Workplace industrial relations in Britain, 1980–2004

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ABSTRACT

The Workplace Industrial Relations Surveys marked a radical departure in the study of industrial relations (IR) by 'mapping' IR in Britain with nationally representative large-scale surveys of workplace managers, thus permitting investigation of the incidence of practices and changes over time. This article reflects on some of what we have learned in the five surveys over the quarter century since 1980, focusing selectively on the demise of collective IR, pay determination, the IR climate, and union effects on wages and employment growth.

IN THE BEGINNING . . .

The first attempt to identify the contours of industrial relations (IR) with largescale nationally representative surveys of workplaces in Britain was made by the Royal Commission on Trade Unions and Employers' Associations—the Donovan Commission—in 1966 (Government Social Survey, 1968). Others followed, notably follow-ups to the Donovan Commission's surveys in 1972 and 1973 (Parker, 1974; 1975), Daniel's (1976) survey of workplace wage determination and the Warwick Workplace Survey of 1977-78 (Brown, 1981). But large-scale surveys of IR provided the basis for relatively little academic investigation in Britain in the 1960s and 1970s. The empirical basis for the discipline consisted largely of case studies and small-scale surveys mostly confined to manufacturing. This all changed with the Workplace Industrial Relations Survey (1980) (WIRS80). It was a far more ambitious enterprise than any workplace survey undertaken hitherto. Earlier surveys had been confined to manufacturing workplaces and had focused on large establishments, the size thresholds being 50, 150 and 200 employees in the case of the Warwick survey, the 1966 Donovan survey and the Daniel survey, respectively. The Donovan follow-ups in 1972 and 1973 had a minimum threshold of 250 employees for most sectors. WIRS80, in contrast, was a nationally representative survey of around 2,000 establishments which covered the whole economy (manufacturing, private services and the public

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sector) and which lowered the employment threshold to workplaces with 25 or more employees (full- or part-time). Furthermore, for the first time, the data were made publicly available for secondary analysis.

But the aspect of the Workplace Industrial Relations Surveys (WIRS) that marked a truly radical departure was the intention to use large-scale nationally-representative surveys of workplace managers to 'map' IR in Britain, thus permitting investigation of the incidence of practices and changes over time. As Peter Brannen, one of the originators of the WIRS series, explained:

these [earlier] surveys never became part of a systematic series. The idea of establishing a series of Workplace Industrial Relations Surveys was developed in the late 1970s in the Department of Employment to remedy this lack of systematic data and to make possible the analysis of change and continuity over time [Millward and Stevens, 1986: x].

It is easy to understate the ambition and potential risks associated with that first survey. As Cully (1998) reminds us, senior statisticians at OPCS had advised against WIRS80, saying that 'a survey which takes establishments as its unit of analysis will not succeed in its research aims . . . [due] to the unreliability of information obtained from individuals acting as proxy informants'. However, WIRS surveys have now been conducted five times (1980, 1984, 1990, 1998 and 2004). Over the period there has been a seismic shift in the discipline reflecting changes in IR structures and practice, embodied in the change in the survey's name to the Workplace Employment Relations Survey (WERS). In addition, there is increasing interest in employees' experience of work in its own right. WIRS has reflected these trends with a very substantial shift in the nature of the survey instruments and survey design (Cully, 1998; Cully and Marginson, 1995; Kersley *et al.*, 2006; Marginson, 1998; Marginson and Wood, 2000).

The ever-changing nature of WIRS reflects an abiding concern with continuity and change. Identifying the degree of continuity in IR means retaining a core set of questions that permit the construction of time-series data. Identifying the nature and reasons for change entails innovation in survey questioning and design. This was apparent to the inventors of WIRS at the outset. Introducing the WIRS84 book, Peter Brannen says that it 'provides a comprehensive overview and descriptive analysis of the survey data and sets out in a lucid and objective manner a wealth of material on employment and IR in British workplaces . . . More importantly, however, the authors have been able to identify, in a rigorous manner, changes and developments over the previous years. This is the first time that such systematic monitoring has been possible' (Millward and Stevens, 1986: xi). Brannen explains that in order to achieve this, 'a substantial core of common questions was retained but a new topic area, concerned with technical change, was introduced . . . In addition an experimental panel element was built into the design'. And so the state of permanent revolution, which is the WIRS series, got under way. This 'revolution' has subsequently involved the refinement and extension of the panel survey, a new employee survey linked to workplaces introduced in 1998 and extended in 2004, the linkage of the survey data to financial information in the Annual Business Inquiry (Forth and McNabb, 2007), the interviewing of non-union worker representatives in 2004 (Kersley et al., 2006:

¹This coverage was made possible by a better sampling frame, the Census of Employment (Daniel and Millward, 1983: 5–6).

²Letter from Head of Social Survey Division, OPCS, July 1979, Department of Trade and Industry files. The counter-argument, and the means of addressing situations in which a workplace manager is not suitably informed, are discussed by Millward (1991: 140–150).

144–177), and a reduction in the employment size threshold for inclusion in the survey from 25 employees to 10 in 1998 and five in 2004 (Forth *et al.*, 2006). Perhaps it is WIRS' ability to both track change and 'move with the times' that has resulted in a growing acceptance of the value of large-scale survey data collection in furthering our understanding of IR, although it is not without its critics (Blackburn, 2005; McCarthy, 1994).

The remainder of this article focuses on WIRS' treatment of some themes that have featured prominently in primary and secondary analysis of the data throughout the survey series: (i) the demise of collective IR; (ii) pay determination and union wage effects; (iii) pay settlements; (iv) the climate of IR; and (v) union effects on employment growth. In doing so, we draw on the primary sourcebooks and on some of the secondary analyses that have appeared in academic journals. Our intention is to reflect on how WIRS marked an important departure in the study of IR.

THE DEMISE OF COLLECTIVE IR

Reflecting on changes in IR traced with the first four WIRS surveys, Millward *et al.* (2000: 234) proclaimed an end to the dominance of collective IR in Britain:

The Conservative government that came to power in 1979 confronted a system of collective employment relations that was dominant, though not universal... That system of collective relations, based on the shared values of the legitimacy of representation by independent trade unions and of joint regulation, crumbled in the intervening eighteen years to such an extent that it no longer represents a dominant model.

They maintained that this change was so profound that it 'can reasonably be regarded as a transformation' (*ibid*.: 234).

For many years it had been possible to track changes in union membership with data lodged with the Certification Officer by trade unions. One-off surveys of individuals, such as the National Training Survey 1975, also contained union membership, but it was only later that repeat cross-section surveys of individuals permitted analyses of changes in union membership. British Social Attitudes (BSA) was among the first, collecting union membership data from 1983. Only with the advent of WIRS were analysts able to track change in workplace-level institutions like union recognition and measure workplace union density, giving a better indication of the concentration of union membership and power than is possible with individual-level data. It also combined cross-sectional and panel workplace data, allowing analysts to identify the extent to which trends were a result of changes in the composition of workplaces, on the one hand, and of behavioural change among surviving workplaces, on the other.

Despite substantial declines in employment, WIRS' measures of collective IR were fairly stable between 1980 and 1984 (Millward and Stevens, 1986: 302–305), with workplace union recognition actually rising in the economy as a whole (*ibid.*: 62–63). There were signs of change, with a decline in the closed shop and in union presence (any members on-site) and a fall in union recognition in manufacturing (*ibid.*). But only with the arrival of WIRS90 did analysts become aware of just how much had changed over a very short period. The sourcebook's authors argued 'so great were the changes that it is not unreasonable to conclude that the traditional, distinctive "system" of British IR no longer characterized the economy as a whole' (Millward *et al.*, 1992: 350). Purcell (1993) called it 'the end of institutional industrial relations'.

The decline in union recognition continued into the 1990s, albeit at a slower rate. However, WERS 2004 suggests that this decline has ceased since 1998, at least among

Table 1:	Table 1: Percentage of workplaces with 25+ employees recognising unions, 1980–2004							
	1000	1004	1000	1000	2004			

1980	1984	1990	1998	2004
65 41 94	56 44 99	44 36 87	28 23 87	37 20 88 39
	65 41	65 56 41 44 94 99	65 56 44 41 44 36 94 99 87	65 56 44 28 41 44 36 23 94 99 87 87

Sources: Millward *et al.* (2000) and Willman and Bryson (2007) based on WERS. Note that 1998 figures based on new weights explaining difference in 1998 private manufacturing figure compared with Millward *et al.* (2000).

the traditional population of workplaces with 25 or more employees (Table 1).³ The decline in a couple of percentage points is not statistically significant. Furthermore, union recognition rates actually rose in the shrinking private manufacturing sector.

This slowdown in the rate of decline in collective IR, confirmed in other research pointing to an increase in the rate of new union recognitions (Blanden *et al.*, 2006; Gall, 2004), is also apparent in the slower rate at which collective bargaining coverage has fallen since 1998, but again, there are large sectoral differences (Kersley *et al.*, 2006: 187–188). One could nevertheless argue that by the turn of the century, the strongest forms of unionisation—especially the closed shop—had all but disappeared in Britain, at least in the private sector. The closed shop had effectively been outlawed in Britain by 1990 so it was not surprising to see that it had virtually disappeared by 1998 (Millward *et al.*, 2000: 147). Only 3 per cent of workplaces with five or more employees had 100 per cent union membership in WERS 2004. Among workplaces with union members who recognised unions and had 25 or more employees, the percentage with 100 per cent union membership fell from 19 per cent in 1984 to 13 per cent in 1990 to 4 per cent in 1998 (*ibid.*: 140). By 2004 the figure stood at 6 per cent.

Having mapped the demise of collective IR, WIRS analysts sought to explain it. Whereas collective IR remained strong in the public sector, analyses of WIRS 1984–98 indicated that changes in the types of workplace entering and leaving the population played only a minor role in the demise of collective IR in the private sector (Bryson *et al.*, 2004). Rather, the decline was widespread, a cohort effect affecting most types of workplace, with newer workplaces entering the population increasingly likely to be non-union relative to their older counterparts, regardless of their other characteristics (Disney *et al.*, 1995; Millward, 1994; Millward *et al.*, 2000). Newer workplaces had a lower propensity to unionise than older ones, with evidence pointing to a 'golden age for union recognition . . . during the Second World War and the years immediately following it' (*ibid.*: 103). Cohort effects continued to drive change over the period between 1998 and 2004. The union recognition rate among panel

³An employer may recognise a union for pay bargaining such that the union bargains over wages even when there are no union members present on the site. This phenomenon was only tracked in WERS for the first time in 2004, indicating that 3 per cent of all workplaces—or one-tenth of those recognising unions—'would not have been identified as recognizing unions in earlier surveys in the series' (Kersley *et al.*, 2006: 120)

⁴Machin (2000) reports similar findings also using WIRS.

workplaces with 10 or more employees who were in existence throughout the period was stable, and new workplaces remained steadfastly non-union—their union recognition rates were far lower than older workplaces and those that had closed over the period (Kersley *et al.*, 2006: 120–121). However, union recognition fell quite dramatically among the smallest workplaces with 10–24 employees.

Although collective IR in Britain rests on employers' voluntary recognition of unions for pay bargaining⁵, union recognition for pay bargaining has become a less reliable indicator of union activity at workplace level in recent years. This phenomenon had been documented by Brown *et al.* (1998) and became apparent in WERS98 when sourcebook analysts uncovered a high percentage of workplaces with union recognition where there appeared to be no collective bargaining coverage (Millward *et al.*, 2000: 159–167). This 'hollow shell' phenomenon was apparent once again in WERS 2004, extending to all aspects of joint regulation, not just pay determination (Kersley *et al.*, 2006: 193–196). It is also apparent in the precipitous decline of union membership within unionised workplaces. The rate of union density decline within recognised workplaces rose three-fold in the 1990s compared to the second half of the 1980s (Millward *et al.*, 2000: 139–145), resulting in substantial growth in free-riding (Bryson and Free-man, 2006).

But how could one account for the 'hollowing out' of unionism where it maintained a presence? Again, WIRS provided some indications. According to Millward *et al.* (2000: 150–152), 'the decline in the closed shop and strong management endorsement of membership were the main reasons for the fall in mean union density in unionized workplaces'. However, the picture was 'quite different' in the 1990s when 'employees appeared to have lost their appetite for unionism'. Managers' attitudes towards unions remained unchanged over the period 1998–2004 (Kersley *et al.*, 2006: 114–115). In spite of this, the rapid growth in free-riding, apparent until the late 1990s, has ceased (Bryson and Freeman, 2006).

PAY DETERMINATION AND THE UNION WAGE PREMIUM

Among workplaces with 25 or more employees, the incidence of collective bargaining remained roughly constant between 1998 and 2004 in the economy as a whole, with around 4 in 10 workplaces using collective bargaining for at least some of their workers (Kersley *et al.*, 2006: 186). Thus, the rate of decline in aggregate collective bargaining coverage in the economy as a whole has slowed since 1998 compared to the 1980s and 1990s, but this hides substantial differences in sectoral trends. The percentage of employees in private manufacturing covered by collective bargaining fell at twice the rate in 1998–2004 compared to 1990–98 and was identical to the rate of decline for 1984–90. In private services, on the other hand, the rate of decline has slowed, albeit from a lower base. Collective bargaining coverage in the public sector has actually risen since 1998, largely because of collective bargaining over regrading and pay in the health sector (*ibid.*: 187–188).⁶

⁵This remains the case in spite of the statutory recognition procedure introduced by the Employment Relations Act 1999.

⁶The traditional WIRS population of workplaces with 25 or more employees overstates the prevalence of collective bargaining in the economy. Only one in eight private sector workplaces with five or more employees had any collective bargaining in 2004. One-quarter of employees were located in them (Forth *et al.*, 2006: 57–59). Nearly three-quarters (73 per cent) of employees in private sector workplaces with five or more employees had their pay set unilaterally by management—usually at workplace level (*ibid.*: 59).

Where collective bargaining occurred in 2004, it continued to have a substantial impact in compressing pay at workplace level (*ibid*.: 198) and in reducing the incidence of low pay (*ibid*.: 199–200). The was also able to deliver a fringe benefits premium (*ibid*.: 199–200), as was the case in WERS98 (Forth and Millward, 2002a).

One of WIRS' biggest contributions to our understanding of IR has been in the estimation of the union wage premium. Early WIRS studies marked a big advance on previous studies. First, *ceteris paribus* estimates of the union wage premium could be made more accurately through comparisons of union and non-union workplaces rather than the aggregate-level analyses that had preceded it. Second, WIRS offered a range of unionisation measures, which meant that analysts could test the sensitivity of their results to different institutional facets of workplace arrangements. This was particularly valuable as some WIRS variables—notably the closed shop and union density—were thought to be good proxies for the degree to which unions could monopolise the supply of labour to employers, this monopolisation being the source of their bargaining power (Stewart, 1987).

Blanchflower's (1984) paper analysing the union wage premium among manual workers with WIRS80 was the first to use workplace-level data in Britain.8 In covering semi-skilled and skilled manual workers in manufacturing, nonmanufacturing and the whole economy, it was far more comprehensive than any previous analysis for Britain. It was also the first econometric analysis to make use of the concept of union recognition rather than union density or coverage. Estimates based on WIRS80 were less likely to be biased than previous estimates for two reasons. First, information from personnel managers was less prone to measurement error than information from workers (ibid.: 322).9 Second, the use of micro-data as opposed to the aggregate data used in all but one of the previous studies permitted the inclusion of a richer array of control variables and the avoidance of aggregation bias emanating from variation in union differentials across industries. His estimates of the union wage premium were lower than those using aggregate data and were larger for semi-skilled manual workers than for skilled manual workers. He also identified a higher premium in the non-manufacturing sector, which had not been identified hitherto.10

WIRS studies have consistently demonstrated that the size of the union premium is correlated with the ability of unions to monopolise the supply of labour and that where unions are weaker there is often no premium at all. For instance, Stewart (1987) found that the workplace-level union recognition premium for skilled manual workers in WIRS80 was confined to those working in establishments with a closed shop. In a subsequent paper, Stewart (1995) attributed part of the decline in the union wage premium in Britain to the demise of the closed shop over the period.¹¹

⁷This 'sword of justice' effect of union pay bargaining has been verified using other data sources (such as the Labour Force Survey) and has been estimated to have a much bigger impact on the gender pay gap than the introduction of the national minimum wage (Metcalf, 2005).

⁸Blanchflower (1984: 328) cites some earlier studies using establishment micro-data in the USA.

⁹Much of the literature uses union membership rather than bargaining coverage to estimate union effects because coverage measures are usually absent or assumed to be measured with error. Surveys of individual employees sometimes obtain measures of union recognition, but these are likely to be more error prone than individuals' reports of their own membership and of managers' reports of union recognition. Conversely, WERS managers tend to underestimate union density (Kersley *et al.*, 2006: 111).

¹⁰Blanchflower and Oswald (1990a) performed a similar analysis for white-collar workers.

¹¹The other reason Stewart cites for the decline in the union wage premium was unions' inability to establish differentials in new workplaces.

A recent preoccupation of analysts has been whether or not there is still a union wage premium in Britain. The disappearance of the premium seems implausible, not least because one would expect workers to obtain some tangible benefit from membership to induce them to join, otherwise why would they join? However, there is some evidence of a decline in the premium. Forth and Millward (2002b) found that the WERS98 union premium was confined to employees in workplaces with high bargaining coverage or multiple unions. Using BSA, Bryson (2007a) finds that a membership premium of 5–7 per cent in 1998 disappears by 2005 when running analyses that are identical in specification. However, using WERS 2004, we estimate an hourly membership wage premium of 6 per cent in private sector workplaces with five or more employees. ¹² One limitation of these analyses (using WERS or BSA) is that the data are cross-sectional and so it is difficult to isolate the wage premium from the effects of sample selection. ¹³ Even if there is a downward drift in the premium it is unclear whether this is a cyclical or a secular phenomenon (Blanchflower and Bryson, 2003).

Since 1998, WERS has incorporated linked employee data, which include banded weekly earnings and continuous hours data, permitting analyses of both workplacelevel and individual-level union wage premia. These linked data also allow analysts to distinguish more clearly between the effects of union membership, bargaining coverage, and background individual and workplace characteristics. This is important because the premium is essentially a product of bargaining rather than membership. Membership provides the bedrock to give unions just cause to bargain, and it provides a source of power. But in Britain there is no necessary reason to expect that a wage premium will be attached to membership other than the fact that recognition and membership are positively correlated. This point is often overlooked by those relying on household and individual surveys that often rely on membership as the indicator of unionisation simply because they lack true measures of bargaining activity. The dangers in doing so are illustrated by Blanchflower and Bryson (2004), whose analyses of WERS98 showed that estimates of the union membership wage premium based on employee-only data were upwardly biased because some of the positive wage effect attributed to membership was actually because of members being employed at betterpaying workplaces.

One of the puzzles in the existing union wage premium literature is the apparent union membership wage premium even among workers covered by collective bargaining (Hildreth, 2000). The linked employer–employee data in WERS98 provided an opportunity to test whether or not this apparent premium was in fact because of unobserved differences between the workplaces employing members and non-members. Using linked employer–employee data from WERS98, Blanchflower and

¹²Our latest estimates from the Labour Force Survey for 2004 and 2005 indicate a union membership wage premium of 12 per cent (controls are age, its square, male, 6 schooling dummies, 4 race dummies, 22 region of work dummies and 11 industry dummies).

¹³The estimation techniques used in earlier papers tend to generate higher estimates than the techniques currently in vogue. So, for instance, Booth and Bryan (2004) and Bryson (2006) find that the non-significant membership premium result is because of the use of an instrumental variables (IV) approach and propensity score matching (PSM), respectively. OLS estimates presented in those papers are significant and much higher. Another reason for exercising caution when drawing inferences about trends in the union wage premium is that estimates based on the first three surveys in the WERS series relied on workplace data, while estimates based on the later surveys are able to use data on individual employees. The two approaches may yield different estimates if the average premium varies by size of workplace. See Forth and Millward (2002c) for a consideration of the sensitivity of union wage premium estimates to analysts' methodological choices. Bryson (2007b) discusses the conceptual issues surrounding the nature of union wage effects and methodological issues arising from the desire to identify causal effects of unionisation.

Bryson (2004) and Bryson (2006) show that the union membership premium falls dramatically among covered workers having controlled for observable workplace heterogeneity. Using a slightly different subset of the WERS98 data and controlling for unobservable workplace-level influences on wages by exploiting the within-workplace variation in wages, Booth and Bryan (2004) find no significant union membership wage premium among covered workers, suggesting that the 'puzzle' has been solved, together with the seeming paradox of free-riders refusing to avail themselves of this benefit.

Multiple observations of employees within the same workplace also permit analyses of spillover effects of collective bargaining and union membership on uncovered workers and non-members. These effects prove to be fairly important. Using WERS98, Forth and Millward (2002b) found no general mark-up for employees covered by collective bargaining. However, there was evidence of a spillover effect from covered to uncovered workers in unionised establishments, which suggests the presence of a small workplace-level wage premium of around 4 per cent associated with the presence of recognised unions. ¹⁴ Larger premia of around 10 per cent, however, were confined to workers in workplaces with high bargaining coverage or multiple unions. Using WERS98, Belfield and Heywood (2001) also found that the threat of unionisation was associated with higher wages for employees in the non-union sector. ¹⁵

In another WERS98 paper, Bryson *et al.* (2005) find a union wage premium that is confined to what they define as 'high involvement management' (HIM) workplaces. Although these HIM practices are associated with higher labour productivity as well, they do not affect the financial performance of union workplaces. These findings are consistent with concessionary wage bargaining (as opposed to 'mutual gains') or simply the hiking of wages in recognition of employees' increased labour productivity in the presence of HIM work practices. A further possibility suggested by Forth and Millward's (2004) WERS98 analysis identifying a wage premium associated with HIM workplaces is that unionisation and HIM may be jointly determined, perhaps indicating that HIM workplaces tend to be high-wage workplaces where employers will value worker voice such as that offered by unions.

PAY SETTLEMENTS

As well as furthering our understanding of pay levels, WIRS has also provided a strong body of evidence identifying factors associated with the size of pay settlements. WIRS is a useful source of information on this issue given its representative nature and the general lack of information on pay settlements in the economy more generally. However, its impact in policy discussions is limited given the infrequency of the surveys and the gap between data collection and data analysis, such that policy analysts often resort to other data.¹⁶

¹⁴This could be explained by employers reaching workplace-wide pay agreements, that is, not discriminating between covered and uncovered workers. Consistent with this is Forth and Millward's (2002d) finding that most workplaces have a single settlement figure for all workers.

¹⁵This effect did not reduce wage dispersion within non-union workplaces, however, as the effect was no more pronounced for lower-paid than for higher-paid employees.

¹⁶The best-known source is the CBI's Pay Databank (Brown *et al.*, 2004). However, these data are confined to CBI members and have traditionally focused on manufacturing settlements. The Databank was suspended in 2003 and is unlikely to resume. Other valuable sources include databases maintained by Incomes Data Services, Industrial Relations Services and the Labour Research Department. For more details see http://www.cipd.co.uk/subjects/pay/general/paysettle.htm.

Using WIRS84, Millward and Stevens (1986: 246–247) found that 'in general terms, the influences upon the pay settlements that were jointly regulated were not very different from those that were unilaterally determined by managers . . . the considerations taken into account in determining the pay of unionised workers applied also to unorganised workers. The difference lay not in the considerations, but in who considered them and how the decision was taken as to what weight should be attached to each'. There was one exception: merit and performance pay tended to be cited more often in non-union settings. ¹⁷

Blanchflower and Oswald (1988: 367–368) came to the same conclusion: 'with the interesting exception of merit payments for individual performance, union and non-union pressures upon wage settlements are apparently similar'. Perhaps more importantly, however, Blanchflower and Oswald's (1988; 1990a) papers and Blanchflower *et al.*'s (1990) paper raised severe doubts about the general applicability of the competitive model of pay determination by showing the importance of factors internal to the workplace in determining wage settlements and wage levels. Concluding their 1990 paper, which identified the importance of factors such as workplace financial performance in determining the weekly earnings of 'typical' workers in WIRS84, Blanchflower and Oswald (1990a: 159) conclude:

the classical competitive model of the labour market does not provide an adequate explanation of wage determination in the United Kingdom. Instead, pay levels are shaped by an intricate blend of internal and external forces. For all but the unskilled non-union sector, a model based on the distinction between insiders and outsiders, where unions and bargaining play a central role, may offer the most appropriate framework. Even parts of the non-unionized sector of the economy exhibit signs of insider influence.

Blanchflower and Oswald (1990b, 1994, 1995) went on to develop these ideas in their identification of the wage curve indicating a negative correlation between local wages and local unemployment, a relationship they first observed in WIRS80. However, they did not find evidence for the wage curve in WIRS84. After a year or so puzzling over why that would be, they realised that the higher levels of unemployment prevailing in 1984 might have resulted in a non-linearity in the wage curve, and their subsequent book was born. Wage curves have now been found in over 45 countries (Blanchflower and Oswald, 2005).

The WERS98 questions on pay settlements differed from those appearing in earlier surveys in two major respects. First, in previous surveys, data had been collected for manual and non-manual workers separately. In WERS98, on the other hand, questions focused on the pay settlement for the core group of non-managerial employees at the workplace (what WERS terms the 'largest occupational group'). However, because two-thirds of workplaces use identical arrangements for all occupational groups, analyses of pay settlements for core employees tend to be representative of workplaces as a whole (Millward *et al.*, 2001). Second, the term 'pay settlements' was the 'pervasive but out-moded terminology of collective bargaining' for the process of periodic adjustment to pay levels (Forth and Millward, 2002d: 3). Thus, the questionnaire referred to 'pay settlement or review' and 'pay settlement or award'. Millward *et al.*'s (2001) and Forth and Millward's (2002d) analyses of private sector pay setting using these rich data in WERS98 revealed a number of interesting features of the pay process. Inflation continued to play a key role in pay adjustments:

¹⁷In WIRS80, very different questions about pay increases were asked of unionised and non-unionised workplaces precluding such comparisons (Daniel and Millward, 1983: 195–197).

despite inflation being at historically low levels, employers still review and adjust pay levels overwhelmingly on an annual basis. Settlements are clustered around the prevailing rate of inflation . . . Employers very commonly cite the inflation rate as a major influence upon the size of settlements, but they also commonly say that settlements are the same for their employees as for others in the same industry. It is difficult to disentangle these two influences. However, we produce some empirical evidence that both are at work: private sector settlements were probably higher when background inflation was higher; and there is some evidence of employers following a 'going rate' [of increase] in their industry [ibid.: 25].

Trade unions frequently had little or no involvement in pay settlements even when, ostensibly, they were subject to collective bargaining. Pay was reviewed more frequently where unions were present than in cases where management were free to choose the frequency of settlements. However, collectively bargained pay settlements were similar in size to settlements achieved in the absence of unions. This finding, in conjunction with the absence of an overall union wage premium in WERS98 (Forth and Millward, 2002b), suggests weakness in union bargaining power.

The analysis of pay settlements in the WERS 2004 sourcebooks was confined to an analysis by size of firm (Forth et al., 2006: 60). However, we have prepared new analyses of the 2004 data to complement that undertaken by Forth and Millward on WERS98. Many of the patterns noted by Forth and Millward remain (Table 2). 18 First, in unionised workplaces, pay remains more likely to be reviewed on an annual basis. It then seems likely that the process of pay review is more regular in unionised workplaces than in non-union establishments, although one cannot say this for certain because those reviews taking place more than once a year in non-union sites may nonetheless have a regular cycle (e.g. six-monthly). Second, unionised settlements are more likely to be influenced by changes in the cost of living than by non-union settlements and are less likely to be influenced by workplace or organisation performance. Third, and in keeping with Blanchflower and Oswald's earlier analysis, pay increases awarded in unionised workplaces are more likely to follow the going rate for similar workers in the same industry or locality. Fourth, substantial minorities of pay settlements in unionised workplaces are apparently concluded without the direct involvement of union representatives or full-time officials. The involvement of employers' associations is extremely uncommon and has become less prevalent since 1998.

CLIMATE OF EMPLOYMENT RELATIONS

As Marginson (1998: 378) notes, 'respondents are not only informants, they are also actors within the workplace . . . relating events and practices of which they are a part'. Given the 'contested' nature of IR, reliance on a single role-holder, such as workplace managers, may lead to a partial or biased picture of the nature of IR in the workplace. With multiple respondents often asked similar or identical questions about their perceptions of IR, WIRS has been able to establish the degree of 'dissonance' between respondents within the same workplace and has helped to explain reasons for the differences. This is nowhere more apparent than in the case of perceptions of the climate of employment relations in the workplace.

WIRS80 made a number of contributions to discussions about industrial conflict in Britain. First, it gave a more accurate picture of the incidence of industrial action than other sources. Just as the Warwick Workplace Survey had identified that strikes of

¹⁸It is not possible to repeat Forth and Millward's analysis of the relative size of pay settlements in unionised and non-unionised settlements as data on settlement size was not collected in 2004.

Table 2: Characteristics of the most recent pay settlement for core employees in private sector workplaces, 1998 and 2004

	1998		2004	
	No union recognised	Union recognised	No union recognised	Union recognised
Frequency of pay review:				
More than once a year	7	5	9	2
Annually	85	91	86	95
Less than once a year	8	4	4	2
Factors affecting most recent ser	ttlement:			
Changes in cost of living	71	80	55	76
Ability to recruit/retain employees	_	_	49	36
Organisation or workplace performance	75	65	_	_
Financial performance of organisation or workplace	_	_	69	64
Productivity levels within organisation or workplace	_	_	46	39
Industrial action threatened or taken	2	12	<1	4
Risk of redundancies	11	22	_	_
Change at last review:				
Increase	95	97	87	93
No change	5	2	13	7
Decrease	<1	1	<1	<1
Where pay increase, settlement s	same as that f	for:		
Managers at this workplace	66	76	66	66
Other non-managerials	85	88	82	81
Similar workers in same industry/sector	67	79	66	76
Similar workers in same locality	62	79	64	67
Where pay increase, who was in	volved:			
Union representatives	2	60	1	57

Base: Private sector establishments with 10 or more employees.

short duration and those in smaller workplaces were under-recorded (Brown, 1981: 97–101) so WIRS80 provided information on the incidence of industrial action short of a strike where official statistics were either absent or patchy (Daniel and Millward, 1983: 291–293). Furthermore, Daniel and Millward (1983) found that managers and worker representatives in WIRS80 disagreed about the occurrence of industrial action, a finding replicated in subsequent surveys.

Second, it supplemented information on the incidence of strike action with other information about conflict at work such as claims to industrial (employment) tribunals

Table 3: Managerial perceptions of the industrial relations climate among workplaces with 25+ employees, 1980–2004

	1980	1984	1990	1998	2004	
Panel A: Whole economy						
Very good	49	38	32	39	39	
Good	49	57	61	51	53	
Panel B: Unionised workplaces						
Very good	45	34	28	40	37	
Good	53	62	63	50	55	
Panel C: Non-unionised workplaces						
Very good	56	48	37	39	41	
Good	41	48	59	52	53	

Note: The categories 'neither good nor poor', 'poor' and 'very poor' account for the remainder.

and perceptions of the 'climate' of IR at the workplace. Management perceptions of 'climate' indicate an improvement in IR since 1990, but on this measure, relations appear poorer than they were in the early 1980s (Table 3). Of course, it is also possible that the norms and expectations governing what constitutes a 'good' climate have shifted, in which case it would not be possible to infer change in the real world based on these perceptions. The table also shows that although managerial perceptions of climate were poorer in union workplaces than in non-union workplaces in 1980–90, the gap had disappeared by 1998.

In addition to the single-item climate indicator available in WIRS since the outset, WIRS includes items such as sanctions against employees (formal written warnings, suspensions of employees, deductions from pay, internal transfers for disciplinary reasons) and days lost through sickness and absence. These have proven valuable in obtaining a comprehensive picture of employment relations and workplace conflict following the virtual disappearance of industrial action by 2004 (Kersley *et al.*, 2006). The single-item climate variable is correlated with these alternative measures in the way one would imagine (*ibid.*: 278–279). Other measures of climate are available in the Survey of Employees and have been used by some analysts to construct multi-item composite indices of climate in the absence of validated scales in WERS (Guest *et al.*, 1999; Ramsay *et al.*, 2000). ¹⁹

Third, WIRS showed that different actors had very different perceptions of the climate of IR at the workplace. Data from union representatives matched to that of managers showed, unsurprisingly that such representatives have a poorer perception of the climate than their managerial counterparts (Daniel and Millward, 1983: 254–256). This finding has been replicated over the course of WIRS. The advent of linked employer–employee data in 1998 meant that analysts were able to assess

¹⁹The limitation, of course, is that such a comprehensive picture is only available at certain time points, whereas there may be considerable change in the intervening period (see the discussion of Employment Tribunal claims in Kersley *et al.*, 2006: 227, endn. 13).

managers' perceptions of IR climate alongside those of employees in the same workplace. Comparisons revealed that managers tended to view climate more positively than their employees (Bryson, 2005; Cully *et al.*, 1999: 283). Similar findings have been reported for 2004 (Kersley *et al.*, 2006: 278). What is more, over the period 1998–2004, there has been an improvement in managers' perceptions of climate that is not apparent among employees (*ibid.*: 277–278).

Fourth, WIRS permitted analysts to investigate workplace-level correlates of IR climate and industrial conflict. Blanchflower and Cubbin's (1986) paper using WIRS80 was the first to use micro-data to assess propensities for various types of industrial action. Their coverage of the non-manufacturing sector was also novel. Their findings from multivariate analyses broadly confirmed results from the crosstabular analyses undertaken by Daniel and Millward (1983). Using WERS98, Knight and Latreille (2000) looked at the correlates of individual conflict as measured by workplace variability in disciplinary action, dismissals and tribunal applications. They showed that both workplace and workforce characteristics explained much of the variance. Analyses of WERS98 and WERS 2004 have also shown that correlates of positive perceptions of climate differed markedly across managerial respondents and employees within the same workplace (Bryson, 2005; Kersley *et al.*, 2006: 279–286).

UNIONS AND EMPLOYMENT GROWTH

Finally, we turn to the literature on the effect of unions on workplace-level employment in Britain to illustrate two things. First, although changes in workplace employment have been featured in the WIRS sourcebooks—notably when Millward and Stevens (1986: 11–13) reported a 'preponderance of establishments with declining employment numbers' over the recession period 1980–84²⁰—the analyses of this issue have largely occurred in academic papers.²¹ This literature is dominated by WIRS-based analyses. Second, it illustrates the way in which WIRS can help us understand IR not simply through the 'mapping' of the terrain but by trying to understand the relationship between key variables in the data. What is striking about this particular illustration is that the relationship between unionisation and establishment employment change has remained roughly constant over the years.

The WIRS literature on unions' employment effects has focused on changes in workplace employment levels. Early studies used retrospective data from managers on employment levels in earlier years to estimate union effects on employment change. More recent studies have begun to use the WIRS panel data, thus obtaining more accurate information. Studies tend to find that the average effect of union recognition is to lower employment growth by 2.5 to 4 per cent per annum relative to non-union workplaces, *ceteris paribus* (Addison and Belfield, 2004; Blanchflower *et al.*, 1991; Booth and McCulloch, 1999; Bryson, 2004; Machin and Wadhwani, 1991). Similar findings emerge from other countries (Bryson, 2004). This has led some

²⁰Also see Millward et al. (2000: 26-27).

²¹WIRS sourcebooks have focused more on the ways in which workplaces make workforce reductions (Cully *et al.*, 1999: 79–80; Millward *et al.*, 1992: 320–326).

analysts to refer to the employment effect of unions as the 'one constant' in studies of unions' economic effects (Addison and Belfield, 2004).

Some studies have found that union effects differ according to the nature of unionisation and the conditions facing the firm. For instance, negative employment growth effects in the 1990s were more pronounced where bargaining coverage was high (Bryson, 2004), whereas the effect is ameliorated when unions bargain over employment and wages (*ibid.*: 494–495). Most of these studies focus on the private sector. However, Addison and Belfield (2004) find negative employment growth effects of union recognition in the public sector similar to those for the private sector. In addition, they find evidence for the public sector that changes in workplace-level union recognition affect employment growth, with new recognitions reducing employment growth and with union derecognition increasing employment growth (*ibid.*). These union switches do not affect employment growth in the private sector.

Interpreting these union effects is quite a different matter. Some question whether or not the link is causal (Metcalf, 2005: 100). It is only recently that WIRS analysts have shown that this union effect is not solely attributable to a slower rate of employment growth, but is also attributable, at least in part, to a greater propensity for unionised workplaces to undertake within-workplace job cuts (Bryson and White, 2006). It remains to be seen whether or not analyses of the WERS 1998–2004 panel will reveal the same 3 per cent reduction in employment growth associated with unionisation.

CONCLUDING REMARKS

This article has sought to illustrate how WIRS marked a major departure in our understanding of IR in Britain. The first two surveys, WIRS80 and WIRS84, when taken together, fostered a new understanding of IR in Britain and how it was changing. It was 'new' in the sense that the IR community had little else to go on that was nationally representative of all broad sectors of the economy. It was also clear that the choice of the workplace as the visor through which we came to view IR was the appropriate level of analysis for many of the institutions and practices that were of greatest interest. This approach was not entirely novel, but simply establishing this way of conceiving IR was a considerable achievement.

It is unsurprising, therefore, that these early surveys began to change the way we thought about IR in Britain. One view is that a large number of the first-order questions about the nature of collective IR in Britain were answered in those early surveys undertaken in 1980 and 1984. Contrary to popular perception, these early studies painted a reasonably clear picture of the non-union sector in Britain. Diminishing returns may well have set in after the first two surveys. The contrary point of view is that revisions to the questionnaires and the addition of new survey instruments mean that WIRS is better able to 'map' IR. Perhaps one of the issues facing WIRS in subsequent years, identified by Millward (2001), is the difficulty surveys have in categorising the non-union sector, which, by its nature, is less rule bound than the union sector. It has proven difficult to construct proxies for 'slippery' concepts that are key in non-union settings—and, indeed, to the HRM practices that are also common in the union sector. The 'de-institutionalisation' of IR means that it has also become more difficult to construct proxies for union activity.

Five surveys, nine sourcebooks²² and numerous journal articles down the line²³, we are used to seeing British IR through the lens of the workplace. WIRS makes Britain one of the very few countries with representative workplace-level data. Yet it is important to recognise its limitations, both in terms of its scope and design. It has yet to survey the smallest workplaces with fewer than five employees, the panel component is limited, sample sizes limit the investigation of the heterogeneity of practices across different sorts of workplace and there are debates about measurement. At the same time, the survey tries to cover a huge range of practices and procedures. It may be time to invent new surveys to deal with some WIRS-related issues. These and other considerations are featured in current debate in the policy and academic communities regarding the next WIRS.

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²² Cully et al. (1999); Daniel (1987); Daniel and Millward (1983); Forth et al. (2006); Kersley et al. (2006); Millward (1994); Millward and Stevens (1986); Millward et al. (1992, 2000).

²³We estimate that there are around 400–450 WIRS publications. Roughly 165 of these are articles in refereed journals and 15 are books.

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