XI. THE FUTURE OF UNIONS IN MODERN BRITAIN

Union Relative Wage Effects in the United States and the United Kingdom

David G. Blanchflower

Dartmouth College and National Bureau of Economic Research

Alex Bryson

London School of Economics

Abstract

This paper presents evidence of both countercyclical and secular decline in the union membership wage premium in the United States and the United Kingdom over the last couple of decades. The premium has fallen for most groups of workers, the main exception being public sector workers in the United States. By the beginning of the 21st century, the premium remained substantial in the United States, but there was no premium for many workers in the United Kingdom. Industry, state, and occupation-level analyses for the United States identify upward as well as downward movement in the premium characterized by regression to the mean.

Declining union density in the United States and the United Kingdom has prompted some commentators to wonder whether unions matter anymore. In particular, there has been speculation that the intensification of competition since the 1980s, coupled with a diminution of union bargaining strength, has prevented unions from obtaining the sort of wage premium they have achieved in the past. It is evident that unions are not as central to the econo-

Author's address: Dartmouth College, Department of Economics, 6106 Rockefeller Hall, Hanover, NH 03755

my as they used to be, but union decline is not apparent everywhere: many employers continue to contend with strong unions, raising important questions about union effects in those sectors.

In his definitive empirical work, H. Gregg Lewis (1986) found that the overall impact of unions in the U.S. economy was approximately 15 percent and showed relatively little variation across years—varying between 12 percent and 19 percent between 1967 and 1979. Subsequent work confirmed constancy of the differential until the 1990s. For example, Hirsch and his coauthors have produced a series of papers estimating changes in the differential over time and concluded there has been some decline in the premium in recent years (Hirsch and Macpherson 2002).

Countercyclical movement in the union wage premium may occur when unions can protect their members from the downward wage pressures when workers in general face unfavorable market conditions (Freeman and Medoff 1984). The length of union contracts relative to nonunion ones might also mean union wages are less responsive to the cycle. Empirical evidence suggests pro-cyclical movement in union wages in the 1970s (Grant 2001). Looking at a longer time frame through 1999, Bratsberg and Ragan (2002) find clear evidence of a countercyclical union wage premium. Cost-of-living-adjustment (COLA) clauses in union contracts that increase union wages in response to increases in the consumer price level should reduce countercyclical movement in the premium.

In the United Kingdom there is a growing belief that the union wage premium may be falling. This fact would be consistent with evidence pointing to diminishing union influence over pay setting. Evidence indicates a narrowing in the scope of bargaining (Brown et al. 1998); union pay settlements at the end of the 1990s were no greater than nonunion settlements (Forth and Millward 2000) and—even where managers say employees have their pay set through workplace-level or organization-level collective bargaining—union representatives and officials are either not involved or are only consulted in a minority of cases (Millward et al. 2001). And yet unions continue to narrow pay differentials across gender, ethnicity, health, and occupation (Metcalf et al. 2001), perhaps suggesting that those unions that have survived are the stronger and, as such, better able to command a wage premium (thus raising the "batting average" of unions).

The consensus in the earlier literature is that the mean union wage gap was approximately 10 percent, the gap remaining roughly constant between 1970 and 1995 (Blanchflower 1999). However, while the union effect was persisting, the premium declined for some workers (Blanchflower 1999). The picture emerging from research through to 1998 and 1999 is suggestive of a more widespread decline in the premium. For instance, Machin (2001) finds

a wage gain for people moving into union jobs in the early 1990s, but this had disappeared by the late 1990s.

Trends in the Union Wage Premium in the United States

Table 1 presents estimates of the wage gap using separate log hourly earnings equations for each of the years from 1973 to 1981 using the National Bureau of Economic Research's (NBER) May Earnings Supplements to the Current Population Survey (CPS) and for the years since then using data from the NBER's Matched Outgoing Rotation Group (MORG) files of the CPS.

TABLE 1
Union Wage Gap Estimates for the United States, 1973–2002 (%)

	All Sectors	Private Sector
1973	14.1	12.7
1974	14.6	13.8
1975	15.1	14.3
1976	15.5	14.6
1977	19.0	18.3
1978	18.8	18.6
1979	16.6	16.3
1980	17.7	17.0
1981	16.1	16.3
1983	19.5	21.2
1984	20.4	22.4
1985	19.2	21.0
1986	18.8	20.1
1987	18.5	20.0
1988	18.4	19.1
1989	17.8	19.2
1990	17.1	17.6
1991	16.1	16.6
1992	17.9	19.2
1993	18.5	19.6
1994	18.5	18.2
1995	17.4	18.0
1996	17.4	18.4
1997	17.4	17.7
1998	15.8	16.1
1999	16.0	16.9
2000	13.4	14.3
2001	14.1	15.1
2002	16.5	18.6
1973-2002 average	17.1	17.6

The time series properties of the whole economy and private sector series are essentially the same. The wage gap averages 17–18 percent over the period and is similar in size in the private sector as it is in the economy as a whole. What is notable is the high differential in the early to mid-1980s and a slight decline thereafter, which gathers pace after 1995, with the series picking up again as the economy started to turn down in 2000.

Estimating union wage gaps for subgroups of private sector employees since the mid-1970s we find no group of workers in the private sector sample has experienced a substantial increase in their union premium. Also, with the exception of the manual/nonmanual gap, those with the highest premiums in the 1970s saw the biggest falls, so there has been some convergence in the wage gaps. Nevertheless, the wage premium is 10 percent or more for most. The situation is different for public sector workers. Between the two periods 1983 to 1988 and 1996 to 2001, the public sector premium rose from 13.3 percent to 14.5 percent. Over the same period the private sector premium fell from 21.5 percent to 17 percent.

Industries

We used our data to estimate separate results for forty-four two-digit industries for 1983 to 1988 and 1996 to 2001. In contrast to the analysis by worker characteristics, which reveal near universal decline in the premium—at least in the private sector—we found that the wage gap rose in seventeen industries and declined in twenty-seven. The decline in the wage gap for the whole economy is due to the fact that the industries experiencing a decline in their wage gap make up a higher percentage of all employees than those experiencing a widening gap.

To explore these changes in the private sector industry union wage premium over time, we ran panel fixed effects estimates (Blanchflower and Bryson, forthcoming) estimating the impact of the lagged premium, lagged unemployment, and a time trend on the level of the industry-level wage premium. In the unweighted analyses, the lagged premium is positively and significantly associated with the level of the premium the following year indicating regression to the mean. Unemployment and the time trend are not significant. However, once the regression is weighted by the number of observations in the industry, the first-stage regression lagged unemployment is positive and significant, indicating countercyclical movement in the premium; and there is a negative time trend indicating secular decline in the premium. More detailed analysis of industry-level influences on the premium confirm Bratsberg and Ragan's (2002) earlier findings that the unemployment rate, deregulation in communications, and import penetration in both durables and nondurables have positive impacts on the premium. However, in contrast to their findings,

our preferred model specifications indicate no significant impact of COLAs, inflation, or other industry deregulations.

States

A similar procedure was adopted to estimate state-level premia over time for the fifty states plus Washington, D.C. Between the periods 1983 to 1988 and 1996 to 2001, the mean state union wage gap fell from 23.4 percent to 17.2 percent. The premium fell in all but five states. Controlling for state fixed effects with fifty state dummies, we find that with an unweighted regression the lagged premium is positive and significant, as it was at industry level. Again, as in the case of industry-level analysis, the effect is apparent when weighting the regression. The positive, significant effect of lagged state-level unemployment confirms the countercyclical nature of the premium—the effect is apparent whether the regression is weighted or not. There is also evidence of a secular decline in the state-level premium but only where the regression is unweighted.

Occupations

Similar analyses at occupation level show clear evidence of regression to the mean, with the lagged premium positive and significant, as well as evidence of a secular decline in the premium. A significant countercyclical effect is evident when the regression is weighted but not in the unweighted regression.

Trends in the Union Wage Premium in the United Kingdom

Table 2 presents the union membership wage premium over the period 1985 to 2002. Column 1 estimates the premium for the United Kingdom since 1993 using the Labour Force Survey (LFS), while column 2 estimates the premium for Britain since 1985 using the British Social Attitudes Surveys (BSAS). Both series are based on standard specifications for each separate year. In identifying the union effect over time, we make what we think is the reasonable assumption that any bias in our estimates arising through unobserved heterogeneity is constant over time.

The LFS estimates tend to be above the BSAS estimates, but in both series there has been a decline in the log hourly union wage premium since 1994 (with the BSAS estimate for 1997 as an outlier). Although the premium remains roughly 10 percent in the 2000 LFS, it falls to a statistically insignificant 5 percent in BSAS 2000 and falls even further in 2001. However, it recovers to a statistically significant 6.4 percent in 2002 as unemployment rises, further evidence of countercyclical movement in the premium.

When we run LFS analyses for different types of workers, we find that, in 1993, only one group of employees (the highly educated) had a premium well

TABLE 2	
Time-Series Estimates of Union Wage Premium	(%),
United Kingdom and Britain	

	LFS	BSAS
1985		3.5
1986		11.1
1987		7.9
1989		6.3
1990		6.3
1991		4.8
1993	14.9	11.4
1994	17.5	13.7
1995	14.6	13.1
1996	14.8	7.3
1997	11.4	17.7
1998	12.2	11.0
1999	10.2	9.5
2000	10.3	5.0
2001		4.4
2002		6.4

below 10 percent. In 2000, all but three out of the seventeen types of workers had a premium below 10 percent. Results are similar when using BSAS data. In 1993 to 1995, only two types of workers (non-manuals and the highly qualified) had a union premium of less than 10 percent. By 1999 to 2001, eleven types of workers had a premium of less than 10 percent. For five types of workers (men, younger workers, those in the private sector, non-manuals, and the highly educated) the membership premium was no longer statistically significant.

Conclusions

The union membership wage premium has been higher in the United States than in the United Kingdom in the last couple of decades. In both countries the premium was untrended in the years up to the mid-1990s, but it has fallen since then. Much of this is due to countercyclical movement and thus, as we might expect, the premium rose with unemployment in both countries in 2001 and 2002 after a number of years of decline. However, we also find clear evidence in the United States of a secular decline in the premium. Even so, in 2002, the premium in the U.S. economy was 16.5 percent, just a little below the 17.1 percent average for the period 1973 to 2002. In the private sector, the 2002 premium was 1 percentage point above the average of 17.6 percent for the period. In the United Kingdom, on the other hand, there are

real questions as to whether there is a significant union wage premium for workers at the beginning of the 21st century.

What are the implications for trade unions? The size of the premium in the United States might suggest that the benefits of membership, net of dues and other costs, remain sizeable. So why has density been declining in the private sector? One possibility is that the premium comes at the cost of union jobs-evidence for the United States and the United Kingdom shows unionized establishments grow at a slower rate than nonunionized establishments. Unionized companies face greater competition from nonunion employers at a time when increasing price competitiveness means employers are less able to pass the costs of the premium on to the consumer. Declining union density, by increasing employers' opportunities to substitute nonunion products for union products, fueled this process. So too did rising import penetration: if imports are nonunion goods, regardless of U.S. union density, they increase the opportunity for nonunion competition. These pressures have increased the employment price of any union wage premium. A second possibility—not inconsistent with the first—is that the costs of membership have risen, most notably through increasing employer opposition to union organizing (Kleiner 2002). That opposition may even be fuelled, in part, by the size of the wage premium if employers view it as the price tag attached to successful union organizing campaigns. Either way, it is clear that unions' relative success in the bargaining arena is not going to bring about a reversal in union fortunes. In the United Kingdom, the problem is that unions are struggling to procure any premium for members. At a time when the new cohort of employers has turned away from unions (Bryson et al. 2004), raising the costs of employees joining unions, this dip in the premium means a further reduction in the net benefits of membership, making it increasingly difficult for unions to recruit new members.

Acknowledgments

We thank Bernt Bratsberg, Bernard Corry, Henry Farber, Richard Freeman, Barry Hirsch, Andrew Oswald, Jim Ragan, and participants at the NBER Labor Studies and at the 56th annual meeting of the Industrial Relations Research Association in San Diego for their comments. We also thank the Economic and Social Research Council for their financial assistance (grant R000223958). Some of the material is adapted from our chapter "Changes Over Time in Union Relative Wage Effects in the United Kingdom and the USA Revisited," in *The International Handbook of Trade Unions*, ed. John Addison and Claus Schnabel, Cheltenham, UK: Edward Elgar, 2003. We acknowledge the Department of Trade and Industry; the Economic and Social Research Council; the Advisory, Conciliation, and Arbitration Service; and the

Policy Studies Institute as the originators of the 1998 Workplace Employee Relations Survey data; and the Data Archive at the University of Essex as the distributor of the WERS data. None of these organizations or individuals bears any responsibility for the authors' analysis and interpretations of the data.

References

- Blanchflower, D. G. 1999. "Changes Over Time in Union Relative Wage Effects in Great Britain and the United States." In *The History and Practice of Economics: Essays in Honor of Bernard Corry and Maurice Peston*, ed. S. Daniel, P. Arestis, and J. Grahl. Vol. 2. Northampton, Mass.: Edward Elgar, pp. 3–32.
- Blanchflower, D., and A. Bryson. Forthcoming. "What Effect Do Unions Have on Wages Now and Would 'What Do Unions Do?' Be Surprised?" *Journal of Labor Research*.
- Bratsberg, B., and J. F. Ragan 2002. "Changes in the Union Wage Premium by Industry— Data and Analysis." *Industrial and Labor Relations Review*, Vol. 56, no. 1, pp. 65–83.
- Brown, W., S. Deakin, M. Hudson, C. Pratten, and P. Ryan. 1998. *The Individualization of Employment Contracts in Britain*. Vol. 4 of Employment Relations Research Series. London: United Kingdom Department of Trade and Industry.
- Bryson, A., R. Gomez, and P. Willman. 2004. "The End of the Affair? The Decline in Employers' Propensity to Unionize." In *Union Organization and Activity*, ed. J. Kelly and P. Willman. London: Routledge, pp. 129–49.
- Forth, J., and N. Millward. 2000. "Pay Settlements in Britain." NIESR Discussion Paper No.173, National Institute for Social and Economic Research, London. Freeman, R.
- B., and J. Medoff. 1984. What Do Unions Do? New York: Basic Books. Grant, D. 2001. "A Comparison of the Cyclical Behavior of Union and Nonunion Wages in
 - the United States." *Journal of Human Resources*, Vol. 36, no. 1, pp. 31–57.
- Hirsch, B. T., and D. A. Macpherson. 2002. *Union Membership and Earnings Data Book:* Compilations from the Current Population Survey (2002 Edition). Washington, D.C.: Bureau of National Affairs.
- Kleiner, M. 2002. "Intensity of Management Resistance: Understanding the Decline of Unionization in the Private Sector." In *The Future of Private Sector Unionism in the United States*, ed. James T. Bennett and Bruce E. Kaufman. Armonk, N.Y.: M.E. Sharpe, pp. 292–316.
- Lewis, H. G. 1986. *Union Relative Wage Effects: A Survey*. Chicago: University of Chicago Press.
- Machin, S. 2001. "Does It Still Pay to Be In or to Join a Union?" Working paper, University College London.
- Metcalf, D., K. Hansen, and A. Charlwood. 2001. "Unions and the Sword of Justice: Unions and Pay Systems, Pay Inequality, Pay Discrimination and Low Pay." *National Institute Economic Review*, Vol. 176, pp. 61–75.
- Millward, N., J. Forth, and A. Bryson. 2001. Who Calls the Tune at Work? The Impact of Unions on Jobs and Pay. York: Joseph Rowntree Foundation.