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BRITISH UNIONS IN DECLINE: AN EXAMINATION OF THE 1980S FALL IN TRADE UNION RECOGNITION

Richard Disney
Amanda Gosling
Stephen Machin

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ABSTRACT

The authors analyze establishment-level data from the three Workplace Industrial Relations Surveys of 1980, 1984 and 1990 to document and explain the sharp decline in unionization that occurred in Britain over the 1980s. Between 1980 and 1990 the proportion of British establishments which recognised manual or non-manual trade unions for collective bargaining over pay and conditions fell by almost 20 percent (from 0.67 to 0.54). The evidence reported demonstrates the importance of the interaction between the labour market, the product market, employer behaviour and the legislative framework in determining union recognition status in new establishments. The sharp fall in trade union recognition appears to be largely driven by a failure to achieve recognition status in establishments set up in the 1980s. These results, when taken in conjunction with recent changes in the nature of employment in the British labour market, seem to paint a bleak picture for unions and there appears to be no reason why the decline in union activity should not continue into the 1990s.

Richard Disney
Keynes College
University of Kent
Canterbury, Kent CT27NP
ENGLAND

Amanda Gosling
Institute for Fiscal Studies
7 Ridgmount Street
London WC1E 7AE
ENGLAND

Stephen Machin
Center for Economic Performance
London School of Economics
London WC2A 2AE
ENGLAND
and Harvard University and NBER

I. Introduction

Declining unionization has been one of the most significant features of the British labour market in the 1980s. All conventional measures of union presence and power vividly demonstrate this. The proportion of British establishments which recognised manual or non-manual trade unions for collective bargaining over pay and conditions fell by almost 20 percent (from 0.67 to 0.54) between 1980 and 1990 (Millward et al., 1992); the proportion of workers covered by a collective agreement fell from 0.71 in 1984 to 0.54 in 1990 (Millward et al., 1992); aggregate union membership fell from 13.2 million in 1980 to 9.9 million by 1990; the corresponding fall in aggregate union density was from 54 percent to 38 percent (and it has continued to fall post-1990). The longer time series profile of aggregate union density (defined as the number of union members divided by the total workforce), pictured in Figure I, shows that declines in the 1980s have completely reversed the gains achieved in the 1970s. Union density now stands at its lowest level for 30 years.

A recent survey of trends in union activity in the British labour market is provided in Mason and Bain (1993).[1] They evaluate and appraise the (relatively large) literature which has attempted to explain longer term trends in unionisation and the smaller body of evidence that has analysed the sharp decline of the 1980s. There are few British studies, however, that analyse microeconomic data on workplaces or individuals at different points in time and most concentrate on union membership density as the variable to be explained.

In this paper we use microeconomic establishment-level data from the three Workplace Industrial Relations Surveys[2] to document and explain the sharp 1980s decline in union activity. We differ from the studies referred to above (notably Beaumont and Harris, 1993) in that we focus on establishment-level recognition of trade unions for the

purposes of determining pay and conditions of employment as our measure of unionization. Beaumont and Harris, for example, use the panel element of the 1984 and 1990 surveys to focus on within-establishment declines in union density which they argue drives changes in union recognition. On the contrary we study the wider, nationally representative samples of workplaces in the three cross-sections (the sample of establishments in the panel is much more restricted: for example, by definition the panel excludes all those workplaces under 6 years old and it looks only at trading sector establishments). In addition, we view the extent of recognition, rather than union membership or density, as the key determinant of the effects of unions on economic outcomes.[3] For example, in an earlier piece (Disney, Gosling and Machin, 1993a; see also Gregg and Naylor, 1990) the variation in union density across establishments was itself shown to be principally driven by the extent of union recognition.

Our empirical analysis attempts to weigh up the relative importance of compositional changes versus within-group changes in unionism, to develop an econometric model of the determination of union recognition status and, lastly, to discover whether the observed changes are temporary or cyclical (whereby they may be reversed in the future) or if they reflect a more permanent trend. Whether any particular explanation of the union decline dominates is extremely important, both for trade unions and employers, and has implications for the overall functioning of the labour market. It is well established that unions affect a range of economic outcomes[4] (wages, employment, productivity, profits) and that wage, employment and profit determination is different in unionized and non-unionized labour markets. Hence, whether or not companies have trade unions in their workplace is important for their corporate performance. Unions also affect other outcomes. The 1980s has seen a significant rise in wage inequality (see Gregg and Machin, 1993) and unions have

traditionally been seen as a force for pay equality.[5] If the observed union decline is not secular and reflects a long-term trend than we would presumably, in the absence of other offsetting effects, see continued growth in the inequality of the pay received by different workers. It is therefore important to evaluate the reasons for union decline and to stress that the 1980s decline in unionization is interesting not only for its own sake but also for what it implies about the nature of and reward for work in the future.

II. What Happened to Union Recognition in Britain Between 1980 and 1990?

The Workplace Industrial Relations Surveys

The three Workplace Industrial Relations Surveys of 1980, 1984 and 1990 are the most widely-used and commonly cited surveys on industrial relations in British establishments. The surveys are nationally representative surveys of establishments that employ at least 25 workers (the sampling frame is based on the Census of Employment dated three years before each survey).[6] In recent years, the data have been quite heavily used by both labour economists and industrial relations researchers to examine a variety of issues.[7]

Establishment-Level Unionization, 1980-90

Table I uses the establishment-level data from the surveys to document the decline of union recognition for both manual and non-manual workers across all establishments and in different sectors of the economy (the public sector, private sector manufacturing and non-manufacturing). Between 1980 and 1990 the proportion of establishments which recognised trade unions for manual workers fell by around 13 percentage points or 21 percent of the

1980 mean (from 0.61 to 0.48); non-manual recognition fell by about 7 percentage points or 15 percent (from 0.50 to 0.43). Declines in the proportion of establishments with recognised unions are observed between 1980 and 1990 for all the disaggregated groups reported in the Table for both manuals and non-manuals. The sharpest declines have appeared within the areas where unions have been traditionally strong, namely manual workers in manufacturing (the decline there is a massive 25 percentage points fall or 34 percent compared to the 1980 mean).

Table II reports the same exercise for establishment-level union density between 1980 and 1990 and for union coverage between 1984 and 1990 (data on coverage was not available in the first survey). The pattern looks very similar to that traced out by the recognition variables in Table I. There are some differences (e.g. the 1984-90 fall in coverage in the public sector suggests a sharper decline, which is largely due to the removal of collective bargaining machinery for teachers and nurses), but the Table demonstrates the main trends depicted in Table I, namely that falls in unionization have been very marked, and more marked in private sector manufacturing, the traditional stronghold of private sector unionism.

Decomposition of Changes in Union Recognition Status

It is well known that changes in the composition of employment have simultaneously occurred as the 1980s saw large shifts away from manufacturing to services, away from manual to non-manual employment, from full-time to part-time work, male to female employment and so on. As such the changing nature of employment has involved a shift towards those areas where unions have traditionally been less well represented (see, for example, Green, 1992).

The relative importance of declines within the three groups in Table I versus declines arising from compositional changes can be easily evaluated. One can decompose the aggregate change in the proportion of establishments with recognised unions, say ΔX, in the following manner

$$\Delta X = \Delta X_1 \bar{f}_1 + \Delta X_2 \bar{f}_2 + \Delta X_3 \bar{f}_3 + (\bar{X}_1 - \bar{X}_3)\Delta f_1 + (\bar{X}_2 - \bar{X}_3)\Delta f_2$$

where a bar denotes a 1980-1990 mean, X_i is the proportion of establishments with recognised unions amongst the establishments in group i and f_i is the relative frequency of group i among all establishments. The first three terms relate to within-group changes and the last two terms reflect compositional (or between group) shifts. The results are shown in Table III and pictured in Figure II. Half of the decline in manual recognition is explained by the decline inside the manufacturing sector. For manual workers compositional changes between these three broad sectors explain less than 15 percent of the total 1980 to 1990 change. For non-manual workers both the decline within the public sector and the declining share of public sector employment in total employment are important, but no single effect dominates.

Simple Logit Models of Union Recognition Status

The nature of the decomposition results are further drawn out by the simple logit models of union recognition that we report in Tables IVa and IVb. These are purely descriptive econometric models which attempt to disentangle the relative importance of potential determinants of union status. In addition to the sectoral classifications used in the decomposition, we treat recognition as a function of establishment size and workforce

characteristics since they are likely to determine the expected costs and benefits of unionization (e.g. if unions give workers access to collective voice this will have more of an effect in larger establishments where there is a greater need for more formal channels of communication). Furthermore, there are important reasons as to why establishment age affects union status relating to life cycle, attrition and changing circumstances at set up date. These are discussed in more detail below. We thus include a dummy variable indicating whether the establishment is over 25 years old (20 in 1990)

Several important results emerge from consideration of the regressions in Table IV. First, the cross sectional decline in union recognition between 1980 and 1990 is not fully explained by the estimated models. In the pooled sample for both manuals and non-manuals the estimated coefficients on the 1980 and 1984 sample dummies are large, statistically significant and positive indicating that the trend in unionization is not entirely explained by the decline in the relative share of public sector establishments, manufacturing establishments, and the other controls.

Secondly, in most specifications recognition appears to be determined differently in private sector manufacturing than in private sector non-manufacturing and in the public as compared to the private sector as the χ^2 parameter stability tests at the base of the Tables show. For manual recognition, the estimated coefficient on the dummy variables indicating private manufacturing status shows a sharp decline from 0.814 (marginal effect = 0.143) to 0.259 (marginal effect = 0.056) between 1980 and 1990 reinforcing the result that there have been large declines **within** manufacturing that are not explained by the independent variables included in the logit models.[8]

The third result of note is that establishment age is found to be an extremely

important determinant of recognition in all years (for manuals) and its effect is clearly increasing over time (for both groups of workers). One should be a little careful here since the definition of the age variable differs across years[9] but, even given this, there does appear to be an important shift. For example, in the manual specifications in Table IVa, the marginal effect associated with the coefficient on age more than doubles, rising from 0.07 in 1980 to 0.18 in 1990.[10] Hence, between 1980 and 1990 there is a large *ceteris paribus* increase in the probability that unions are recognised in older establishments.

III. The Importance of the Establishment Age Effect

Modelling Procedure

Establishment age will be a determinant of the probability of recognition if there is some inertia in the determination of union status or if older establishments are consistently different from newer ones. It will also be important as a time related variable if, for one reason or another, the organising ability of unions or the ability of employers to resist unions shifts over time.

Existing evidence suggests that recognition is usually a once and for all decision made at some point early in the lifetime of the establishment. Recognition changes in existing establishments have remained uncommon even in the 1980s. Evidence suggests that derecognitions were almost unheard of up to about 1984, but some derecognitions occurred in the mid-to-late 1980s (see Claydon, 1989).[11] In the 1990 Workplace Industrial Relations Survey managers of non-union workplaces were asked if they had a recognised union in 1984: only 2 percent of the private sector sample stated that they had. Beaumont and Harris

(1993) examine the panel element of the 1984 and 1990 surveys (which covers 537 trading sector establishments) and state that "the vast majority of establishments did not change their union (non-union) status in the years 1984-90". Similarly, although the company-level survey of Gregg and Yates (1991) reported a number of partial recognition changes (i.e. derecognition for a single skill group in an establishment, or in a single establishment of a multi-establishment company), they found very few cases of complete derecognition. Smith and Morton (1993) confirm this and attribute it to the significant fixed costs associated with changing the union status of establishments.

Accepting this once for all nature of the union recognition decision what are the reasons for variations in recognition over time? Three broad mechanisms through which establishment age can affect union recognition status suggest themselves:

(i) Life cycle effects: If at any point in time the probability that a non-union establishment starts to recognise a union is greater than zero and recognition is a once and for all decision then the cumulative probability of recognition must be higher in older establishments. A greater share of newer establishments in the total stock of establishments in the 1980s would therefore predict lower union recognition.

(ii) Attrition effects: if there are unobservable factors that both determine the expected lifetime of a workplace and unionization and/or the expected life span of an establishment is determined by union status then these will be picked up by the coefficient on age. One example is that "unions kill firms" via their rent-seeking activities (Freeman and Kleiner, 1993); this is discussed in more detail later.

(iii) Time varying covariates: it is not the age of the establishment per se that matters for recognition, but the prevailing conditions in the economy and the industry when the

establishment was set up that affect the likelihood of union recognition. Thus an establishment set up in the 1960s is more likely to recognise a union than one set up in the 1980s not because it is 20 years older but because the conditions in the 1960s were more favourable to unionization than in the 1980s.

The expected future path of unionization depends crucially on which of these factors is dominant. Under the first two mechanisms the level of unionization is literally determined by the age structure of establishments. If the last mechanism is of most importance, then given the nature of the legislative and macroeconomic climate and trends in the changing nature of employment (all of which seem set to continue into the 1990s), new establishments will be much less likely to become unionized and the observed decline in recognition can be expected to continue into the 1990s.

Analysis of the three Workplace Industrial Relations Surveys suggests that time varying covariates are a potentially important determinant of the relationship between union status and establishment age. Firstly, the actual question in the surveys from which the age variable is constructed concerns the age of the workplace at its current address (see footnote 9 where the question is reproduced): thus it includes establishments that have moved (to larger premises, for example). In the 1990 survey questions were asked to determine which establishments were not in fact new establishments but were movers and among these movers whether the move took place with the workforce intact and so on. The relationship between union recognition and age is not significantly different between these three groups. Thus while moving may enable management to re-evaluate its industrial relations strategy (as in the case of Wapping for the newspaper industry) there appears to be no mechanism by which it should change the expected life path of the establishment: this would be necessary if the

first two effects discussed above were dominant.

The second reason for the claim that what matters is the date that the establishment was set-up rather than its age is demonstrated below. In the 1990 survey the question on establishment age was continuous (up to 20 years old) and thus we know the exact year in which the workplace was 'born'. If attrition or life cycle effects were dominant we would expect a smooth (if not linear) mean relationship between age and recognition. This is simply not the case. The age dated paths of average recognition proportions plotted in Figure III mirror the aggregate union density series in Figure I but, the overall downward trend apart, do not display a smooth relationship.

Our final reason is the statistical importance of age of establishment dated regressors in econometric models of the determinants of recognition status and we turn to this next. Rather than just including age in a recognition equation we next evaluate the importance of various variables dated to the time of establishment set up. This is clearly an attractive procedure since it gives us information on what determines union status in the first instance and draws out the historical aspect of the recognition decision.

Model Specification

What time-specific factors are likely to affect the probability of recognition? Three groups of time-varying factors (which need not necessarily be mutually exclusive) can be separated:

(i) Economic factors: union status can be seen to be the outcome of a bargain, implicit or explicit, between management and unions at or around the time at which the establishment was set up. Product market structure at the time of the bargain will influence the relative

costs and benefits to management and unions of achieving or resisting unionization and thus condition the level of resources they will be prepared to sacrifice to achieve the desired outcome (see Abowd and Farber, 1990, or Disney et al., 1992, for an extended discussion of these issues). It is also likely that there are factors which determine the balance of power in the labour market and the probability of new recognitions. One obvious labour market structure variable reflecting this is the extent of unionization among comparable establishments.

We utilise two variables in our empirical work to model product and labour market structure at establishment set up date. We model the product market by including industry-level profits per head (quasi-rents per worker)[12] at the date of set up (as in our earlier paper based only on private sector manufacturing, see Disney et al., 1992, 1993b). This proxies the expected rents over which the employer and union can bargain and hence the expected gain (loss) of unionization. The relationship is expected to be non-linear (see Disney et al. 1992). Unfortunately data on this variable is not available for non-manufacturing or for the public sector. Our labour market structure variable, industry union density at set up date, is however available for all three sectors.

(ii) Legislative factors: the Conservative government elected in 1979 introduced a range of anti-union legislative measures. Whilst it is hard to ascribe an effect to legislation on the basis of time effects (though this is exactly what Freeman and Pelletier, 1990, do) we can attempt to evaluate this route by considering whether or not a post-1979 shift in the probability of recognition occurred. Specifically, we incorporate a dummy variable equal to one if the establishment was set up after 1979 in our logit regressions of the determinants of recognition.[13]

(iii) Macroeconomic factors: a lot of earlier labour economics and industrial relations work has emphasised the role of the business cycle in shaping union status. We experiment with several macroeconomic indicators at the date of set up: specifically we allow potential roles for GDP growth, unemployment and inflation.

Estimates of Establishment-Level Union Recognition Equations

Table V examines the importance of these time-dated variables in affecting manual union recognition. It is not surprising, given the time series profile of establishment age dated recognition illustrated in Figure III, that the variable indicating whether or not the establishment was set up in the 1980s proves extremely important. Establishments that were set up in the eighties are significantly less likely to recognise trade unions. As noted above it is hard to reconcile this with the life-cycle and attrition explanations of the importance of establishment age. Hence, much of the focus in Table V is on the importance of this 80s effect in conjunction with the other time-dated variables.

Three specifications are reported in Table V for each sector. The first is a simple logit regression of manual union recognition on the "Established in the 1980s" variable; the second includes the age-dated economic factors relating to labour and product market structure; the third includes those macroeconomic factors found to be important over and above the other effects. In the private manufacturing and non-manufacturing equations the 1980s effect is strongly negative and statistically significant. The magnitude of the effect is sizable: private sector manufacturing establishments set up in the 1980s were *ceteris paribus* some 30 percent less likely to recognise manual unions than other private sector manufacturing establishments (column (2)); within non-manufacturing the analogous

probability was about 18 percent (column (5)).[14] This drives home the point made above that much of the union decline is going on **within** sectors. Unions are finding it harder to achieve recognition status both where they used to be strong (private sector manufacturing) and in the newer sorts of establishments that are becoming increasingly more typical of the British labour market (private sector non-manufacturing). On the strength of this, it is hard to imagine this decline being arrested in the 1990s.

In the private sector the other set up dated variables perform well. In manufacturing the industry quasi-rents per head variables show the stable, quadratic relationship that we have reported in earlier work (Disney et al., 1992, 1993b).[15] Similarly, industry unionisation at time of set up has a strong positive impact on the likelihood of manual union recognition. It is relatively hard to find any important role for macroeconomic factors: the most marked effect over and above the other time-varying controls came from an aggregate GDP growth variable, the coefficient on which only suggests a very weak pro-cyclical pattern in the ability of unions to achieve recognition status in the private sector (other macroeconomic variables were statistically insignificant as the Likelihood Ratio statistics at the base of the Table demonstrate).

In the public sector it proves harder to isolate any important effects. This is (at least partially) down to the fact that, unlike the other sectors, unionised bargaining is still the dominant mode of pay determination. The coefficient on the 80s variable is estimated to be negative but insignificant and, if anything, the GDP growth variable suggests a counter-cyclical pattern. Overall, it appears (not surprisingly) that the time series pattern of public sector recognition is driven by other factors. This seems plausible as the likes of competitive tendering and subcontracting by non-union employers are probably more likely to be the

principal factors shaping the more modest fall in public sector unionism.

Evaluation of Results and Consideration of Alternative Hypotheses

The results point to an important fall in private sector union recognition that is inherently linked to a failure to achieve recognition status in newer establishments. Several factors could lie behind this. Those that have been emphasised as potential explanations of union decline in the United States are: compositional changes; unfavourable shifts in public opinion towards unions; increased management opposition; reduced demand for union representation. There is some debate but the US work seems to rule out compositional changes and increases in anti-union sentiments with the debate falling between those who emphasise increased opposition of employers (Freeman, 1986; Freeman and Kleiner, 1990) and falling demand (Farber and Krueger, 1993).

In the UK case it seems that one can also rule out the compositional changes hypothesis for (at least) two reasons. First, the results in Table III suggest that between-sector shifts are relatively unimportant. Second, many of the compositional shifts that are supposed to be bad for unions (e.g. increased female participation, moves towards an increased share of non-manual workers and service sector employment) occurred in both the 1970s and the 1980s when unionization respectively increased and decreased.

The notion that attitudes towards unions became more unfavourable in the 1980s also receives no support. The annual Gallup political opinion poll asks those surveyed the following question:

"Generally speaking, do you think trade unions are a good thing or a bad thing?"

Figure IV plots the responses to this question between the mid-1950s and 1990. In

the 1980s it is clear that the percentage of respondents stated that unions were perceived to be a good thing increased through the decade.

What of the other explanations? Data limitations and the identification issue make it impossible for us to address the hypothesis that the individual-level demand for unionism has fallen. It is, however, possible to shed some light on the possibility of management opposition by considering the following question asked to the managers of establishments that do not have any union members in the 1990 Workplace Industrial Relations Survey:

"How would you describe management's general attitude towards trade union membership among employees at this establishment. Is management....

.... in favour of trade union membership

.... not in favour of it

.... or neutral about it?

Table VI reports descriptive statistics on the responses to this question. It is clear that managers are more likely have an unfavourable disposition towards unions in manufacturing establishments where the proportion not in favour is 0.46 as compared to an average across all establishments of 0.32. As the largest falls in union recognition were in manufacturing this clearly points in the right direction (of course, we would also have liked to know changes in managerial attitudes but, unfortunately, the question was only asked in the 1990 survey).

In Table VII we examine the hypothesis that unfavourable management attitudes were more prevalent in those establishments set up in the 1980s. We do this by estimating a simple logit model with a dependent variable coded 1 if management were not in favour of unions and 0 otherwise. The "Established in the 1980s" variable is included as an

independent variable. We report separate specifications for private manufacturing and non-manufacturing and report models which include the set of control variables used for the recognition models in Table V.

In private-sector manufacturing establishments there is some evidence that managerial attitudes towards unions were less favourable in establishments that were set up in the 1980s. Despite the small sample size, the estimated coefficient on "Established in the 1980s" is estimated to be positive and significant (at the 10 percent level). The marginal effect in column (1) suggests, ceteris paribus, that managers were some 23 percent more likely to have an unfavourable view of unions in newly set-up establishments. Hence, increased managerial opposition to unions seems important in the sector where the largest falls in recognition status occurred. Effects are, however, insignificantly different from zero in private services.

A final hypothesis, that "unions kill firms", because the cost increasing aspect of union rent-seeking activity ultimately drives union firms out of business (Freeman and Kleiner, 1993) can also briefly be examined since a sub-set of the 1984 survey establishments were interviewed again to construct the panel element of the 1990 survey. A sample of the trading sector establishments in the 1984 survey were re-sampled and the survey investigators identified 87 plant closures (Millward et al., 1992).[16] The proportion of these with manual union recognition was .480, as compared to .491 for the population of trading sector establishments; for non-mannal recognition, comparable proportions were .291 for the closures and .338 for the population. There is clearly no evidence here for the hypothesis that the exit rate of establishments displays a positive correlation with union recognition status. This is important for our hypothesis that emphasises failure to organise new

establishments set up in the 1980s, as differences in exit rates would bias such a conclusion.

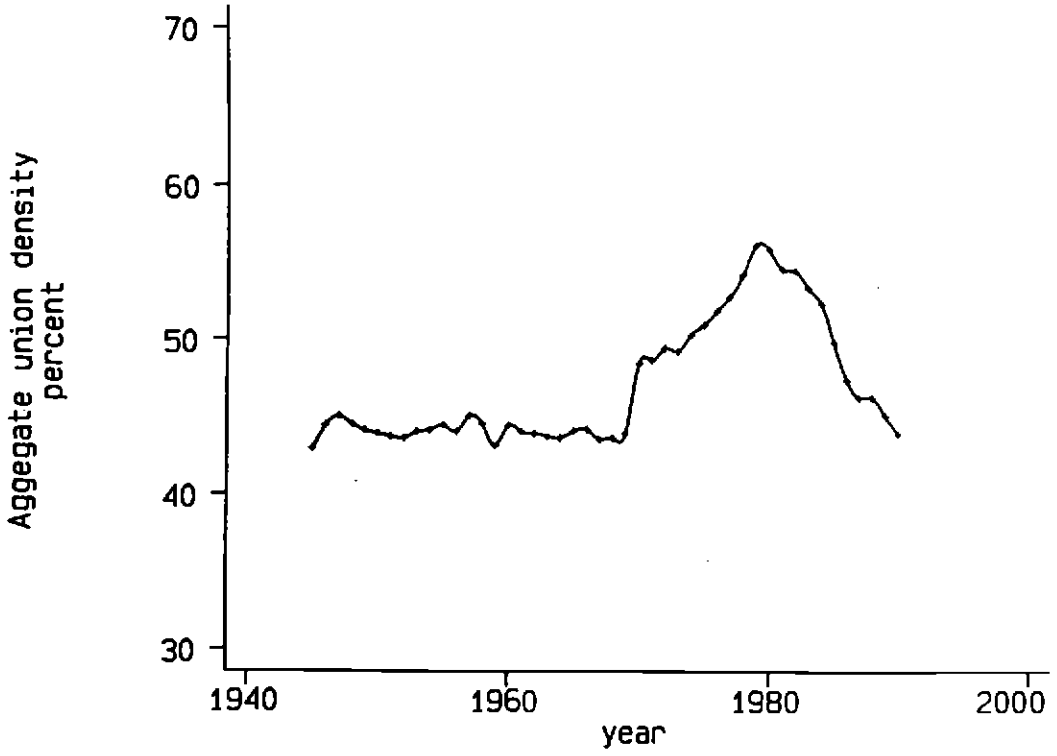
IV. Concluding Remarks

This paper documents and evaluates the reasons for the dramatic decline in union presence observed in the British labour market through the 1980s. It focuses on trends in union recognition drawing on data from the three Workplace Industrial Relations Surveys of 1980, 1984 and 1990. Our paper is rather different from earlier British work since we are principally interested in changes over time, and because of the way in which we examine time-specific effects. Some strong results emerge from the analysis. Much of the decline has been due to falls within specific sectors. Hence the 1980s has seen big falls in union presence both in sectors where they have traditionally been strong (private sector manufacturing) and where they have been relatively weak (private sector services). The probability of union recognition is seen to depend importantly on the nature of the product and labour market at the time in which an establishment is initially set up. As such it seems that union recognition became significantly harder to achieve in new establishments in the 1980-1990 time period and it is this, rather than derecognition of unions in existing establishments, which has been driving the downturn in unionization. Within private sector manufacturing, traditionally a stronghold of union activity, it appears that a 1980s increase towards unfavourable managerial attitudes to trade unions can explain some of this fall.

The findings of this paper appear to paint a bleak picture for the future ability of unions to organise new establishments, at least in the private sector (more in-depth analysis of the public sector is certainly warranted, but beyond the scope of this paper). Given the trends observed in the British labour market in the 1980s and the increased importance of

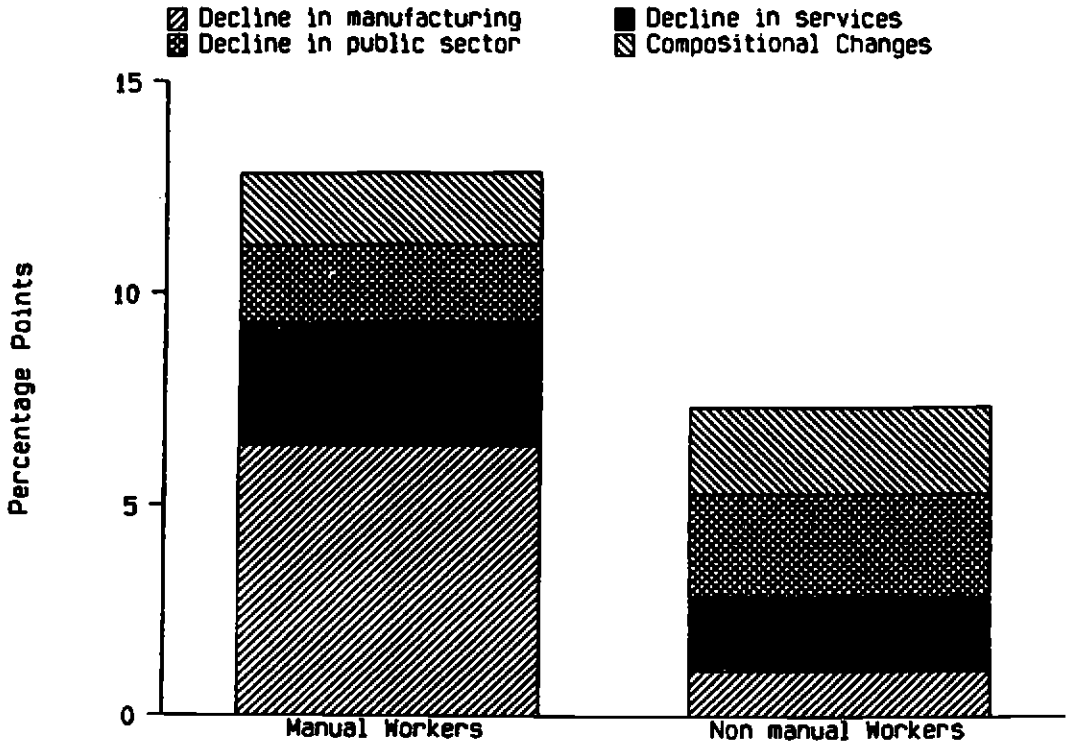
new, smaller establishments, we see no reason why the dramatic declines in union presence of the 1980s should not continue into the 1990s.

Figure I: Aggregate Union Density, 1945-1990



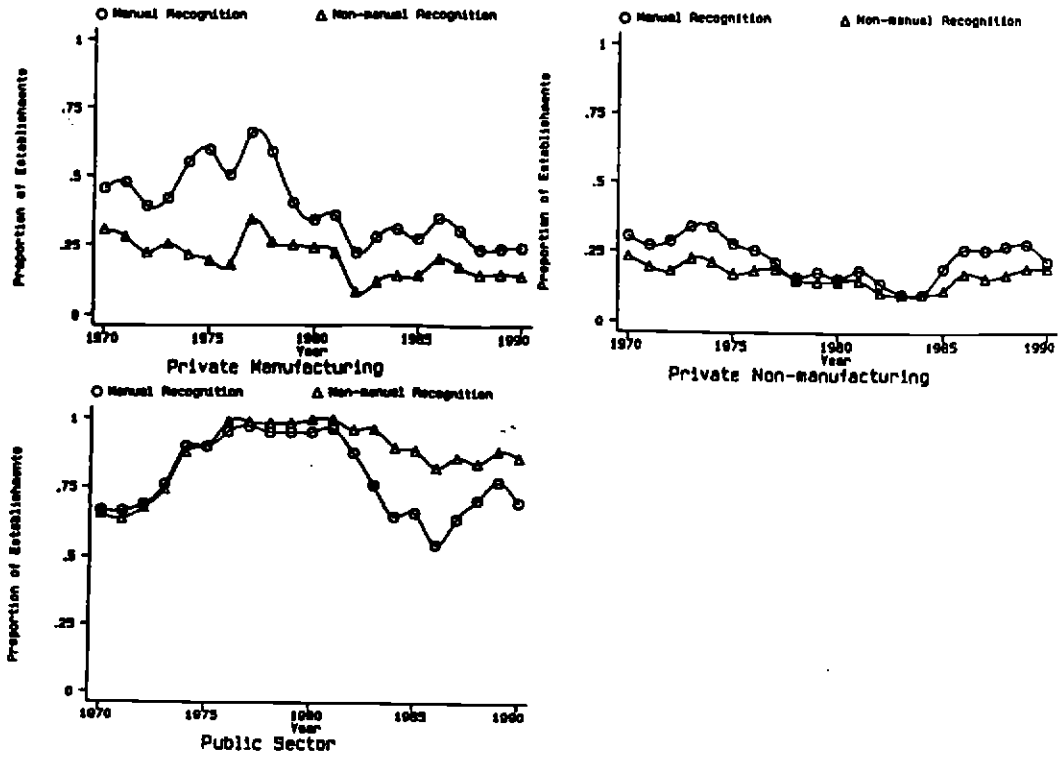
Sources: Bain and Price (1980), Price and Bain (1983) and Waddington (1992)

Figure II: The Components of the 1980-90 Decline in Union Recognition



Notes.
1. Decomposition described in the text.

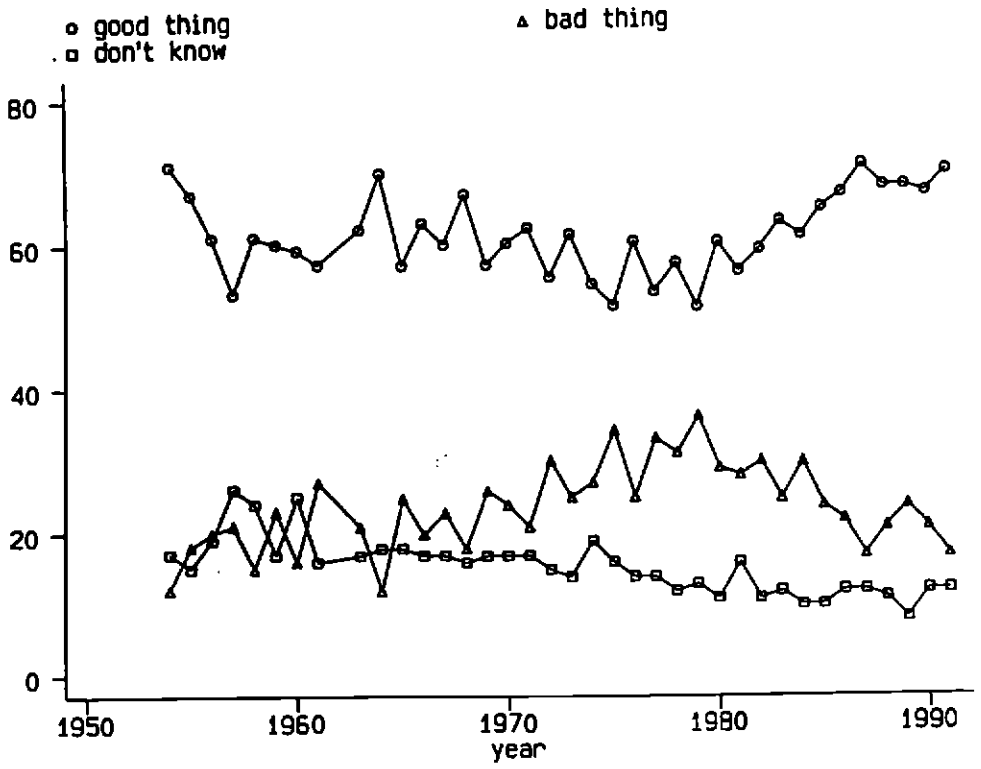
Figure III: Trends in Age Dated Union Recognition 1970-1990



Notes.

1. The year definition is based on responses to the establishment age question from the 1990 Workplace Industrial Relations Survey.
2. The reported profiles are 5-year moving averages of weighted data.
3. Means of smoothed union recognition in establishments set up in the 1970s are: manual manufacturing 0.50; manual non-manufacturing 0.26; manual public sector 0.82; non-manual manufacturing 0.25; non-manual non-manufacturing 0.19; non-manual public sector 0.90.
4. Means of smoothed union recognition in establishments set up the 1980s are: manual manufacturing 0.25; manual non-manufacturing 0.19; manual public sector 0.74; non-manual manufacturing 0.16; non-manual non-manufacturing 0.15; non-manual public sector 0.82.

Figure IV: General Attitudes Towards British Unions



Source: Gallup political opinion poll.

Table I: Descriptive Statistics on Union Recognition, 1980-1990

Proportion of Establishments With Recognised Unions For Manual Workers						
	1980		1984		1990	
	Proportion	Number of Establishments	Proportion	Number of Establishments	Proportion	Number of Establishments
All Establishments	0.61	1780	0.62	1853	0.48	1831
Public Sector	0.84	611	0.91	758	0.78	561
Private Sector	0.50	1169	0.44	1095	0.37	1270
Private Sector Manufacturing	0.69	703	0.56	580	0.44	616
Other Private Sector	0.38	466	0.38	515	0.31	654

Proportion of Establishments With Recognised Unions For Non-manual Workers						
	1980		1984		1990	
	Proportion	Number of Establishments	Proportion	Number of Establishments	Proportion	Number of Establishments
All Establishments	0.50	1934	0.54	2010	0.43	2058
Public Sector	0.91	702	0.98	825	0.84	630
Private Sector	0.29	1232	0.28	1185	0.25	1429
Private Sector Manufacturing	0.28	702	0.26	592	0.23	630
Other Private Sector	0.30	530	0.30	593	0.26	798

Notes.

1. Calculated from the 1980, 1984 and 1990 Workplace Industrial Relations Surveys. Weighted proportions (weights are from WIRS, based on the Census of Employment three years prior to the survey, to allow for the deliberate oversampling of larger establishments).
2. Numbers differ in 1980 from those reported in the WIRS reference books (Millward and Stevens, 1986; Millward et al., 1992) due to different treatment of missing values (assigned to non-recognition in the books, but treated as missing here).
3. The number of establishments are the unweighted numbers.

Table II: Descriptive Statistics on Union Density and Coverage, 1980-1990

	Proportion of Workers who are Union Members (proportion of full-timers, 1980; all workers, 1984 and 1990)			Proportion of Workers Covered by Collective Bargaining	
	1980	1984	1990	1984	1990
All Establishments	0.62	0.58	0.48	0.71	0.54
Public Sector	0.73	0.80	0.72	0.95	0.78
Private Sector Manufacturing	0.64	0.56	0.48	0.64	0.51
Other Private Sector	0.33	0.30	0.27	0.41	0.33

Notes.
1. Source : Daniel and Millward (1983); Millward and Stevens (1990); Millward et al. (1993).
2. The union coverage question was not asked in 1980.

Table III: Decomposition of the Aggregate Decline in Union Recognition, 1980-1990

Percentage point change in recognition resulting from:	Manual Trade Union Recognition: Percentage point change (Percentage of total change)	Non-manual Trade Union Recognition: Percentage point change (Percentage of total change)
Decline within manufacturing	6.39 (50)	1.10 (15)
Decline within services	2.85 (22)	1.76 (24)
Decline within public sector	1.87 (15)	2.42 (33)
Compositional changes (between sectors)	1.71 (13)	2.04 (28)
Total changes 1980-1990	12.79 (100)	7.32 (100)

Notes.
1. Based on decomposition described in text.

Table IVa: Logit Estimates of the Determinants of Manual Union Recognition, 1980-1990

	1980	1984	1990	POOLED
Constant	-2.141*** (0.269)	-2.230*** (0.256)	-2.021*** (0.236)	-2.284*** (0.153)
Public Sector	2.276*** (0.207)	3.035*** (0.210)	2.311*** (0.188)	2.501*** (0.114)
Private Sector Manufacturing	0.814*** (0.185)	0.538*** (0.205)	0.259 (0.159)	0.493*** (0.098)
Establishment is over 25 years old (20 years old in 1990 survey)	0.392*** (0.147)	0.376*** (0.142)	0.813*** (0.127)	0.564*** (0.079)
50-99 Employees	0.584*** (0.203)	0.538*** (0.205)	0.430* (0.230)	0.507*** (0.116)
100-199 Employees	1.010*** (0.217)	1.301*** (0.222)	0.915*** (0.205)	1.042*** (0.121)
200-499 Employees	1.611*** (0.239)	1.271*** (0.223)	1.687*** (0.221)	1.526*** (0.130)
500-999 Employees	2.630*** (0.348)	2.096*** (0.276)	2.330*** (0.266)	2.385*** (0.164)
1000 or more Employees	3.419*** (0.446)	3.278*** (0.363)	2.266*** (0.245)	2.754*** (0.175)
Manual Proportion	3.172*** (0.304)	2.917*** (0.283)	1.912*** (0.240)	2.545*** (0.154)
Part time Proportion	-1.897*** (0.378)	-1.596*** (0.347)	-1.788*** (0.301)	-1.762*** (0.192)
Foreign Owned	-0.757*** (0.264)	-0.293 (0.225)	-0.167 (0.180)	-0.264** (0.112)
Single Establishment	-1.346*** (0.194)	-0.663*** (0.270)	-0.972*** (0.180)	-1.004*** (0.110)
1980 Survey	-	-	-	0.507*** (0.096)
1984 Survey	-	-	-	0.465*** (0.095)
Number of Establishments	1715	1785	1727	5227
Log-likelihood	-614.147	-648.581	-785.213	-2083.715
H_0: $\beta^{manu} = \beta^{public}$	$\chi^2(11)=20.52$ P-value=0.05	$\chi^2(11)=47.01$ P-value<0.01	$\chi^2(11)=29.34$ P-value=0.01	$\chi^2(13)=94.93$ P-value<0.01
H_0: $\beta^{manu} = \beta^{non-manu}$ (in private sector model)	$\chi^2(10)=12.78$ P-value=0.38	$\chi^2(10)=31.34$ P-value<0.01	$\chi^2(10)=13.49$ P-value=0.31	$\chi^2(12)=42.85$ P-value<0.01
H_0: $\beta^{manu} = \beta^{non-manu} = \beta^{public}$				$\chi^2(24)=71.55$ P-value<0.01

Table IVb: Logit Estimates of the Determinants of Non-manual Union Recognition, 1980-1990

	1980	1984	1990	POOLED
Constant	-0.681*** (0.213)	-1.178*** (0.221)	-1.284*** (0.193)	-1.311*** (0.128)
Public Sector	2.932*** (0.202)	4.972*** (0.397)	2.858*** (0.188)	3.318*** (0.125)
Private Sector Manufacturing	0.069 (0.162)	0.179 (0.167)	0.150 (0.150)	0.124 (0.091)
Establishment is over 25 years old (20 years old in 1990 survey)	0.173 (0.130)	0.317** (0.137)	0.670*** (0.121)	0.408*** (0.074)
50-99 Employees	0.395** (0.199)	0.484** (0.219)	0.193 (0.202)	0.356*** (0.118)
100-199 Employees	0.572*** (0.198)	0.854*** (0.221)	0.654*** (0.199)	0.674*** (0.117)
200-499 Employees	1.716*** (0.214)	1.412*** (0.226)	1.484*** (0.205)	1.543*** (0.123)
500-999 Employees	2.055*** (0.252)	2.043*** (0.258)	1.908*** (0.234)	1.969*** (0.141)
1000 or more Employees	3.449*** (0.331)	3.237*** (0.335)	2.032*** (0.226)	2.679*** (0.155)
Manual Proportion	-0.382* (0.228)	0.089 (0.238)	0.051 (0.195)	-0.031 (0.125)
Part time Proportion	-0.802** (0.359)	-0.827** (0.361)	-1.107*** (0.283)	-0.980*** (0.187)
Foreign Owned	-0.621*** (0.213)	-0.298 (0.193)	-0.345** (0.159)	-0.356*** (0.099)
Single Establishment	-0.992*** (0.179)	-0.696*** (0.263)	-1.143*** (0.193)	-0.965*** (0.122)
1980 Survey	-	-	-	0.288*** (0.088)
1984 Survey	-	-	-	0.428*** (0.088)
Number of Establishments	1856	1935	1925	5716
Log-likelihood	-779.858	-693.140	-891.757	-2394.089
H_0: $\beta^{manual} = \beta^{white}$	$\chi^2(11)=9.23$ P-value=0.72	$\chi^2(11)=4.11$ P-value=0.97	$\chi^2(11)=17.54$ P-value=0.14	$\chi^2(13)=49.37$ P-value<0.01
H_0: $\beta^{manual} = \beta^{non-manual}$ (in private sector model)	$\chi^2(10)=40.85$ P-value<0.01	$\chi^2(10)=60.51$ P-value<0.01	$\chi^2(10)=30.98$ P-value<0.01	$\chi^2(12)=107.73$ P-value<0.01
H_0: $\beta^{manual} = \beta^{non-manual} = \beta^{white}$				$\chi^2(24)=78.67$ P-value<0.01

Notes.

1. Logit coefficients (standard errors) are reported. *, ** and *** denote statistical significance at the 0.10, 0.05 and 0.01 significance level.

Table V: Estimates of the Determinants of Manual Union Recognition in 1990 Including Time-dated Regressors

	Private Manufacturing			Private Non-manufacturing		
	(1)	(2)	(3)	(4)	(5)	(6)
Established in the 1980s	-1.743** (0.219)	-1.504** (0.306)	-1.438** (0.309)	-0.718** (0.202)	-0.746** (0.242)	-0.745** (0.243)
Industry union density at time of set up	-	1.229** (0.353)	1.280** (0.357)	-	1.066** (0.199)	1.077** (0.200)
Industry quasi-rents per head at time of set-up	-	2.856** (1.385)	2.683** (1.388)	-	-	-
Industry quasi-rents per head at time of set-up squared	-	-1.032** (0.469)	-0.987** (0.468)	-	-	-
GDP growth	-	-	0.160 (0.105)	-	-	0.171* (0.105)
Log-likelihood	-313.30	-230.31	-229.08	-337.33	-264.24	-262.78
Number of Establishments	584	584	584	500	500	500
$\chi^2(1)$ test for inclusion of aggregate unemployment	-	-	0.20	-	-	0.86
$\chi^2(1)$ test for inclusion of aggregate inflation	-	-	0.04	-	-	1.75
Marginal effect for Established in the 1980s	-0.351	-0.303	-0.266	-0.178	-0.184	-0.184

	Public Sector		
	(7)	(8)	(9)
Established in the 1980s	-0.375 (0.343)	-0.256 (0.441)	-0.469 (0.454)
Industry union density at time of set up	-	-0.196 (0.538)	-0.189 (0.537)
Industry quasi-rents per head at time of set-up	-	-	-
Industry quasi-rents per head at time of set-up squared	-	-	-
GDP growth	-	-	-0.354 (0.226)
Log-likelihood	-174.98	-116.57	-114.93
Number of Establishments	442	442	442
$\chi^2(1)$ test for inclusion of aggregate unemployment	-	-	1.50
$\chi^2(1)$ test for inclusion of aggregate inflation	-	-	3.12
Marginal effect for Established in the 1980s	-0.044	-0.030	-0.047

Notes.

1. Logit coefficients. Asymptotic standard errors in parentheses.
2. The second two specifications for each group includes the following controls: establishment size dummies; manual, part-time proportions; whether UK owned; single-site; 10 regional dummies.

Table VI: Managerial Attitudes To Unions Where No Union Members Present

	In favour of unions	Not in favour of unions	Neutral	Number of establishments (unweighted)
All Establishments	0.020	0.318	0.663	476
Public sector	0.000	0.082	0.918	5
Private manufacturing	0.008	0.462	0.531	136
Other private sector	0.024	0.270	0.706	335

Notes.

1. Calculated from the 1990 Workplace Industrial Relations Survey. Based on managerial responses in establishments with no union members. Weighted proportions.

Table VII: Logit Estimates of Managerial Unfavourable Views on Unions

	Private Manufacturing	Private Non Manufacturing
	(1)	(2)
Established in the 1980s	0.916** (0.450)	-0.049 (0.319)
Controls included	Yes	Yes
Log-likelihood	-80.827	-148.170
Number of establishments	133	252
Marginal effect for Established in the 1980s	0.227	-0.010

Notes.

1. Logit estimates. Asymptotic standard errors in parentheses.
2. Controls are those included in the recognition models in column (2) of Table V. There are too few observations to estimate a public sector equation.

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ENDNOTES

1. Farber and Krueger (1993) provide a recent empirical evaluation of US trends in individual union membership and Riddell (1993) draws a contrast between the United States and Canada.

2. See Millward et al. (1992) for an extremely comprehensive review of these data sources.

3. The use of recognition as an indicator of union presence has been common in empirical studies by labour economists using the Workplace Industrial Relations Surveys: see the several papers on wages by Blanchflower and Oswald or Stewart (examples are Blanchflower and Oswald, 1990, or Stewart, 1990) or the various papers on the effects of unions on non-wage outcomes (Blanchflower et al., 1991, or Machin and Wadhwani, 1991, are two examples of these). It also has the virtue of being exogenous in the sense that it is determined in an earlier time period, probably at or around the date at which an establishment is set up: we elaborate much more on the historical feature of the determination of recognition status below.

4. See Metcalf's (1993a, 1993b) comprehensive surveys of the UK evidence or Freeman and Medoff's (1984) book on the US work.

5. Gosling and Machin (1993) report evidence in line with this suggesting that wage inequality would have risen by about 15-20% less than it did between 1980 and 1990 had the union structure of 1980 still prevailed in 1990.

6. Of course, the 25 employee cut-off point excludes a sizable (considerably less unionized) proportion of aggregate employment and this should be borne in mind when interpreting the results reported in this paper.

7. Millward (1992) provides a summary of papers based on the surveys up to 1992.

8. In logit models marginal effects are computed as $\beta P(1-P)$ where P is the mean of the dependent variable and β is the relevant estimated coefficient.

9. The precise wording of the survey question is as follows: in 1980 and 1984 "How long ago did this establishment first engage in its main activity?"; in 1990 "How long has this establishment been operating here at this address?". The range of responses also differs. In 1980 and 1984 responses were banded into 1-3 years, 3-5 years, 5-10 years, 10-25 years and 25 or more years. In 1990 responses were continuous up to 20 years and then open-ended as 20 or more years.

10. For completeness, note that for non-manual recognition the comparable rise in the marginal effect associated with age demonstrates an even sharper increase from 0.04 to 0.16.

11. Also, some recent evidence (Geroski, Gregg and Desjonqueres, 1993) suggests that this may have accelerated in the recession of the early 1990s, at least in the large firms that they survey.

12. This variable was mapped in at 2-digit industry-level from the relevant Census of Production and is defined as (sales - material costs - average wage) / number of workers. Note that, for data matching reasons, capital costs are not deducted. We did, however, experiment with netting out capital costs with little difference to the results. These additional tests are discussed below.

13. Rather than simply use this "Established in the 1980s" variable we also included a set of dummy variables indicating the year of set-up in the 1980s (except for 1989 where all new establishments did not have recognition). These results (available on request) pointed to a negative effect in each year after 1979.

14. Despite the fact that one of the included controls is a single-site dummy variable it is also possible that effects may be different in newly established single independent establishments as compared to those that are part of a multi-establishment enterprise (we thank a referee for this comment). Estimating separate equations comparable to column (1) of Table V for single-site establishments and for establishments that belong to a multi-plant organisation produced very similar marginal effects associated with the "Established in the 1980s" variable. Hence, the failure to organise new establishments seems to hold for new firms and for newly set up establishments in existing firms.

15. As noted above (footnote 10) the quasi-rents variable does not net out capital costs. Whilst we could not get a capital stock series to perfectly match the industry classification of the quasi-rents variable, we did also construct a rents variable that nets out capital costs, albeit at a slightly higher level of aggregation. Effects remained much the same as in Table V when this variable was used: more experiments of this kind are reported in Disney et al. (1993).

16. We are extremely grateful to Neil Millward for providing us with the serial codes for the 87 establishments who closed between 1984 and 1990.