

Trade union membership and recognition 1997-98: an analysis of data from the Certification Officer and the Labour Force Survey

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Key points

According to the Certification Officer:

- At the end of 1997 there were 233 listed trade unions in Great Britain, 12 fewer than a year earlier.
- Total union membership was 7.8 million, the lowest since 1945.
- This was the 18th consecutive year in which membership fell. It is now more than 40 per cent below the peak level achieved in 1979.

According to the Labour Force Survey:

- The proportion of all employees who were union members has fallen from 39 per cent in 1989 to 30 per cent in 1998.
- Union density has only fallen by 0.6 percentage points in the year to autumn 1998, and union membership by only 10,000. This fall of 10,000 is the smallest annual fall since the series began in 1989, and is not statistically significant.
- The decline in union density has been particularly marked among male employees, manual employees, and those in production industries – all areas where membership has traditionally been higher. By contrast, union density has fallen less slowly among female employees, those working part-time, and non-manual employees.
- Union density varies widely by industry, ranging from just 7 per cent in hotels and restaurants to 60 per cent among employees in public administration.
- In 1998, an estimated 8 million people, or 35 per cent of all employees, were covered by collective bargaining over pay. Employees working in the public sector and in larger workplaces were much more likely to say they were covered by a collective agreement.
- 10.1 million employees work in organisations where trade unions are recognised.



Two main sources of information measure changes in trade union organisation in Great Britain: the Certification Officer and the Labour Force Survey. This article uses the most recent data from both to look at changes in union membership and recognition.

Introduction

THERE ARE two main sources of information which are used to measure changes in trade union organisation in Great Britain. The first of these is the administrative details provided annually to the Certification Officer for Trade Unions and Employers' Associations. This is a legal requirement for all independent trades unions, and can be used to calculate both the total number of unions and the present level of union membership according to trade union records. The second are the estimates of union membership from the Labour Force Survey (LFS) which provides more detailed information on the characteristics of union members and their workplaces.

Information provided by the Certification Officer refers to the year ending December 1997, while data from the LFS relate to the position during the autumn quarter of 1998. While the LFS covers the whole of the UK, the information in this article is restricted to Great Britain unless otherwise stated, as trade union information was not available for Northern Ireland in years prior to 1995.

The two sources of information are compiled in very different ways and as such produce very different estimates of trade union membership. A certain amount of caution is therefore required when making comparisons between them. A significant part of the

difference can be explained by the ways that the Certification Officer and LFS deal with particular classifications of union membership. For example, data provided by the Certification Officer includes members of trade unions who are currently unemployed, and could include those who are retired or whose usual residence is no longer in the United Kingdom. Conversely, the LFS excludes these groups as questions on trade union membership are asked only of those in employment in the survey's 'reference week'. A more thorough explanation of the differences can be found on pp403-13, *Employment Gazette*, August 1990.

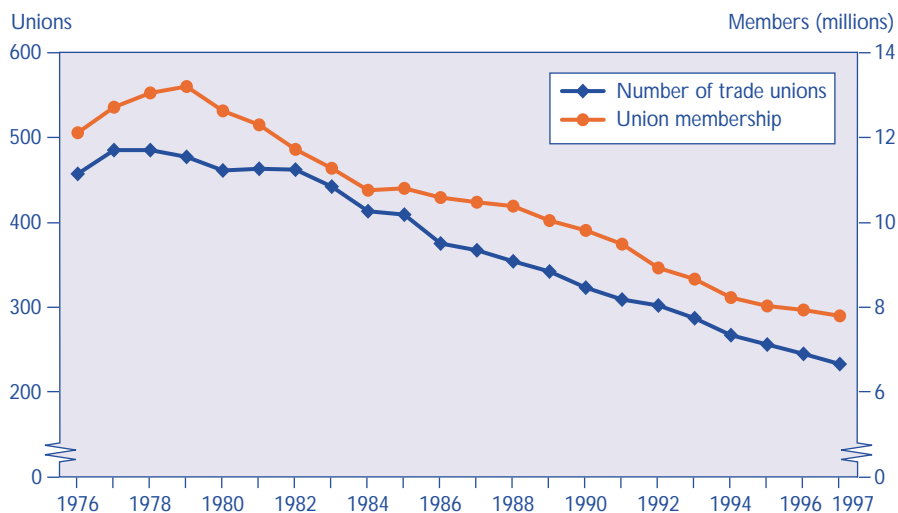
The major advantage of the Certification Officer data is that it provides a long and consistent time series of both trade union numbers and membership figures. The LFS has the advantage of a wealth of other information collected on the respondent's individual and workplace characteristics, which enables a more detailed analysis of patterns and changes in union membership. This includes details of whether an employee's workplace officially recognises a trade union and whether pay is determined by collective bargaining.

Trade union membership data compiled by the Certification Officer

According to information provided by the Certification Officer, there were 233 listed trade unions in Great Britain in December 1997, 12 fewer than the previous year's total and less than a fifth of the peak number of 1,384 in 1920. Since this highpoint there has been a steady decline in the number of unions. The change over 1976-1997 is shown in *Figure 1*. This decline has been caused by a combination of two factors: falling union membership and union mergers. What is less obvious from raw figures alone is that, while unions cease to exist or amalgamate, there are new unions being created.

Figure 1 shows union membership figures from the Certification Officer.

Figure 1 Number of trade unions and union members; Great Britain; 1976-1997



Source: Certification Officer

The recorded fall of 1.7 per cent in the last year represents a continuation of the downward trend in membership. Union membership has fallen for 18 consecutive years and is at its lowest level since 1945.

Table 1 shows the distribution of these 7.8 million union members across trade unions. Most unions are very small, with nearly two-thirds having a membership of less than 2,500. However, these unions account for less than 2 per cent of the membership. At the other end of the scale, there are relatively few large unions – only 17 with membership in excess of 100,000,

although these account for more than 80 per cent of union membership.

At the end of 1997 the largest union was UNISON with 1.3 million members. The next largest was the Transport and General Workers Union, followed by the Amalgamated Engineering and Electrical Union and then the GMB.

In 1997 there were seven mergers affecting a total of 14,222 members. These were technically transfers of engagement, which occur when one union is subsumed by another and loses its legal identity. The largest of these was the transfer of engagements



PHOTO: ANDREW WARD

Table 1 Trade unions distributed by size; Great Britain; December 1997

Number of members	Number of unions	Membership (000s)	Number of unions		Membership of all unions	
			Per cent	Cumulative per cent	Per cent	Cumulative per cent
Under 100	31	1	13.3	13.3	0.0	0.0
100-499	49	9	21.0	34.3	0.1	0.1
500-999	29	19	12.4	46.8	0.2	0.4
1,000-2,499	36	63	15.5	62.2	0.8	1.2
2,500-4,999	20	74	8.6	70.8	0.9	2.1
5,000-9,999	14	98	6.0	76.8	1.3	3.4
10,000-14,999	7	90	3.0	79.8	1.2	4.5
15,000-24,999	6	103	2.6	82.4	1.3	5.9
25,000-49,999	18	599	7.7	90.1	7.7	13.5
50,000-99,999	6	354	2.6	92.7	4.5	18.1
100,000-249,000	8	1,201	3.4	96.1	15.4	33.5
250,000 and over	9	5,184	3.9	100	66.5	100
Total	233	7,795	100		100	

Source: Certification Officer

Note: Figures in this table vary from those reported in the annual report of the Certification Officer, as only listed unions are included.

of the National Association of Licensed House Managers to the Transport and General Workers Union, which involved 6,127 members.

Trade union membership and density based on LFS data

Details on union membership status have been collected by the LFS since 1989. *Table 2* presents headline figures indicating trends in union membership and union density (union density is defined as the proportion of a specified

group who are union members). *Table 2* shows that trade union membership continued to fall in 1998, as it has each year since the time series began. The LFS estimate of union membership now stands at 7.1 million, a fall of around a fifth since 1989. This decrease equates to a fall of some 21 per cent. The longer term perspective provided by the Certification Officer data shows that trade union membership has continued to fall year on year since it peaked in 1979. However, the decrease in 1998 was only 10,000 – the smallest annual fall since the series began in 1989 – which is not statistically significant.

Union density among those in employment has fallen. In 1998 26.9 per cent of all those in employment at the time of the survey were union members, down from 27.3 per cent a year earlier. Union density for employees tells a similar story, standing at 29.6 per cent in 1998 compared with 30.2 per cent a year earlier. Over the course of the most recent economic cycle, the largest fall in union membership occurred in 1992, a period of substantial job losses. Trade unions have subsequently failed to recover membership even though employment growth has recovered.

The remainder of this article focuses on employees only, excluding the self-employed and those on government training schemes. Members of the armed forces have also been excluded from the analysis. Union membership among the self-employed has always been low, with less than a tenth saying they were union members in 1998.

Figure 2 shows trends in union density among employees across various individual, job-related and employer characteristics. There has been a steady decline in union density since 1989 when the LFS first covered union membership. There were falls in density in the year to December 1998 in all classifications aside from part-time employees. However, there are quite marked differences in the magnitude of decline. Traditional strongholds of unionism

Table 2 Union membership; Great Britain; 1989-1998

Year	Number of members (000s)	Percentage change in membership since previous year	Union density of all in employment (per cent)	Union density of employees (per cent)
1989	8,964		34.1	39.0
1990	8,854	-1.2	33.4	38.1
1991	8,633	-2.5	33.3	37.5
1992	7,999	-7.3	32.1	35.8
1993	7,808	-2.4	31.3	35.1
1994	7,553	-3.3	30.0	33.6
1995	7,275	-3.7	28.8	32.1
1996	7,215	-0.8	28.2	31.3
1997	7,117	-1.4	27.3	30.2
1998	7,107	-0.1	26.9	29.6

Change since 1989 -1,857

-7.2

-9.4

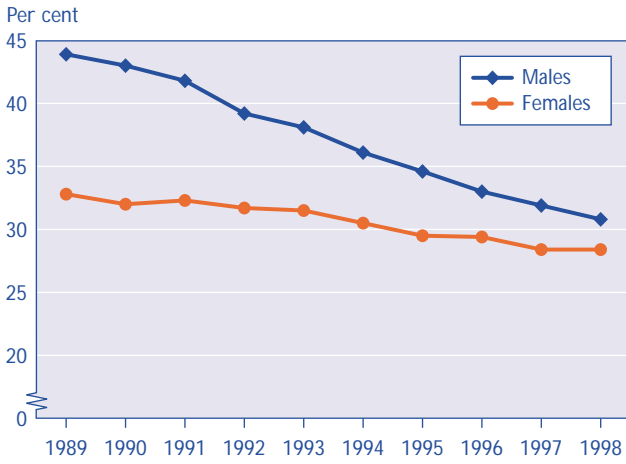
Source: Labour Force Survey

Note: Includes all those in employment, except for the final column which is employees only, excluding members of the armed forces.

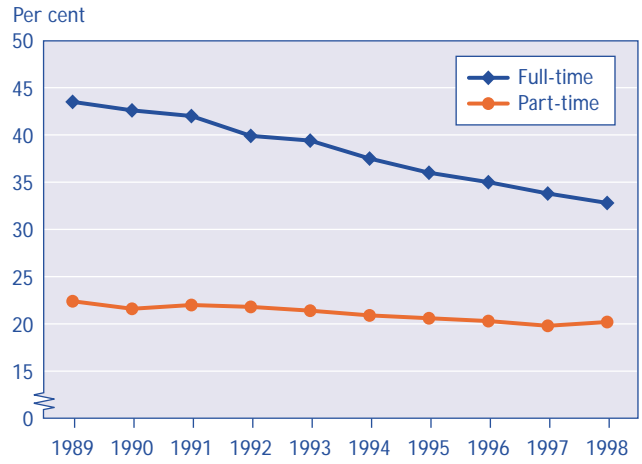
From 1989 to 1991 union membership questions were asked in the spring. Since 1992 they have been asked in the autumn quarter. Those who did not report their union status or were not contactable in the autumn quarter have been allocated on a pro-rata basis.

Figure 2 Union density; Great Britain; 1989-98

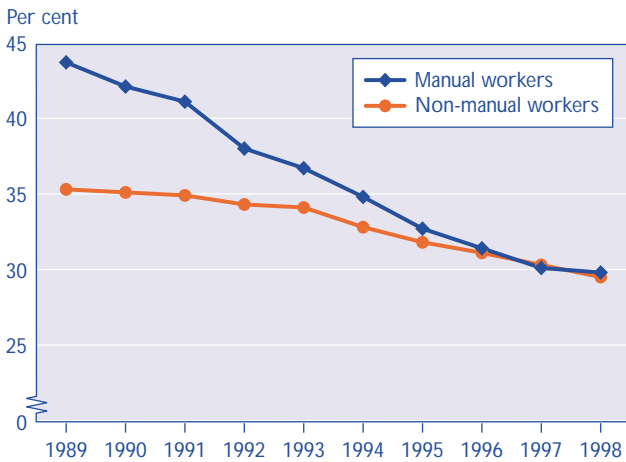
(a) Density by sex



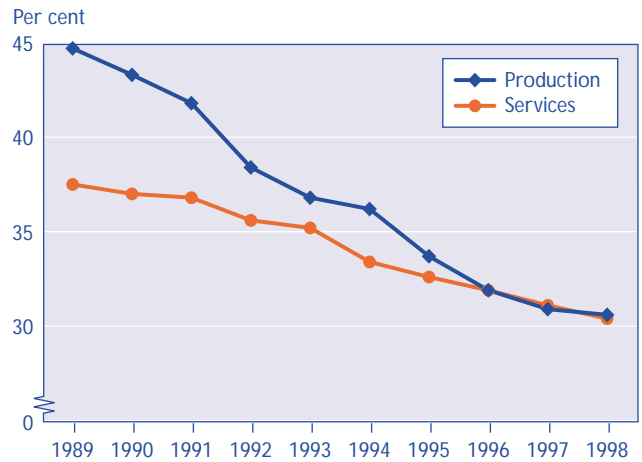
(b) Density by full or part-time work



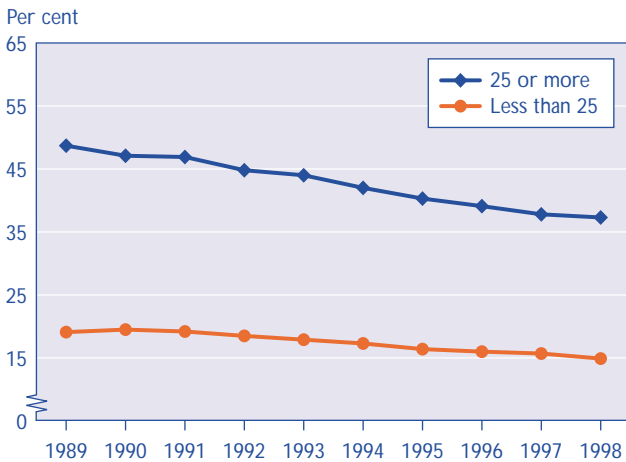
(c) Density by type of work



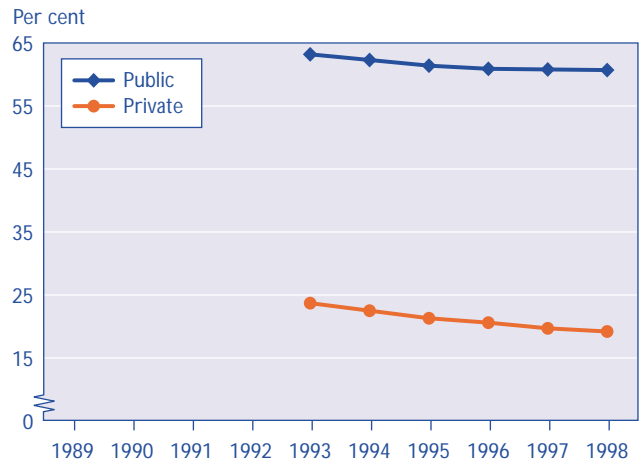
(d) Density by industry



(e) Density by number of employees at workplace



(f) Density by sector



Source: Labour Force Survey

have suffered some of the greatest declines. For instance, manual occupations have suffered a reduction of 14 percentage points since 1989 and now have a similar density to non-manual professions, which were formerly associated with low union density.

Union density among men fell from 44 per cent in 1989 to 31 per cent in 1998. Union density among women has fallen by less, from 33 per cent to 28 per cent over the same period. Density among employees in production industries fell from 45 per cent in 1989 to stand at 31 per cent in 1998, the same level as in service industries. Density among part-time employees and those working in small organisations has always been relatively low.

When looking at figures of this sort, it is easy to forget that the trends here show the net change in union density. If unions are simply to maintain current levels of membership then they must recruit, or re-recruit, thousands of members a year.

Individual characteristics

Table 3 presents levels of union density among employees by a number of individual characteristics and compares the results for men and women. A slightly higher proportion of male employees are union members than their female counterparts, although *Figure 1* shows that this gap is narrowing.

Age group

The first characteristic in *Table 3* is age. These age profiles suggest an association between increasing age and likelihood of union membership. In 1998 only 6 per cent of employees aged under 20 were union members, compared with almost one third among those aged 30 and above. Older women (40 and above) are less likely to be union members than their male counterparts, although there is no such difference for younger age groups.

Ethnic origin

The ethnic profiles show that there is no substantial difference between White and non-White employees. However, whereas proportionally more men than women are union members among White employees, the situation is reversed for non-White employees.

Black employees are more likely to be union members than employees in any other ethnic group. Some 36 per cent are union members, compared with 30 per cent of White employees, the next highest category. Black women are most likely to be union members, with a density of 40 per cent.

Educational qualifications

The LFS provides a wealth of information on educational qualifications. Looking at the highest qualification that an individual has obtained, it can be seen that employees with further education are considerably more likely to be members of a union than those without post-school training or education. Union density among those with higher education below degree level is the highest of any educational background, standing at 44 per cent. The lowest level of union membership is among those with GCSE or equivalent qualifications, where only 22 per cent are union members.

The profiles of men and woman across different educational grades are very different. There is comparatively little variation in union membership among men of different educational backgrounds (ranging from 25 to 33 per cent). However, among women the differences are much more marked.

Marital status

This section of *Table 3* reveals clear differences between employees who are or have been married or cohabiting, and those who have never married and are not presently living with a partner. Single employees are significantly less likely to be union members with only 20 per cent reporting membership, compared with around a third for other groups. Among single employees there is very little difference between men and women. However, both married and divorced female employees are less likely to be members of a union than their male counterparts.

Table 3 Union density by individual characteristics; Great Britain; autumn 1998

	Per cent	
	All	Female
All employees	30	28
Age group		
Under 20 years	6	4
20 to 29 years	19	20
30 to 39 years	32	32
40 to 49 years	38	36
50 years and over	34	32
Ethnic origin		
White	30	28
Non-white	27	30
of which		
Black	36	40
Indian	26	25
Pakistani/Bangladeshi	20	20
Other	22	26
Highest qualification		
Degree or equivalent	37	45
Other higher education	44	54
A-level or equivalent	29	22
GCSE or equivalent	22	21
Other	28	23
No qualifications	25	21
Marital status		
Single, never married	20	19
Married or cohabiting	33	31
Divorced or separated	33	30
Widowed	29	30

Source: Labour Force Survey

Note: includes all employees, except for those in the armed forces. See technical note for details on classifications.

Job-related characteristics

Table 4 considers a range of characteristics relating to the respondent's job. There is a particular emphasis on the differences between full-time and part-time employees. The higher level of union membership for full-time employees is sustained across almost every category of job related characteristic examined. This may reflect the difficulties that unions have in recruiting and organising part-time employees.

Length of service

The figures for length of service reflect a similar pattern to that of age, with density increasing substantially with length of service. Employees serving less than a year with an organisation have very low levels of membership: just 11 per cent. Density steadily increases with the length of tenure, and nearly six in ten employees who have been in their jobs for over 20 years are members of a union.

Occupation

There is wide variation of union density across the different occupational groups, ranging from just 11 per cent among employees within sales occupations to nearly half of professional employees. Density is higher among full-time employees in all occupations, with the exception of associate professional and technical, which includes such occupations as nursing staff and social welfare professionals. The difference in density between full- and part-time employees is less pronounced in the professional occupations.

Managerial status

Managerial status is based upon the employee's response when asked if their day-to-day work entails any managerial or supervisory duties. Foremen or supervisors have the highest membership density at 38 per cent. The next highest density is found among those without any managerial duties (29 per cent), while managers have the lowest density at only 25 per cent.

The differences in union membership between full-time and part-time

employees are comparatively small for all groups aside from those without any management responsibility, where the density for full-timers is almost double that of their part-time colleagues.

Employment status

Table 4 also considers differences in union density by employment status; for instance, whether the respondent considers their job to be permanent or temporary. Unsurprisingly, union membership is far more prevalent among employees in permanent employment, with almost a third reporting membership of a trade union compared with only a fifth of temporary staff.

Special working arrangements

Non-standard working arrangements are associated with increased flexibility in the labour market and there is some evidence that the incidence of these is on the rise in Britain. An example of this is the increasing tendency for temporary and part-time working.

Employees with special working arrangements have rates of union membership well above the national average, 40 per cent, compared with a third overall. The exceptions are those employees who jobshare, with a density of 37 per cent. However, these should more properly be compared with part-time workers, who have a significantly lower density of only 20 per cent.

Table 4 Union density by job-related characteristics; Great Britain; autumn 1998

	Per cent		
	All	Full-time	Part-time
All employees	30	33	20
Length of service			
Less than one year	11	13	8
One to two years	16	18	12
Two to five years	22	24	16
Five to 10 years	35	37	27
10 to 20 years	47	49	40
20 years or more	59	61	42
Occupational group			
Managers and administrators	19	19	17
Professional	49	50	45
Associate professional/technical	44	42	52
Clerical and secretarial	24	27	18
Craft and related	32	33	13
Personal and protective	27	37	17
Sales	11	11	11
Plant and machine operatives	38	40	18
Other occupations	27	37	16
Managerial status			
Manager	25	25	25
Foreman or supervisor	38	38	36
No managerial duties	29	35	18
Employment status			
Permanent	31	34	21
Temporary	19	20	18
Special working arrangements			
Flexitime	42	45	30
Job sharing	37	*	36
Term-time working	45	71	27
Annualized hours contract	46	49	32
4.5-day week / 9-day fortnight	45	46	*

Source: Labour Force Survey

*Sample size too small for reliable estimate.

Note: includes all employees, except for those in the armed forces. See technical note for details on classifications.

Workplace characteristics

Table 5 profiles levels of union density among employees by industry, region and workplace size, placing the emphasis on the difference between those who work in the private and public sectors. In broad terms, there are substantial differences between these sectors, with an estimated 19 per cent of employees in the private sector being members of a union compared with 61 per cent in the public sector.

Industry

There is wide variation in union density across the different industries, ranging from 7 per cent in hotels and restaurants to 60 per cent in public

administration. Within the private sector, the electricity, gas and water supply industry has a union density of 58 per cent, significantly higher than transport and communication, the next highest, at 36 per cent. Significant parts of these industries were formerly nationalised and it is likely that their high levels of union membership were inherited from their public sector days.

Region

Table 5 also shows large regional variations in union density. In all, 40 per cent of employees in the North were members of unions compared with only 22 per cent in the South East (excluding London). A closer examination of the table suggests that there is a general

trend for higher levels of union membership among employees in the northern regions compared with those in the south. Wales, Scotland and Northern Ireland all have levels of union density well above the rate for England.

Workplace size

Table 5 finally presents density by two broad workplace size bands. In 1998, union density stood at just 15 per cent in workplaces with fewer than 25 employees, compared with 37 per cent among those with 25 or more employees.

There is a profound difference in union density between public and private for small establishments. Only 8 per cent of employees working in small establishments in the private sector were union members compared with 51 per cent in small public sector workplaces. Establishment size and sector are strongly associated with union membership.

Table 5 Union density by workplace characteristics; Great Britain; autumn 1998

	Per cent		
	All	Private	Public
All employees	30	19	61
Industry			
Agriculture, forestry and fishing	12	9	*
Mining and quarrying	30	31	*
Manufacturing	30	29	58
Electricity, gas and water supply	58	58	*
Construction	21	14	75
Wholesale and retail trade	11	11	*
Hotels and restaurants	7	5	40
Transport and communication	42	36	76
Financial intermediation	31	31	39
Real estate and business services	11	8	59
Public administration	60	26	62
Education	53	26	58
Health	46	15	64
Other services	22	10	50
Standard statistical region or country			
England	29	19	59
Greater London	25	14	59
Rest of South East	22	14	52
East Anglia	25	16	54
South West	27	17	54
West Midlands	31	22	60
East Midlands	29	20	60
Yorkshire and Humberside	33	22	65
North West	35	24	67
North	40	29	69
Wales	40	27	69
Scotland	35	22	67
Northern Ireland	40	24	72
Workplace size			
Less than 25 employees	15	8	51
25 employees or more	37	26	63

Source: Labour Force Survey

*Sample size too small for reliable estimate.

Note: includes all employees, except for those in the armed forces. See *technical note* for details on classifications.

Trade union recognition and collective bargaining coverage

In 1993 the LFS began collecting information on another key indicator of union influence, union recognition. The survey measures the extent to which an employee's workplace recognises trade unions for the purposes of negotiating the pay and conditions of employees. However, this does not mean that respondents reporting union recognition in their workplaces actually have their own pay and conditions determined through collective bargaining. In 1996 a new question was added to the LFS to establish whether an individual employee was covered by a collective agreement which directly affected their pay and conditions. Analysis of responses to both of these questions is discussed in the following paragraphs.

Coverage of trade union recognition and collective bargaining

Table 6 shows that, in 1998, around 10.1 million employees worked in

Table 6 Union recognition and collective bargaining; Great Britain; 1993-1998

Year	Number of employees in workplaces with recognition (000s)	Percentage change in number since previous year	Percentage of employees in workplaces with recognition	Number of employees whose pay is determined by collective agreement (000s)	Percentage of employees whose pay is determined by collective agreement
1993	10,420		48.9		
1994	10,374	-0.4	48.2		
1995	10,226	-1.4	46.8		
1996	10,141	-0.8	45.8	8,091	36.5
1997	10,032	-1.1	44.3	8,058	35.5
1998	10,081	0.5	43.5	7,984	34.5
Change since 1993	-339	-3.7	-4.6		

Source: Labour Force Survey

Note: Includes all employees, except for members of the armed forces. Those who did not report their union recognition status, or who were not contactable in the autumn quarter, have been allocated on a pro-rata basis.

organisations where trade unions were recognised, little changed on the previous year. Overall the number of employees working in such organisations has fallen by 340,000 since the question was included in the LFS in 1993. This fall equates to a reduction of four-and-a-half percentage points over the period.

Of the 10.1 million employees in workplaces with union recognition, almost 8 million were covered by collective bargaining; this equates to 35 per cent of all employees. Since ques-

tions relating to collective agreements were introduced to the LFS in 1996 the proportion of employees whose pay was determined by collective agreement has fallen by 2 percentage points.

Workplace characteristics

Table 7 highlights the impact that workplace size plays upon collective bargaining. In private sector industries with fewer than 25 employees, coverage is only 7 per cent, compared with 31 per cent in establishments of 25 employees or more. The difference in

establishment size has a less dramatic impact in the public sector although, at 61 per cent and 78 per cent respectively, it is still substantial. In the public sector, small workplaces will generally form part of a larger organisation and it is likely that, if collective bargaining does take place, then it will do so at a higher, more centralised level of the organisation.

The table shows that there is considerable variation in collective bargaining coverage by industry. This follows a similar rank order to that for union

Table 7 Percentage of employees covered by collective bargaining by workplace characteristics and union membership; Great Britain; autumn 1998

	All	Private				Public	Per cent
		Less than 25 employees		25 or more employees			
		Less than 25 employees	25 or more employees	Less than 25 employees	25 or more employees		
All employees	34	7	31	61	78		
Industry							
Agriculture, forestry and fishing	9	*	*	*	*		
Mining and quarrying	31	*	36	*	*		
Manufacturing	33	5	39	*	77		
Electricity, gas and water supply	69	62	70	*	*		
Construction	22	6	19	91	91		
Wholesale and retail trade	14	3	25	*	*		
Hotels and restaurants	7	2	8	*	64		
Transport and communication	46	14	47	67	92		
Financial intermediation	44	46	43	*	57		
Real estate and business services	12	3	11	62	82		
Public administration	79	*	33	68	84		
Education	64	*	32	64	72		
Health	50	6	14	59	77		
Other services	26	4	20	48	76		
Union membership							
Member	81	59	80	81	87		
Not a member	14	2	12	37	62		

Source: Labour Force Survey

* Sample size too small for reliable estimate.

Note: Includes all employees, except for those in the armed forces. See *technical note* for details on classifications.

density (see *Table 5*) – highest in public administration at 79 per cent, and lowest in hotels and restaurants at just 7 per cent.

Within industries there is a pattern for the percentage of employees covered by collective bargaining to be higher in larger workplaces, and higher in the public sector than the private sector. Bargaining coverage for public sector industries in large workplaces is comparatively uniform, with at least two-thirds covered. Conversely, among employees in small private sector workplaces, there are only three industries where bargaining coverage is greater than one tenth: transport and communication; financial intermediation; and electricity, gas and water supply.

Union membership

Table 7 shows the extent of bargaining coverage by union membership status. While employees may work in a workplace with union recognition, and even have their pay determined by collective bargaining, they may not themselves be a member of a trade union. Conversely, it can be the case that unions may not be recognised in an

employee's workplace, but he or she may still belong to a trade union. Despite the absence of union recognition by management for negotiating pay and conditions of employment at a particular workplace, unions may still play a prominent role. For example, they may retain a representational role on other issues.

Table 7 shows that 81 per cent of union members are covered by collective bargaining. Conversely, 14 per cent of employees who are not members of a trade union said that their pay and conditions are covered by a collective bargaining agreement.

The LFS is a household survey and as many as a third of responses are made by proxies. There is some evidence that proxies under-report union recognition and collective bargaining coverage and as such these figures are likely to be underestimates (see *technical note*). A part of the 1998 Workplace and Employee Relations Survey¹ (WERS) asks a sample of managers of workplaces with 25 employees or more details on union organisation. Of these workplaces, 53 per cent have union members and 45 per cent officially

recognise a trade union. WERS estimates that 36 per cent of employees are union members.

Conclusion

The overall level of trade union density now stands at just under a third of all employees although there is significant variation in different industries and among different types of employees.

Data from the two sources relate to different time periods which makes it difficult to draw firm conclusions about the recent trend. The Certification Officer series shows a fall in union membership in the year to the end of December 1997, continuing the long-term trend. The LFS, which covers the change in the year to autumn 1998, shows that union density has only fallen by 0.6 percentage points, and union membership by only 10,000. This fall of 10,000 is the smallest annual decrease since the series began in 1989, and is not statistically significant. It will be necessary to look carefully at the next year's data from both sources to see if there is evidence of a clear shift in patterns of union membership.

Note

- 1 The 1998 Workplace Employee Relations Survey is a research project conducted jointly by the Department of Trade and Industry, the Economic & Social Research Council, the Advisory, Conciliation and Arbitration Service, and the Policy Studies Institute.

Further information

For further information, please contact:

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Technical note

Certification Office data

The data covers the membership of all organisations known to the Department of Trade and Industry (DTI). Since 1975 they concern organisations that fall within the definition of a trade union under section 28 of the Trade Union and Labour Relations Act of 1974 and more recently section 1 of the Trade Union and Labour Relations (Consolidation) Act 1992. The figures are based on data supplied by the Certification Officer for Trade Unions and Employers' Associations.

Included in the data are home and overseas membership figures of contributory and non-contributory members, under the rules of those trade unions whose head offices are in Great Britain. Employment status of members are not provided and the figure may therefore include some people who are self-employed, unemployed or retired.

All the figures given in this article are provisional and subject to revision as later information becomes available. Figures published in earlier years have been revised in line with the latest information.

Statutory list of trade unions

For a trade union to be included in the Certification Officer list, it must be an organisation composed wholly or mainly of workers which has the regulation of relations between those workers and employers as one of its main purposes.

With the co-operation of the Certification Officer the DTI has been able to use the former's information about membership and so avoid having to do a separate survey. The figures reported replicate data from the Certification Officer's annual report.

This article only refers to estimates for Great Britain, whereas the reporting of Certification Officer data in recent years has been for the United Kingdom.

The *Annual Report of the Certification Officer*, published in March 1999, contains the names of those trade unions listed at December 31, 1998. The lists are open to public inspection at the Certification Office, Brandon House, 180 Borough High Street, London SE1 1LW, tel. 020 7210 3735. For organisations with head offices in Scotland, the lists can be viewed at the office of the Assistant Certification Officer, 58 Frederick Street, Edinburgh EH2 1LN, tel. 0131 226 3224. For organisations with head offices in Northern Ireland, the lists can be viewed at the Northern Ireland Certification Office, Windsor House, 9-15 Bedford Street, Belfast BT2 7NU, tel. 01232 237 773.

The Labour Force Survey

The LFS is a survey of around 60,000 private households throughout Great Britain. The survey was conducted once every two years between 1973 and 1983, and once every year in the spring between then until 1991. From 1992 onwards, the survey has been conducted on a quarterly basis in Great Britain, and since 1995 for the United Kingdom as a whole.

Trade union questions

The question on trade union membership has been asked annually since 1989 of all individuals in employment (or away

temporarily) during the reference week, either as employees or as self-employed, or of people on government employment or training programmes who were based with an employer during the reference week. The remaining trade union-related questions were introduced as annual questions in the autumn 1993 survey and the data are analysed in respect of all employees. A new question on collective bargaining coverage was introduced in 1996. The exact wording and sequence of the questions are as follows:

At your place of work, are there any unions, staff associations or groups of unions?

If yes:

Is it/are any of them recognised by management for negotiating pay and conditions of employment?

If yes:

Are your pay and conditions of employment directly affected by agreements between your employer and any trade union(s) or staff associations?

All in employment:

Are you a member of a trade union or staff association?

A fuller discussion of the rationale for this line of questioning and question wording, and a comparison with results from other sources, can be found in the December 1994 *Employment Gazette*.

In 1992 the trade union membership question was moved from the spring to the autumn quarter. Consequently, estimates since 1992 are not strictly comparable with those for earlier years, because estimates before and after this change may reflect seasonal factors as well as longer-term trends. It is not possible to adjust the data for seasonality. However, it is known that at the aggregate level, seasonal variations in the number of people in employment – the group that are asked the membership questions – tend to be relatively modest (see *Employment Gazette* April and May 1993 for a fuller discussion). There is also a minor discontinuity between 1992 and 1993 due to the inclusion in 1993 of the additional questions on trade unions which preceded the membership question.

Non-contacts

Each household in the LFS is in the sample for five consecutive quarters. For the small number of households which were not contactable in the quarter (other than the first), their responses from the previous quarter are brought forward. For questions that do not appear every quarter, such as the trade union membership question, there is no previous response to carry forward, and a 'does not apply' response is therefore recorded. There are also cases where the respondent was interviewed in the quarter, but gave no answer (either because they did not know or refused to answer the question). Both cases have been treated in the same way and

Technical note

allocated pro-rata according to those who did answer the question. In 1998 the 'no answer' category accounted for 5 per cent of all responses.

Classificatory variables

Most of the classifications used to place respondents in different categories are based on a direct question relying on the person's self-assessment of their circumstances. Some are based on a combination of more than one question, and others are coded by ONS based on standard conventions. Details are provided below.

Sex, age and ethnic origin are self-defined. Highest qualification is principally based on a question asking individuals to nominate what qualification they have from a list of 40 categories. These have then been aggregated for the purposes of analysis.

Marital status is based on two questions: first, whether individuals have ever been married, and; second, whether if not presently married and living with their spouse, they are presently living with someone as a couple. Thus, people who are separated from their spouses but are cohabiting with another person have been placed in the 'married or cohabiting' category.

With the exception of occupation, all job-related classifications are self-defined. In particular, it should be noted that the two aspects of employment status – full-time or part-time, and permanent or temporary – are based on direct questions and do not rely on any set criteria (e.g. number of hours worked). The classification for special working arrangements only includes those who work under such arrangements, and the final category of 'work mainly in own home' is taken from a separate question on homeworking.

The occupational classifications are from the 1991 Standard Occupational Classification, and are assigned by ONS staff based on an open-ended question asking people what was their job, and what did they mainly do in their job.

Defining the sector in which people work is based on two questions, first introduced in 1993. These ask first if they worked in a private firm or business, a limited company, or some other kind of organisation, and second, if other, what kind of non-private organisation.

Industry is based on respondent's answers to a question about what the firm or organisation for which they worked mainly made or did, and coded using the Standard Industrial Classification of economic activities 1992 or SIC(92).

Region of place of work and number of employees at the workplace are both self-defined.

Sampling and non-sampling error

The LFS is a sample survey and, in common with all other surveys, estimates are subject to known sampling error and unknown non-sampling error.

Sampling errors relate to the fact that the sample chosen is only one of a very large number of samples which might have been chosen. It follows from this that one quarter's estimate of, say, trade union membership, is only one of a large number of such estimates which might have been made. It is possible to calculate standard errors and assign confidence intervals to estimates, based on standard statistical formulae, which takes into account the complexity of the sample design, the estimated proportion, the number of survey respondents and the size of the population. Generally, the more aggregated the results the lower the standard error giving the estimate a greater degree of precision. All published LFS estimates have relative standard errors of 20 per cent or less.

Non-sampling errors are very difficult to quantify and can be minimised by achieving very high response rates, and by a concentration on quality management in the conduct of the survey and coding responses. LFS response rates are ordinarily above 80 per cent, which is very high for a household survey. Research conducted by ONS comparing the LFS with the Census of Population shows that some groups are under-represented in the LFS sample. These include people from households living in London; those renting from housing association; those in converted or shared accommodation; and those with only one adult, aged 16-19 in the household.

It is possible that some non-sampling error arises in the series of questions on trade unions because of measurement problems. Around a third of the sample are proxy respondents, and the data show that this group are less likely to be union members than those responding on their own behalf, 24 per cent and 28 per cent respectively. If proxy respondents were no different from those responding on their own behalf, one would expect there to be no difference at all. This suggests that there may be a slight downward bias to the estimate of union membership.

On the questions on union recognition and collective bargaining coverage, it is known from surveys of employers that only a small proportion of public sector workplaces are not covered, and that these arrangements are generally made at the head office level or across many organisations. It is therefore likely that employees who are not union members and who work in small workplaces in the public sector may be unaware that union recognition and collective bargaining arrangements apply to their organisation. Consequently, there may also be a downward bias to these measures.