union recognised
Yes	88	61	70	12
No	11	36	24	83
Don't know	*	*	2	2
Not answered	1	2	4	3
Weighted base	9980	1004	6466	10,632
Unweighted base	10,349	1035	6575	10,123

Source: Workplace Employee Relations Survey 1998. Base: all employees with individual membership and workplace recognition data.

**Table A6:** *Perceptions of management–employee relations, all employees*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
V good	38	36	38	34	34	32	38	34	32	29	30	29	36	28
Q. good	47	47	45	47	48	49	45	45	48	47	45	52	43	51
Not v. g.	11	13	12	14	14	14	14	16	14	17	18	14	17	16
N.a.a.g	5	3	4	5	4	4	3	5	6	7	7	6	4	5
Wted	795	756	825	1504	1334	1418	1252	1247	1226	1543	1556	1643	574	1525
Unwted	810	772	851	1514	1372	1449	1300	1227	1133	1438	1436	1515	540	1410

Source: BSAS. Based on responses to the question: 'In general, how would you describe relations between management and other employees at your workplace?' by employees working 10 hours or more per week. Scale is 'very good', 'quite good', 'not very good', 'not at all good'.

**Table A7:** *Perceptions of management–employee relations, employees in non-unionised workplaces*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
V. good	51	46	53	47	51	42	54	45	45	35	41	35	45	38
Q. good	38	41	36	41	38	44	35	38	39	44	38	49	36	45
Not v. g.	7	10	9	10	8	9	9	13	11	13	16	10	15	12
N.a.a. g.	4	2	2	3	3	5	2	4	6	7	6	5	4	5
Wted	267	279	311	575	500	599	522	522	540	701	699	821	291	784
Unwted	272	276	324	572	511	600	546	531	501	650	647	755	269	707

Source: BSAS. Based on responses to the question: 'In general, how would you describe relations between management and other employees at your workplace?' by employees working 10 hours or more per week. Scale is 'very good', 'quite good', 'not very good', 'not at all good'.

**Table A8:** *Perceptions of management–employee relations, employees in unionised workplaces*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
V. good	31	30	29	26	25	25	27	26	21	23	22	22	27	18
Q. good	52	51	51	51	54	53	51	50	55	50	51	54	51	57
Not v.g.	12	15	15	17	17	18	18	19	17	20	19	17	18	21
N.a.a.g.	5	4	6	6	4	4	4	5	7	7	7	7	4	5
Wted	528	477	514	928	834	819	729	726	686	842	857	822	283	741
Unwted	538	496	527	942	861	849	754	696	632	788	789	760	271	703

Source: BSAS. Based on responses to the question: 'In general, how would you describe relations between management and other employees at your workplace?' by employees working 10 hours or more per week. Scale is 'very good', 'quite good', 'not very good', 'not at all good'.

**Table A9:** *Perceptions that management and employees are always at loggerheads, 1998*

	No recognition %	Union recognised %	All %
Agree strongly	3	1	2
Agree	13	14	13
Neither agree/disagree	18	23	20
Disagree	49	51	50
Disagree strongly	18	11	14
Wted	595	605	1201
Unwted	534	578	1112

Source: BSAS98. Based on responses to the statement: 'At my workplace, management and employees are always at loggerheads' by employees working 10 hours or more per week.

**Table A10:** *Perceptions that managers keep promises, 1998*

	No recognition %	Union recognised %	All %
Agree strongly	8	3	6
Agree	44	36	40
Neither agree/disagree	27	36	31
Disagree	17	22	19
Disagree strongly	4	4	4
Wted	600	603	1203
Unwted	539	575	1114

Source: BSAS98. Based on responses to the statement: 'Managers at my workplace usually keep their promises to the employees' by employees working 10 hours or more per week.

**Table A11:** *Perception that management always try to get the better of employees, by year*

	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1998
Agree strongly	12	13	20	17	18	12	20	14	21	17	13
Agree	42	41	43	41	44	50	42	51	46	46	46
Neither	22	19	16	21	19	16	21	19	19	22	25
Disagree	22	25	19	18	16	21	16	15	13	15	15
Disagree strngly	2	3	2	2	3	1	1	1	1	1	1
Wted	713	664	1201	1247	1113	1172	573	1344	1361	1435	1283
Unwted	738	666	1238	1268	1161	1144	526	1262	1261	1332	1186

Source: BSAS. Based on responses to the statement: 'Management will always try to get the better of employees if it gets the chance' by employees working 10 hours or more per week. Not asked in 1983, 1984, 1997.

**Table A12:** *Perception of how well the workplace is managed, by year*

	1983	1984	1985	1986	1987	1989	1990	1991	1993	1994	1995	1996	1997	1998
V.w.man.	30	29	28	27	26	26	26	25	26	22	23	24	28	24
Q.w.man.	50	52	54	52	54	55	55	55	53	54	54	54	51	54
N.w.man.	20	20	18	21	20	19	19	20	21	23	23	22	21	22
Wted	800	752	827	1503	1333	1407	1249	1247	1230	1547	1565	1651	577	1533
Unwted	815	767	853	1514	1372	1436	1297	1227	1136	1441	1445	1523	543	1418

Source: BSAS. Based on responses to the question: 'In general, would you say your workplace was very well managed, quite well managed or not well managed?' by employees working 10 hours or more per week. Scale is 'very well managed', 'quite well managed', 'not well managed'.

**Table A13:** *Perception that management ignores unions, 1998*

	No recognition %	Union recognised %	All %
Agree strongly	13	4	4
Agree	24	17	17
Neither agree nor disagree	16	25	24
Disagree	42	51	50
Disagree strongly	5	4	4
Wted	47	716	763
Unwted	43	682	725

Source: BSAS98. Based on responses to the statement: 'The trade unions (staff association(s)) at my workplace are usually ignored by management' by employees working 10 hours or more per week in unionised workplaces.

**Table A14:** *Perceptions of unions' responsiveness to problems and complaints, 1998*

	Member %	Non-member %	All %
Agree strongly	8	17	13
Agree	55	62	59
Neither agree nor disagree	20	9	14
Disagree	7	9	8
Disagree strongly	1	2	2
Don't know	9	2	5
Wted	330	473	802
Unwted	316	443	759

Source: BSAS98. Based on responses to the statement: 'Trade unions (staff association(s)) at my workplace (take/takes) notice of members' problems and complaints' by employees working 10 hours or more per week in unionised workplaces.

**Table A15:** *Perceptions that unions help in the smooth running of the workplace, 1998*

	Non-member %	Member %	All %
Agree strongly	1	5	4
Agree	29	39	35
Neither agree nor disagree	34	36	35
Disagree	25	17	21
Disagree strongly	2	2	2
Don't know	8	1	4
Wted	330	473	802
Unwted	316	443	759

Source: BSAS98. Based on responses to the question: 'Please say how strongly you agree or disagree [that] (trade unions/staff association(s)) at my workplace (help/helps) make things run more smoothly at work' by employees working 10 hours or more per week in unionised workplaces.



**Table A16:** Control variables used in pooled analyses for 1983–1998

	All	Union	Non-union
<b>Demographic:</b>			
FEM, if female	49	47	50
ETHNIC, if non-white ethnic minority	4	4	4
<i>AGE, age, in years:</i>			
AGE1824	15	12	18
AGE2534	26	25	28
AGE3544	26	28	23
AGE4554	22	24	19
AGE5564	11	12	9
AGE65PLS	1	*	2
AGEDK	*	*	*
<i>HEDQUAL, Highest educational qualification (NA 1983, 1984):</i>			
IHEDQU_7, No qualifications	24	23	26
IHEDQU_6, Foreign/other qualification	1	1	1
IHEDQU_5, CSE or equivalent	9	8	10
IHEDQU_4, GCSE or equivalent	23	22	25
IHEDQU_3, A level or equivalent	13	13	13
IHEDQU_2, Higher education below degree level	18	20	15
IHEDQU_1, Degree or equivalent	12	14	10
IHEDQU_8, Data missing	*	*	*
UNSAMEMB, if union/staff association member	41	68	5
<b>Job-related characteristics:</b>			
<i>RGHCLASS, Hope-Goldthorpe occupational class:</i>			
RGHCL1: Professional and management, higher grade	13	15	12
RGHCL2: Professional and management, lower grade	21	22	19
RGHCL3: Routine non-manuals	18	18	18
RGHCL4: Personal service	7	4	10
RGHCL8: Foremen and technicians	7	8	7
RGHCL9: Skilled manual workers	10	10	11
RGHCL10: Semi-skilled and unskilled manuals	22	22	21
Data missing	*	1	1
PTEMPEE, part-time employee, self-definition	20	18	23
<b>Workplace-related:</b>			
<i>SECTOR, industrial sector:</i>			
MANUFAC: Manufacturing	23	24	22
SERVICES: Services	67	68	67
CONSTRU: Construction	4	3	6
OTHERSEC: Other industries	5	6	5
PUBLIC, if public sector	25	40	6
<i>SIZE, N employees at the workplace (NA in 1983):</i>			
SIZU10	16	7	27
SIZ1024	16	12	21
SIZ2599	26	25	27

SI100499	24	30	17
SIZOV499	18	26	7
SIZMIS	1	1	1

**Attitudinal data:**

LEFTRIG2, Left-right scale running from 1 to 5 (continuous)	2.5	2.5	2.6
LRLOW, % with score on LEFTRIG2 below 2.5	0.44	0.46	0.40
<i>PAYGAP, perception of pay gap between highest and lowest paid at workplace:</i>			
Much too big	18	21	14
Too big	27	30	23
About right	44	40	49
Too small	3	3	3
Much too small	*	*	1
Don't know	8	6	10

**Other data:****YEAR:**

YEAR1, 1983	5	5	4
YEAR2, 1984	4	5	4
YEAR3, 1985	5	5	4
YEAR4, 1986	9	10	8
YEAR5, 1987	8	9	7
YEAR6, 1989	8	8	8
YEAR7, 1990	7	7	7
YEAR8, 1991	7	7	7
YEAR9, 1993	7	7	7
YEAR10, 1994	9	8	9
YEAR11, 1995	9	8	9
YEAR12, 1996	10	7	11
YEAR13, 1997	3	3	4
YEAR14, 1998	9	8	11

**REGION:**

SCOTLAND: Scotland	9	10	10
NORTH: North, North West, Yorks and Humberside	25	28	28
WALES: Wales	5	6	6
SOUTH: South East, South West and East Anglia	33	29	29
MIDS: East and West Midlands	17	17	17
GTRLON: Greater London	12	11	11
UVRATE, unemployment–vacancy ratio	15.1	15.4	15.4
EMPRATE, % workforce in employment	56.5	56.4	56.4

*Base:* all employees with non-missing data working 10 hours or more per week. Mean scores based on pooled data for the period 1983–1998. Column 2 confined to employees in workplaces with unions recognised for pay bargaining. Column 3 confined to employees in workplaces with no unions recognised for pay bargaining. Note that this table does not include measures of union strength, union effectiveness or management support for unions, all of which are presented in the main text.

Table A17: Control variables used in cross-sectional analysis for 1998

	All	Union	Non-union
<b>Demographic:</b>			
FEM, if female	52	53	51
ETHNIC, if non-white ethnic minority	6	6	6
RAGE, age, in years:	39.3	40.5	38.1
<i>HEDQUAL, Highest educational qualification:</i>			
IHEDQU_7, No qualifications	17	13	20
IHEDQU_6, Foreign/other qualification	1	1	*
IHEDQU_5, CSE or equivalent	9	8	10
IHEDQU_4, GCSE or equivalent	25	24	25
IHEDQU_3, A level of equivalent	13	12	14
IHEDQU_2, Higher education below degree level	24	28	21
IHEDQU_1, Degree or equivalent	12	14	9
UNSAMEMB, if union/staff association member	33	60	7
UNMEMB, if union member	29	53	6
SAMEMB, if staff association member	4	8	1
PREVMEMB, if not currently union/staff association member but was previously	24	20	29
<b>Job-related characteristics:</b>			
<i>RGHCLASS, Hope-Goldthorpe occupational class:</i>			
RGHCL1: Professional and management, higher grade	15	19	12
RGHCL2: Professional and management, lower grade	24	25	22
RGHCL3: Routine non-manuals	16	16	16
RGHCL4: Personal service	9	8	10
RGHCL8: Foremen and technicians	8	8	8
RGHCL9: Skilled manual workers	9	8	10
RGHCL10: Semi-skilled and unskilled manuals	19	17	22
<i>HOURS, hours worked per week</i>			
HRS1015, 10–15 hours	6	5	8
HRS1623, 16–23 hours	12	12	11
HRS2429, 24–29 hours	4	4	5
HRS30PLS, 30+ hours	78	79	77
JTENURE, tenure at current workplace, in months	91.6	118.2	66.1
<b>Workplace-related:</b>			
<i>SECTOR, broad sector:</i>			
PUBLIC: Public sector	30	53	9
PRIVATE: Private sector	67	46	87
OTHSECT: Voluntary sector	3	1	4
<i>SIZE, N employees at the workplace:</i>			
SIZU10	13	4	22
SIZ1024	15	11	19
SIZ2599	26	22	30
SI100499	26	33	20
SIZOV499	19	30	9
<b>Worker representation:</b>			
UNIONREC, if recognised union or staff association	49	100	0
UNIREC, if recognised union	45	92	0
SAREC, if recognised staff association	4	8	0

ACTIVE, if non-recognised union	3	0	6
REP, if on-site worker representative	48	84	14
MRECREP, union/SA member in recognised workplace with on-site rep	25	52	0
MRECNREP, union/SA member in recognised workplace w/out on-site rep	4	9	0
MNRECREP, union/SA member in non-recognised workplace with on-site rep	1	0	2
MNRECNREP, union/SA member in non-recognised workplace w/out on-site rep	2	0	5
NMRECREP, non-member in recognised workplace with on-site rep	16	32	0
NMRENREP, non-member in recognised workplace w/out on-site rep	4	8	0
NMNREREP, non-member in non-recognised workplace with on-site rep	6	0	11
NMNRNREP, non-member in non-recognised workplace w/out on-site rep	42	0	82
RECREP, recognised workplace with on-site rep	41	84	0
RECNOREP, recognised workplace w/out on-site rep	8	16	0
REPNOREC, non-recognised workplace with on-site rep	5	0	9
NORECREP, non-recognised workplace w/out on-site rep	43	0	85
MEMBREC, union/SA member in recognised workplace	30	60	0
NMEMBREC, non-member in recognised workplace	19	40	0
MEMNOREC, union/SA member in non-recognised workplace	4	0	7
NMEMNREC, non-member in non-recognised workplace	48	0	93

**Attitudinal data:**

LEFTRIG2, Left-right scale running from 1 to 5 (continuous)	2.52	2.48	2.55
LRLOW, % with score on LEFTRIG2 below 2.5	0.51	0.55	0.48
<i>PAYGAP, perception of pay gap between highest and lowest paid at workplace:</i>			
Much too big	22	26	19
Too big	28	34	23
About right	41	35	46
Too small	2	1	3
Much too small	*	*	*
Don't know	6	4	9

**Other data:****REGION:**

SCOTLAND: Scotland	8	8	8
NORTH: North, North West, Yorks and Humberside	23	26	21
WALES: Wales	6	7	5
SOUTH: South East, South West and East Anglia	33	32	34
MIDS: East and West Midlands	17	16	19
GTRLON: Greater London	11	10	13

*Base:* all employees with non-missing data in the estimation sample working 10 hours or more per week. Column 2 confined to employees in workplaces with unions recognised for pay bargaining. Column 3 confined to employees in workplaces with no unions recognised for pay bargaining. Note that this table does not include measures of union strength, union effectiveness or management support for unions, all of which are presented in the main text. \* means under 0.5 per cent.

**Table A18:** *Perceptions of the employee relations climate, whole economy*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Workplace and individual unionisation (ref.: no recognition/no rep/non-member)</i>						
mrecrep						-0.442 (4.18)**
mrecnrep						-0.092 (0.56)
mnrecrep						0.044 (0.13)
mnrecnrep						-0.321 (1.45)
nmrecrep						-0.246 (2.27)*
nmrenrep						-0.275 (1.48)
nmnrerep						-0.079 (0.59)
unirec			-0.288 (3.32)**	-0.250 (2.48)*	-0.150 (1.34)	
sarec			0.096 (0.57)	0.108 (0.59)	0.131 (0.64)	
active			-0.036 (0.19)	0.015 (0.07)	0.063 (0.31)	
<i>Individual union membership status (ref: never member)</i>						
unmemb						-0.229 (2.32)*
samemb						-0.063 (0.34)
prevmemb						-0.128 (1.39)
unionrec	-0.440 (6.90)**	-0.252 (3.07)**				
rep		-0.269 (3.29)**	-0.264 (3.13)**	-0.117 (1.24)	-0.118 (1.25)	
Controls?	NO	NO	NO	YES	YES	YES
cut1:	-1.889 (24.75)**	-1.931 (24.31)**	-1.937 (23.99)**	-1.730 (7.50)**	-1.695 (7.34)**	-1.722 (7.46)**
cut2:	-1.034 (18.05)**	-1.075 (17.78)**	-1.079 (17.55)**	-0.831 (3.71)**	-0.792 (3.54)**	-0.821 (3.67)**
cut3:	0.378 (7.47)**	0.344 (6.51)**	0.344 (6.42)**	0.676 (3.01)**	0.719 (3.21)**	0.688 (3.06)**
Observations	1382	1382	1382	1380	1380	1380

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above.

For key to variable names see Appendix Table A17. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.

**Table A19:** *Perceptions of the employee relations climate in the public and private sectors*

	(1)	(2)	(3)	(4)	(5)	(6)
	<b>Private sector</b>			<b>Public sector</b>		
<i>Workplace unionisation (ref: no union/staff association)</i>						
unirec	-0.056 (0.43)			-0.530 (2.12)*		
sarec	0.045 (0.18)	0.032 (0.12)		0.117 (0.36)	0.119 (0.33)	
active	0.064 (0.24)	0.053 (0.20)		-0.146 (0.36)	-0.144 (0.33)	
rep	0.001 (0.01)			-0.268 (1.55)		
<i>Union X rep interaction</i>						
Union recognition		-0.034 (0.18)			-0.532 (1.82)	
Rep main effect		0.017 (0.11)			-0.273 (0.80)	
Interaction		-0.041 (0.17)			0.005 (0.01)	
<i>Workplace and individual unionisation (ref.: no recognition/no repl/non-member)</i>						
mrecrep			-0.212 (1.59)			-0.802 (3.00)**
mrecnrep			0.127 (0.45)			-0.266 (0.81)
mnrecrep			-0.392 (1.10)			0.199 (0.32)
mnrecnre			-0.338 (1.48)			-0.121 (0.16)
nmrecrep			-0.064 (0.51)			-0.544 (2.00)*
nmrenrep			-0.242 (1.05)			-0.412 (1.16)
nmnrerep			0.037 (0.24)			-0.158 (0.45)
unsamemb	-0.160 (1.46)	-0.158 (1.45)		-0.133 (0.91)	-0.133 (0.91)	
Controls?	YES	YES	YES	YES	YES	YES
cut1:Constant	-1.752 (6.05)**	-1.751 (6.04)**	-1.788 (6.13)**	-1.614 (3.25)**	-1.615 (3.17)**	-1.568 (3.10)**
cut2:Constant	-0.864 (3.09)**	-0.862 (3.08)**	-0.898 (3.18)**	-0.597 (1.22)	-0.598 (1.19)	-0.555 (1.11)
cut3:Constant	0.541 (1.95)	0.542 (1.95)	0.509 (1.82)	1.297 (2.58)**	1.296 (2.52)*	1.331 (2.61)**
Observations	909	909	909	431	431	431

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to variable names see Appendix Table A17. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.

**Table A20:** *The effect of union power on employee perceptions of the employee relations climate*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Union power:</i>						
Tupowtm	0.097 (0.30)	0.669 (1.87)	0.537 (1.46)	0.834 (1.74)	-0.162 (0.46)	0.521 (0.96)
Tupowrit	0.083 (0.79)	0.687 (6.97)**	0.827 (6.44)**	0.640 (4.05)**	0.228 (1.85)	-0.420 (1.53)
Tupowtl	-0.496 (4.48)**				-0.323 (2.34)*	-1.105 (3.99)**
Tupowmis	0.092 (0.57)	0.645 (2.57)*	0.735 (1.63)	0.578 (1.94)	0.283 (1.53)	-0.381 (1.05)
<i>Individual membership status (ref: never member)</i>						
Unmemb	-0.179 (1.81)	-0.191 (1.40)			-0.097 (0.73)	-0.179 (0.93)
Samemb	0.049 (0.31)	0.200 (0.97)			-0.229 (0.93)	0.414 (1.57)
Prevmemb	-0.101 (1.07)	-0.052 (0.32)			-0.077 (0.73)	0.086 (0.40)
Controls?	YES	YES	YES	YES	YES	YES
cut1:Constant	-1.644 (7.07)**	-1.188 (3.43)**	-0.748 (1.53)	-1.852 (3.69)**	-1.741 (6.01)**	-1.508 (2.80)**
cut2:Constant	-0.724 (3.21)**	-0.087 (0.25)	0.354 (0.73)	-0.568 (1.12)	-0.834 (2.98)**	-0.458 (0.87)
cut3:Constant	0.820 (3.66)**	1.665 (4.80)**	2.280 (4.62)**	1.140 (2.26)*	0.595 (2.15)*	1.544 (2.89)**
Observations	1380	731	434	297	909	431

Model (1) = whole sample. Model (2) = employees in unionised sector. Model (3) = union members in unionised sector. Model (4) = union non-members in unionised sector. Model (5) = employees in private sector. Model (6) = employees in public sector. T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to variable names see Appendix Table A17. Reference categories for union power: In models (1), (5) and (6) no recognised union; in (2), (3) and (4), union with too little power. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.

**Table A21:** *The effect of management attitudes to unions on employee perceptions of the employee relations climate*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Management attitudes to union membership (ref: not an issue)</i>						
Imanat_1	0.588 (4.04)**	0.629 (3.74)**	0.745 (3.55)**	0.909 (2.77)**	0.719 (2.37)*	0.622 (3.04)**
Imanat_2	0.047 (0.55)	0.013 (0.12)	0.130 (0.87)	-0.161 (0.99)	0.116 (0.98)	0.000 (0.00)
Imanat_3	-0.701 (5.93)**	-0.791 (3.51)**	-0.883 (2.87)**	-0.941 (2.73)**	-0.607 (4.81)**	-0.867 (2.32)*
Imanat_5	-0.181 (0.92)	-0.306 (1.39)	-0.239 (1.04)	-0.540 (1.98)*	-0.232 (0.92)	0.033 (0.11)
<i>Workplace-level unionisation (ref: no union)</i>						
Unirec	-0.309 (2.59)**				-0.252 (1.75)	-0.640 (2.30)*
Sarec	0.084 (0.39)	0.377 (1.77)	0.691 (3.37)**	0.425 (1.50)	0.018 (0.06)	-0.184 (0.53)
Active	0.034 (0.17)	0.327 (1.62)	0.418 (1.05)	0.393 (1.76)	0.103 (0.40)	-0.315 (0.74)
Rep	-0.101 (1.08)	-0.207 (1.59)	-0.484 (2.55)*	0.033 (0.17)	0.018 (0.15)	-0.250 (1.41)
<i>Individual membership status (ref: never member)</i>						
unmemb	-0.269 (2.68)**	-0.358 (2.64)**			-0.207 (1.58)	-0.346 (1.74)
samemb	-0.108 (0.57)	-0.047 (0.20)			-0.305 (1.04)	0.048 (0.18)
prevmemb	-0.065 (0.70)	-0.130 (0.85)			-0.047 (0.44)	-0.046 (0.22)
Controls?	YES	YES	YES	YES	YES	YES
cut1:Constant	-1.820 (7.71)**	-1.846 (4.90)**	-1.416 (2.65)**	-2.319 (4.15)**	-1.812 (6.14)**	-1.859 (3.70)**
cut2:Constant	-0.879 (3.85)**	-0.737 (1.98)*	-0.290 (0.55)	-1.008 (1.80)	-0.886 (3.13)**	-0.792 (1.58)
cut3:Constant	0.680 (2.99)**	0.988 (2.66)**	1.610 (3.01)**	0.698 (1.23)	0.562 (2.00)*	1.167 (2.27)*
Observations	1380	731	434	297	909	431

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to variable names see Appendix Table A17. Model (1) = whole sample. Model (2) = employees in unionised sector. Model (3) = union members in unionised sector. Model (4) = union non-members in unionised sector. Model (5) = employees in private sector. Model (6) = employees in public sector. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.



**Table A22:** *The effect of unions doing their job well on employee perceptions of the employee relations climate*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Union doing job well?</i>						
Ujobwyes	-0.095 (0.94)				0.054 (0.44)	-0.544 (2.26)*
Ujobwno	-0.427 (3.89)**	-0.435 (4.38)**	-0.549 (4.32)**	-0.390 (2.31)*	-0.206 (1.61)	-1.089 (4.06)**
Ujobwdk	0.170 (0.82)	0.276 (1.33)	0.186 (0.50)	0.337 (1.41)	0.313 (1.11)	-0.040 (0.13)
<i>Individual membership status (ref: never member)</i>						
unmemb	-0.245 (2.48)*	-0.285 (2.15)*			-0.197 (1.50)	-0.222 (1.17)
samemb	0.034 (0.21)	0.151 (0.75)			-0.278 (1.12)	0.424 (1.66)
prevmemb	-0.103 (1.11)	-0.041 (0.27)			-0.093 (0.89)	0.050 (0.24)
Controls?	YES	YES	YES	YES	YES	YES
cut1:Constant	-1.688 (7.38)**	-1.804 (5.07)**	-1.515 (2.99)**	-2.213 (4.27)**	-1.739 (6.03)**	-1.668 (3.43)**
cut2:Constant	-0.777 (3.51)**	-0.721 (2.04)*	-0.433 (0.87)	-0.956 (1.83)	-0.846 (3.04)**	-0.610 (1.29)
cut3:Constant	0.745 (3.37)**	0.975 (2.76)**	1.399 (2.77)**	0.723 (1.38)	0.567 (2.05)*	1.337 (2.75)**
Observations	1380	731	434	297	909	431

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to variable names see Appendix Table A17. Model (1) = whole sample. Model (2) = employees in unionised sector. Model (3) = union members in unionised sector. Model (4) = union non-members in unionised sector. Model (5) = employees in private sector. Model (6) = employees in public sector. See Appendix Table A17 for key to variable names. Reference categories: In models (1), (5) and (6) no recognised union; in (2), (3) and (4), union doing job well. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.

**Table A23:** Perception of the employee relations climate, 1983–1998

	(1)	(2)	(3)	(4)	(5)
<i>Year (ref: 1983)</i>					
lyear_2	-0.025 (0.42)	-0.041 (0.69)	-0.083 (0.75)	-0.095 (0.85)	-0.098 (0.88)
lyear_3	-0.006 (0.11)	-0.023 (0.40)	0.054 (0.51)	0.048 (0.45)	0.044 (0.41)
lyear_4	-0.110 (2.18)*	-0.129 (2.55)*	-0.073 (0.77)	-0.069 (0.73)	-0.074 (0.79)
lyear_5	-0.063 (1.23)	-0.078 (1.52)	0.021 (0.22)	0.028 (0.29)	0.025 (0.26)
lyear_6	-0.120 (2.36)*	-0.159 (3.09)**	-0.203 (2.12)*	-0.195 (2.05)*	-0.201 (2.12)*
lyear_7	-0.014 (0.28)	-0.046 (0.87)	0.071 (0.74)	0.063 (0.66)	0.059 (0.61)
lyear_8	-0.139 (2.55)*	-0.172 (3.13)**	-0.193 (1.95)	-0.224 (1.93)	-0.233 (2.01)*
lyear_9	-0.174 (3.21)**	-0.219 (4.01)**	-0.205 (2.05)*	-0.228 (2.30)*	-0.236 (2.37)*
lyear_10	-0.279 (5.37)**	-0.335 (6.38)**	-0.440 (4.64)**	-0.452 (4.81)**	-0.459 (4.88)**
lyear_11	-0.235 (4.48)**	-0.288 (5.45)**	-0.333 (3.46)**	-0.359 (3.75)**	-0.367 (3.83)**
lyear_12	-0.214 (4.21)**	-0.286 (5.57)**	-0.334 (3.64)**	-0.355 (3.91)**	-0.355 (3.90)**
lyear_13	-0.089 (1.34)	-0.164 (2.44)*	-0.220 (1.91)	-0.235 (2.09)*	-0.239 (2.12)*
lyear_14	-0.219 (4.31)**	-0.298 (5.81)**	-0.305 (3.30)**	-0.319 (3.49)**	-0.321 (3.51)**
Unionrec		-0.418 (21.65)**			
<i>Union recognition X year interactions</i>					
Recognition main effect			-0.428 (4.59)**	-0.399 (4.30)**	-0.263 (2.80)**
luy_1_2			0.065 (0.50)	0.078 (0.59)	0.082 (0.62)
luy_1_3			-0.119 (0.95)	-0.104 (0.82)	-0.093 (0.74)
luy_1_4			-0.089 (0.79)	-0.099 (0.89)	-0.091 (0.82)
luy_1_5			-0.154 (1.33)	-0.179 (1.56)	-0.178 (1.55)
luy_1_6			0.073 (0.64)	0.042 (0.37)	0.049 (0.44)
luy_1_7			-0.193 (1.67)	-0.219 (1.90)	-0.225 (1.95)

luy_1_8		0.032 (0.27)	0.077 (0.55)	0.084 (0.60)	
luy_1_9		-0.025 (0.21)	-0.034 (0.28)	-0.034 (0.29)	
luy_1_10		0.186 (1.64)	0.144 (1.27)	0.148 (1.31)	
luy_1_11		0.078 (0.68)	0.045 (0.39)	0.036 (0.31)	
luy_1_12		0.089 (0.80)	0.053 (0.48)	0.038 (0.34)	
luy_1_13		0.106 (0.75)	0.071 (0.51)	0.055 (0.39)	
luy_1_14		0.011 (0.10)	-0.057 (0.52)	-0.077 (0.70)	
unsamemb				-0.221 (9.09)**	
Controls?	NO	NO	NO	YES	YES
cut1:Constant	-1.783 (40.26)**	-2.090 (43.81)**	-2.098 (25.51)**	-1.985 (22.41)**	-1.984 (22.39)**
cut2:Constant	-0.985 (23.46)**	-1.285 (28.61)**	-1.294 (16.02)**	-1.167 (13.37)**	-1.164 (13.32)**
cut3:Constant	0.314 (7.57)**	0.042 (0.96)	0.035 (0.44)	0.197 (2.26)*	0.205 (2.36)*
Observations	16470	16470	16470	15834	15834

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. See Appendix Table A16 for key to variable names. Controls: gender, ethnicity, age, part-time, sector, social class, region.

**Table A24:** *Perception of the employee relations climate, 1983–1998 with non-linear trend*

	(1)	(2)	(3)	(4)	(5)	(6)
year2	-0.015 (6.30)**	-0.027 (6.29)**	-0.028 (6.43)**	-0.006 (1.09)	-0.012 (1.98)	-0.015 (2.48)*
post90				-0.098 (1.64)		
lunion_1		-0.520 (9.77)**	-0.333 (5.39)**		-0.490 (11.82)**	-0.335 (6.75)**
luXyea_1		0.011 (2.36)*	0.006 (1.10)			
lpost9_1					-0.169 (1.89)	-0.163 (1.79)
luXp_1_1					0.132 (2.64)*	0.102 (1.88)
unsamemb			-0.221 (13.12)**			-0.220 (12.84)**
Controls?	NO	NO	YES	NO	NO	YES
cut1:Constant	-1.783 (64.22)**	-2.155 (42.25)**	-2.042 (24.22)**	-1.752 (56.13)**	-2.109 (51.62)**	-2.008 (27.66)**
cut2:Constant	-0.986 (40.98)**	-1.352 (29.05)**	-1.224 (15.76)**	-0.954 (31.75)**	-1.305 (35.58)**	-1.189 (17.94)**
cut3:Constant	0.311 (12.28)**	-0.026 (0.54)	0.142 (1.62)	0.343 (12.36)**	0.021 (0.57)	0.177 (2.42)*
Observations	16490	16490	15853	16490	16490	15853

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. See Appendix Table A16 for key to variable names. Controls: gender, ethnicity, age, part-time, sector, social class, region.

**Table A25:** *Perceptions that managers keep promises in 1998, whole economy*

	(1)	(2)	(3)	(4)	(5)	(6)
Unionrec	-0.262 (3.82)**	-0.149 (1.70)				
Unirec			-0.191 (2.03)*	-0.102 (0.93)	-0.015 (0.14)	
Sarec			0.015 (0.08)	0.053 (0.26)	0.013 (0.06)	
Active			-0.142 (0.68)	-0.079 (0.37)	-0.057 (0.28)	
Unmemb					-0.202 (2.02)*	
Samemb					0.070 (0.36)	
Prevmemb					0.017 (0.18)	
Membrec						-0.180 (1.62)
Nmembrec						0.020 (0.20)
Memnrec						-0.067 (0.35)
Rep		-0.167 (1.89)	-0.144 (1.56)	-0.001 (0.01)	0.006 (0.06)	
Controls?	NO	NO	NO	YES	YES	YES
cut1:Constant	-1.882 (21.47)**	-1.912 (21.05)**	-1.920 (20.91)**	-1.750 (7.36)**	-1.734 (7.28)**	-1.737 (7.31)**
cut2:Constant	-0.875 (14.21)**	-0.903 (14.13)**	-0.911 (13.94)**	-0.666 (2.82)**	-0.640 (2.69)**	-0.645 (2.72)**
cut3:Constant	-0.005 (0.09)	-0.031 (0.54)	-0.038 (0.64)	0.267 (1.13)	0.296 (1.24)	0.290 (1.22)
cut4:Constant	1.469 (19.61)**	1.446 (19.11)**	1.441 (18.94)**	1.851 (7.60)**	1.881 (7.68)**	1.873 (7.65)**
Observations	1116	1116	1116	1114	1114	1114

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to meaning of variables see Appendix Table A17. Reference categories: In M(1) and M(2) no recognised union; in M(3)–(5), no union; in M(6), non-member in workplace without recognised union/sa. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.

**Table A26:** *Perceptions of union power and management keeping promises*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Union power:</i>						
Tupowtm	-0.266 (1.11)	-0.035 (0.13)	-0.344 (1.53)	0.291 (0.70)	-0.126 (0.63)	-0.635 (1.07)
Tupowrit	0.314 (3.04)**	0.704 (6.76)**	0.697 (5.28)**	0.759 (4.61)**	0.388 (3.13)**	0.205 (0.75)
Tupowtl	-0.301 (2.55)*				-0.241 (1.52)	-0.402 (1.42)
Tupowmis	0.054 (0.37)	0.364 (1.73)	0.486 (1.40)	0.284 (1.02)	0.007 (0.04)	0.279 (0.76)
<i>Union status (ref: never member)</i>						
Unmemb	-0.134 (1.33)	-0.071 (0.54)			-0.249 (1.73)	-0.081 (0.48)
Samemb	0.055 (0.32)	0.163 (0.78)			0.225 (1.11)	-0.020 (0.08)
Prevmemb	0.036 (0.38)	0.248 (1.70)			-0.017 (0.16)	0.174 (0.80)
cut1:Constant	-1.769 (7.41)**	-1.381 (4.27)**	-1.572 (3.44)**	-1.429 (2.51)*	-2.087 (6.54)**	-0.863 (1.77)
cut2:Constant	-0.644 (2.69)**	-0.108 (0.34)	-0.284 (0.64)	0.097 (0.18)	-0.926 (2.89)**	0.237 (0.49)
cut3:Constant	0.319 (1.33)	1.001 (3.06)**	0.703 (1.54)	1.572 (2.90)**	-0.024 (0.08)	1.374 (2.83)**
cut4:Constant	1.926 (7.77)**	2.798 (7.82)**	2.454 (4.91)**	3.671 (6.31)**	1.608 (4.90)**	3.065 (6.10)**
Observations	1114	615	363	252	712	368

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to meaning of variables see Appendix Table A17. Model (1) = whole sample. Model (2) = employees in unionised sector. Model (3) = union members in unionised sector. Model (4) = union non-members in unionised sector. Model (5) = employees in private sector. Model (6) = employees in public sector. See Appendix Table A17 for key to variable names. Reference categories: In models (1), (5) and (6) no recognised union; in (2), (3) and (4), union with too little power. Controls: gender, age, ethnicity, qualifications, social class, region, hours, workplace tenure, sector, workplace size.

**Table A27:** *Perceptions that managers will try to get the better of employees if they get the chance, 1985–1998*

	(1)	(2)	(3)	(4)	(5)
year2	0.013 (1.53)	0.015 (1.80)	0.021 (2.15)	0.026 (2.99)*	0.022 (2.44)*
unionrec				-0.039 (1.71)	
lunion_1		0.125 (4.76)**	-0.109 (2.54)*		-0.109 (2.57)*
luXyea_1		-0.001 (0.54)	0.007 (2.37)*		0.007 (2.40)*
unsamemb			0.298 (7.90)**	0.296 (8.00)**	0.298 (7.92)**
Controls?	NO	NO	YES	YES	YES
cut1	-0.763 (8.45)**	-0.681 (7.72)**	-0.429 (4.02)**	-0.358 (4.36)**	-0.399 (4.86)**
cut2	-0.161 (1.97)	-0.078 (0.97)	0.238 (2.43)*	0.310 (3.15)*	0.268 (2.76)*
cut3	1.115 (12.59)**	1.200 (14.09)**	1.592 (17.00)**	1.664 (15.30)**	1.622 (15.61)**
Observations	11451	11451	10851	10851	10851

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. See Appendix Table A16 for key to variable names. Controls: gender, age, ethnicity, qualifications, social class, part-time, sector, workplace size, region, unemployment–vacancy ratio.

**Table A28:** *Perceptions of how well the workplace is managed, whole sample*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
unionrec	-0.411 (6.28)**	-0.219 (2.55)*					
unirec			-0.275 (2.98)**	-0.223 (2.07)*	-0.112 (0.99)		
sarec			-0.031 (0.17)	0.009 (0.05)	-0.067 (0.32)		
active			-0.210 (1.17)	-0.133 (0.67)	-0.090 (0.45)		
unmemb					-0.258 (2.56)*		
samemb					0.158 (0.78)		
prevmemb					-0.026 (0.29)		
membrec						-0.295 (2.54)*	
nmembrec						-0.053 (0.48)	
memnorec						0.002 (0.01)	
rep		-0.275 (3.19)**	-0.241 (2.69)**	-0.163 (1.66)	-0.158 (1.59)	-0.174 (1.80)	
mrecrep							-0.468 (4.21)**
mrecnrep							-0.031 (0.17)
mnrecrep							0.046 (0.17)
mnrecnre							-0.057 (0.25)
nmrecrep							-0.211 (1.87)
nmrenrep							0.059 (0.33)
nmnrerep							0.018 (0.13)
Controls?	NO	NO	NO	YES	YES	YES	YES
cut1	-0.995 (18.37)**	-1.037 (18.16)**	-1.047 (18.03)**	-1.026 (4.44)**	-0.994 (4.32)**	-1.003 (4.32)**	-0.987 (4.24)**
cut2	0.527 (10.51)**	0.492 (9.46)**	0.485 (9.20)**	0.572 (2.48)*	0.612 (2.66)**	0.599 (2.58)**	0.620 (2.66)**
Obs	1388	1388	1388	1386	1386	1386	1386

T-statistics in parentheses. \* = significant at 95% confidence level. \*\* = significant at 99% confidence level or above. For key to meaning of variables see Appendix Table A17. Reference categories: In M(3), M(4) and M(5), no union/staff association; in M(4) and (5) never union/sa member; in M(6) non-member in a workplace without union recognition or an on-site worker representative. Controls: gender, age, ethnicity, qualifications, social class, workplace tenure, region, hours, sector, workplace size.



**Table A29:** *Union power and employee perceptions of how well the workplace is managed*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Union power:</i>						
Tupowtm	-0.315 (1.42)	0.151 (0.65)	0.289 (0.70)	0.336 (1.04)	-0.249 (0.92)	-0.734 (1.59)
Tupowrit	0.094 (0.87)	0.631 (6.00)**	0.579 (4.36)**	0.851 (4.66)**	0.263 (1.98)*	-0.460 (2.03)*
Tupowtl	-0.485 (4.12)**				-0.518 (3.43)**	-0.917 (3.74)**
Tupowmis	0.139 (0.99)	0.402 (1.95)	0.148 (0.68)	0.561 (2.17)*	0.378 (2.36)*	-0.523 (1.74)
<i>Membership status (ref: never member)</i>						
unmemb	-0.204 (1.96)	-0.158 (1.19)			-0.075 (0.53)	-0.386 (2.06)*
samemb	0.182 (1.02)	0.248 (1.18)			0.379 (1.30)	0.061 (0.24)
prevmemb	-0.002 (0.02)	0.135 (0.83)			0.057 (0.54)	-0.069 (0.32)
Controls?	YES	YES	YES	YES	YES	YES
cut1:Constant	-0.901 (3.91)**	-0.510 (1.41)	-0.490 (0.94)	-0.462 (0.85)	-1.148 (4.11)**	-0.551 (1.08)
cut2:Constant	0.736 (3.18)**	1.233 (3.32)**	1.265 (2.35)*	1.372 (2.45)*	0.454 (1.62)	1.333 (2.55)*
Observations	1386	737	433	304	910	436

Model (1) = whole sample. Model (2) = employees in unionised sector. Model (3) = union members in unionised sector. Model (4) = union non-members in unionised sector. Model (5) = employees in private sector. Model (6) = employees in public sector. See Appendix Table A17 for key to variable names. Reference categories: In models (1), (5) and (6) no recognised union; in (2), (3) and (4), union with too little power. Controls: gender, age, ethnicity, qualifications, social class, workplace tenure, region, hours, sector, workplace size.

**Table A30:** *Perceptions of how well the workplace is managed, 1983–1998*

	(1)	(2)	(3)	(4)	(5)
<i>Year (ref: 1983)</i>					
lyear_2	-0.020 (0.32)	-0.033 (0.54)	-0.043 (0.39)	-0.043 (0.39)	-0.047 (0.43)
lyear_3	-0.016 (0.28)	-0.030 (0.51)	-0.057 (0.56)	-0.056 (0.56)	-0.060 (0.60)
lyear_4	-0.063 (1.21)	-0.079 (1.51)	-0.107 (1.17)	-0.121 (1.32)	-0.126 (1.38)
lyear_5	-0.061 (1.14)	-0.075 (1.41)	-0.011 (0.12)	-0.002 (0.02)	-0.004 (0.04)
lyear_6	-0.042 (0.80)	-0.073 (1.38)	-0.153 (1.65)	-0.128 (1.40)	-0.133 (1.46)
lyear_7	-0.050 (0.94)	-0.079 (1.48)	-0.101 (1.11)	-0.109 (1.20)	-0.113 (1.25)
lyear_8	-0.092 (1.67)	-0.120 (2.16)*	-0.210 (2.25)*	-0.213 (1.96)	-0.220 (2.03)*
lyear_9	-0.091 (1.63)	-0.128 (2.30)*	-0.167 (1.79)	-0.191 (2.05)*	-0.197 (2.12)*
lyear_10	-0.189 (3.56)**	-0.234 (4.39)**	-0.367 (4.03)**	-0.376 (4.16)**	-0.381 (4.22)**
lyear_11	-0.167 (3.06)**	-0.210 (3.83)**	-0.336 (3.63)**	-0.346 (3.76)**	-0.353 (3.83)**
lyear_12	-0.140 (2.67)**	-0.199 (3.79)**	-0.266 (2.98)**	-0.281 (3.16)**	-0.281 (3.16)**
lyear_13	-0.046 (0.68)	-0.107 (1.56)	-0.212 (1.90)	-0.209 (1.92)	-0.211 (1.94)
lyear_14	-0.132 (2.47)*	-0.196 (3.66)**	-0.231 (2.59)**	-0.241 (2.70)**	-0.241 (2.71)**
unionrec		-0.347 (18.16)**			
lunion_1			-0.432 (4.67)**	-0.396 (4.30)**	-0.275 (2.94)**
luy_1_2			0.010 (0.08)	0.017 (0.13)	0.022 (0.17)
luy_1_3			0.037 (0.30)	0.041 (0.33)	0.050 (0.40)
luy_1_4			0.038 (0.34)	0.050 (0.45)	0.057 (0.51)
luy_1_5			-0.107 (0.94)	-0.131 (1.16)	-0.131 (1.15)
luy_1_6			0.125 (1.11)	0.082 (0.73)	0.090 (0.80)
luy_1_7			0.026 (0.23)	0.011 (0.10)	0.006 (0.05)
luy_1_8			0.139 (1.20)	0.159 (1.19)	0.165 (1.24)
luy_1_9			0.054 (0.46)	0.052 (0.44)	0.051 (0.44)

luy_1_10			0.225 (2.01)*	0.186 (1.67)	0.191 (1.70)
luy_1_11			0.211 (1.82)	0.164 (1.43)	0.157 (1.36)
luy_1_12			0.105 (0.94)	0.070 (0.64)	0.056 (0.51)
luy_1_13			0.182 (1.29)	0.133 (0.96)	0.118 (0.85)
luy_1_14			0.041 (0.36)	-0.029 (0.26)	-0.048 (0.43)
unsamemb					-0.197 (7.73)**
Controls?	NO	NO	NO	YES	YES
Observations	16484	16484	16484	15849	15849

See Appendix Table A16 for key to variable names. Controls: gender, age, ethnicity, part-time, sector, social class, region.

**Table A31:** *Perceptions of managerial performance, 1983–1998 with non-linear trend*

	(1)	(2)	(3)	(4)	(5)	(6)
year2	-0.010 (5.31)**	-0.019 (5.05)**	-0.020 (5.13)**	-0.004 (1.25)	-0.008 (2.44)*	-0.010 (3.03)**
lunion_1		-0.441 (10.50)**	-0.265 (5.25)**		-0.393 (13.35)**	-0.251 (8.15)**
luXyea_1		0.010 (2.13)	0.005 (0.88)			
post92				-0.056 (1.51)		
lpost9_1					-0.108 (2.06)	-0.112 (2.23)*
luXp_1_1					0.093 (2.13)	0.058 (1.25)
unsamemb			-0.195 (8.96)**			-0.194 (8.92)**
Controls?	NO	NO	YES	NO	NO	YES
Observations	16484	16484	15849	16484	16484	15849

For key to meaning of variables see Appendix Table A16. Controls: gender, age, ethnicity, social class, part-time, sector, region.