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ABSTRACT

The Surprising Retreat of Union Britain

After expanding in the 1970s, unionism in Britain contracted substantially over the next two decades. This paper argues that the statutory reforms in the 1980s and 1990s were of less consequence in accounting for the decline of unionism than the withdrawal of the state's indirect support for collective bargaining. The principal goal of the reforms was to boost productivity so the paper examines the link between unions and productivity finding only a small association by the end of the 1990s. Private sector unionism has become highly decentralized which renders it vulnerable to the vagaries of market forces.

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I. Introduction

An assessment of unionism in a society may be organized around three classes of questions: do unions produce a better distribution of income in society?; do unions contribute to a more efficient society?; and do unions enhance a society’s “social capital”?¹ The first two questions are the familiar distributional and efficiency considerations that figure in any interesting economic question. The third class of questions is less familiar to economists. It concerns aspects of social organization such as civic responsibility and engagement that enhance self-government and voluntary cooperation. Associations such as labor unions are an important component of a society’s network of institutions that give individuals an opportunity to shape their environment and to promote mutual assistance. Collective bargaining can be a constructive force at the workplace to resolve problems that arise from the necessary incompleteness of labor contracts and, in this way, unionism has the potential of being an effective vehicle for representing workers’ concerns and for influencing their work conditions. At the same time, unionism has the potential to be a destructive agent. It can frustrate cooperation, incite antagonisms, and create hardship. Whether, on balance, unionism is a source that adds to or detracts from a society’s “social capital” is a matter for determination in any particular context.

In the context of Britain over the past forty years or so, the condition of unionism has changed remarkably. In the 1970s, the union movement in Britain appeared strong: the leadership was consulted on important matters of economic policy, union membership and density were rising, and a Royal Commission (the Bullock Commission) proposed putting union leaders on company boards. This strength arose not because collective bargaining was explicitly supported by a favorable statutory framework, but because various indirect ways had been devised to promote

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¹ I have benefitted from comments on previous drafts of this paper by Richard Blundell, Alison Booth, Adam Seth Litwin, David Metcalf, Andrew Oswald, Norma Virgoe, and an anonymous referee. Research assistance from Benjamin Liu is acknowledged. [UnionsGB.ppr]

¹ While physical capital and human capital refer to the machines and skills that augment an organization’s or an individual’s productivity, social capital alludes to aspects of the social structure such as trust, networks, and conventions that encourage collaboration and coordination for shared advantage. Social capital is not embodied in a single organization or single individual, but in the relations among organizations and individuals. See Coleman (1988).
unionism. This indirect support had been nurtured by governments of different political stripe and found favor with the electorate which habitually expressed approval of collective bargaining as a system for determining labor contracts.

This broad consensus broke down by the close of the 1970s. There were several reasons for this. Increasingly, Britain’s lacklustre productivity performance was attributed to restrictive work practices enforced by unions. The system of collective bargaining was implicated in the accelerating rate of price inflation. A succession of strikes imposed a good deal of hardship on the community. For these and perhaps other reasons, the public’s support for unionism reached a low point in 1979 when a new government was elected to power. Even though public support for unionism recovered quickly, the new government pursued an active policy of taming the power and reach of unions. It was as if, at a relatively brief moment of the electorate’s disenchantment with unionism, the government seized the opportunity to curb collective bargaining over the subsequent fifteen years or so and to subject it to disciplines that have left it debilitated. The retreat of unionism is illustrated by the drop in the fraction of workers who are union members in Figure 1 and by the decline in strike activity in Figure 2. By the year 2000, unionism’s role in private industry looks precarious especially in light of its difficulty in organizing new establishments. I have found nothing in the writing in the 1970s on unions and industrial relations that forecast this change in fortunes. From the perspective of the 1970s, this retreat of union Britain is surprising.

This experience raises many important questions. What caused unionism’s retreat? How has the decline in collective bargaining affected the growth and distribution of incomes? What is the prevailing link between productivity and unionism? How has the decline in unionism affected the workplace experience of employees? How have unions themselves been affected by this reduced status? Answers to these questions are offered in this paper drawing heavily on previous research and making use especially of the detailed data derived from the four Workplace Industrial Relations Surveys conducted in Britain in 1980, 1984, 1990, and 1998. This and other information will be used to describe the changes that have taken place. However, while these and other data allow for a description of the changes, identifying causal relations requires a heavy dose of judgment. Indeed, the perennial problem with issues in labor relations is in unscrambling causal relationships where

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2 Though linked to the earlier surveys, the 1998 Survey was renamed the Workplace Employee Relations Survey. The Workplace Industrial Relations Surveys will be referenced subsequently as WIRS (year) and, in 1998, as WERS (1998).
the key forcing variables are often unmeasured or poorly measured.

The paper proceeds by sketching the state of unionism in the 1960s and 1970s arguing that, unlike most other countries, British unionism was nurtured less by explicit statutory support and more by various indirect mechanisms. Because of the importance of these indirect mechanisms, the statutory reforms in the 1980s and 1990s were probably of less consequence in accounting for the decline of unionism than the withdrawal of the state’s indirect support for collective bargaining. Perhaps the principal goal of the reforms was to break the link between unionism and low productivity so the paper addresses what is known about unions and productivity with special emphasis on what remains of the association between productivity and unionism in the late 1990s. Some original research on this issue is presented. Section V asks how workers are benefitting from unionism today and general conclusions complete the paper.

II. The Condition of Unionism in the 1960s and 1970s

General Overview

In the 1960s and 1970s, Britain’s labor markets and industrial relations practices came under increasing scrutiny. This was manifested not only in extensive public debate of the issues and the establishment of a Royal Commission (the Donovan Commission) in 1965, but also in an increasingly active statutory agenda. A principal reason for this scrutiny grew out of the realization that Britain’s rate of economic growth was inferior to almost all comparable economies and that Britain frequently scored poorly in comparisons of productivity across countries. Many explanations were offered for these chastening international comparisons, but the role of industrial relations was frequently alluded to.

For example, Patten’s (1976) comparison of the productivity of companies with operations in more than one country in the early 1970s found that those company divisions in Britain had a poor productivity record and he ascribed an important part of this to union-enforced restrictive work practices, over-manning, and strikes. Prais’s (1981) study of manufacturing industry came to similar sobering conclusions about British productivity and again identified the poor state of labor relations in Britain as partly responsible. One feature of British industrial relations that came in for frequent censure in accounting for these productivity patterns was the multiplicity of unionism. Such a union structure was said to contribute to jurisdictional disputes and to give undue emphasis
to the interests of narrow occupational groups.3

However, by the end of the 1970s, the link established by economists between unionism and productivity was circumstantial. Though some case studies indicated that unions were defending work practices that harmed productivity, sufficient evidence had not been accumulated to justify a statement to the effect that, in general, unionism harmed productivity.4 Nevertheless, this belief came to be widely shared and contributed to the view that unions were a drag on productivity and economic growth.

In their distributional activities, the popular view was that unions were involved in a constant effort to reallocate incomes away from dividends and interest and towards wages and salaries. In fact, economists brought forward little evidence that unionism materially affected the distribution of national income in this way.5 More attention was directed to the association between unionism and individual earnings. The first empirical studies of union-nonunion wage gaps in Britain were appearing in the 1970s, but the available data at that time did not permit confident inferences. Subsequent research suggests that the wage gaps were modest. For instance, Stewart (1991) estimates union-nonunion wage gaps in 1980 of almost 7 percent for semi-skilled workers and 2 percent for skilled workers.6 This suggests that unionism had modest effects on the wage structure.

However, unions’ efforts to redistribute incomes toward wages contributed to chronic upward pressure on wages and prices. When a firm or industry experiences wage increases induced by collective bargaining, typically a contraction in employment and output is to be expected. The issue then becomes the policy-making authorities’ response to this wage-induced employment reduction. Britain’s tragic experience with unemployment between the two World

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3 See, for instance, Aylen’s (1982) study of the steel industry in Britain, Germany, and the United States.

4 Metcalf’s useful surveys (1989, 1990) list only two relevant studies prior to 1980 and one of these relates to unionism before the First World War.

5 In the classic account of movements in the share of wages in national income in Britain by Phelps Brown and Hart (1952), unions are given a role, but it is largely a secondary one: “The course of the trade cycle brought....changes in the effective strength of trade unions. From time to time there were some greater and in part exogenous changes in union strength. Whether these changes affected the relative size of wages and profits depended on the market environment” (p. 274).

6 In the special case of workplaces with a pre-entry closed shop, these gaps were larger: 15 percent for semi-skilled and 10 percent for skilled workers.
Wars caused governments to give a very high priority to maintaining full employment and this strong aversion to allowing unemployment to rise tended to make wages one of the fixed points in the system to which other variables adjusted. In Hicks’ (1955) words, no longer was the British economy on the Gold Standard but on a Labour Standard.

With the aim of moderating wage increases without inducing a rise in unemployment, governments invited unions into policy-making circles and encouraged them to participate in programs aimed to restrict the growth of all types of money incomes. These were largely fruitless in that, after removing the effects of the business cycle, wage inflation tended to rise inexorably and the unemployment rate seemed to rise along with it. The form of this policy in the last Labour Government of the 1970s, the so-called Social Contract, fell apart amidst a wave of strikes in 1978-79. But until Keynesian demand management policies were totally discarded in the 1980s, the dominant ideas in macroeconomic policy provided an environment that accorded unions an influential role in the management of the economy.

Hence, by the 1970s, it is difficult to make the case that unions in Britain enhanced productivity or materially improved the distribution of income in society. However, unions were

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7 From 1921 until the outbreak of the Second World War, national insurance unemployment rates were above ten percent for every year except 1927 when the unemployment rate was 9.7 percent.

8 Another fixed point was the foreign exchange rate although several times devaluation was the chosen option to adjust to macroeconomic disequilibrium.

9 Hicks (1955, p. 391) wrote, “...the world we now live in is one in which the monetary system has become relatively elastic, so that it can accommodate itself to changes in wages, rather than the other way about. Instead of actual wages having to adjust themselves to an equilibrium level, monetary policy adjusts to the equilibrium level of money wages so as to make it conform to the actual level. It is hardly an exaggeration to say that instead of being on a Gold Standard, we are on a Labour Standard”.

10 In fact, the first signs of the rejection of Keynesianism came from elements in Callaghan’s Labour Government of the 1970s. In response to yet another run on the pound, in 1976, the Chancellor of the Exchequer, Dennis Healey, proposed radical reductions in public expenditure and the Prime Minister told the Labour Party Conference, “You cannot spend your way out of recession”. Subsequently, an abashed Government sought a loan from the IMF that came with further strings attached in the form of cuts in public expenditure. The contradictions of a Labour Government with close ties to the trade union movement pursuing balanced budget policies that conflicted with union aspirations finally brought the Government down in 1979.
For instance, in his research on productivity in manufacturing, Prais (1981) emphasized the frequency of strikes in large plants: “Not only are more man-days lost per employee in Britain, but there are added costs from the greater frequency of stoppages, verging in some plants on continuous disruption; British management in large plants is not able to devote its main energies to the pursuit of more efficient production methods, since so much time is taken up in ‘fire fighting’ to keep the plant at work.....The present so-called ‘voluntary approach’ to industrial relations seems to have been an important factor that has made large-scale production uncompetitive in this country” (pp. 262-3).

The scope of collective bargaining had widened considerably beyond issues of wages and work hours. Unions were involved in issues of work assignment, the speed and organization of production, workplace health and safety, and procedures for laying off of workers. Indeed, these were often the very same issues that gave rise to questions about the effects of unionism on productivity. By involving themselves in such matters, union representatives at the place of work gave employees a sense of participation. The trouble is that, in some instances, this participation was accompanied with hostile and obstructionist postures. Furthermore, in pursuing their goals, unions became increasingly tolerant of the costs imposed on the community in the form of highly disruptive strikes. In this respect, unionism in the 1970s tended to heighten antagonisms within society rather than act as a force for civic engagement and cohesion.

**Strikes**

Because each country’s definition of disputes tends to differ, meaningful comparisons of strike activity across countries are notoriously difficult to make. However, taking the data at face value, by international standards, British unions in the 1970s did not appear reluctant to invoke the strike weapon. In the seventeen countries listed in Table 1 for the 1970s, the United Kingdom ranks in the top half of strike-prone economies. 1979 stands out as the particular “winter of discontent” that presaged Margaret Thatcher’s electoral victory. When the strikes were against monopolies, they tended to impose considerable hardship on the community. In addition, there was evidence to suggest that the nature of these strikes damaged productivity.¹¹

The vast majority of strikes were unofficial in that they occurred without following specified procedures for settling disagreements. Often, the national unions did not sanction them. Indeed, in many instances, the national leadership might be quite surprised by them though, to grant the strikes greater legitimacy and to exert some control over them, the national union would sometimes declare the strikes “official” after they had begun.

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The key figures in these unofficial strikes were the union officials at the place of work, the shop stewards. To many workers, the shop steward was the human face of the union movement while the national union leadership consisted of remote figures with little understanding and knowledge of the particular issues at an employee’s place of work. Unofficial strikes tended to be short and they tended to be unpredictable except to some of those people at the place of work. Some saw unofficial strikes as the assertion by workers of their control over their workplaces, a form of syndicalism. Official strikes tended to be national (rather than local), longer, and more predictable. It was often argued that it was the unpredictable nature of unofficial strikes that made them more costly to employers than the more predictable official strikes and, therefore, the sort of reforms most desirable were those that reduced the incidence of the unofficial strikes.12

A Voluntary System

According to the conventional account, British unionism flourished with little direct statutory support. Whereas many countries closely regulated and nurtured unionism by statutory legislation, such direct support of collective bargaining was remarkably absent in Britain. What distinguished Britain among industrialized countries by the 1970s was the degree to which unionism evolved largely independent of direct regulation by the state. There is nothing in Britain comparable to America’s National and Labor Relations Act or Australia’s Conciliation and Arbitration Act, an encompassing piece of statutory legislation providing a definitive reference for the regulation of unionism and collective bargaining.

Illustrative of the prevailing attitudes toward unionism was the process by which unions became recognized by employers. Until the 1970s, there was no machinery to permit workers to select union representation nor to require an employer to recognize a union of his workers.13 Indeed, “yellow dog” contracts, long outlawed in the United States, were not only legal

12 The Donovan Commission, for example, declared, “We have no hesitation therefore in saying that the prevalence of unofficial strikes, and their tendency (outside coalmining) to increase, have such serious economic implications that measures to deal with them are urgently necessary” (United Kingdom Royal Commission, 1968, p. 112).

13 The 1975 Employment Protection Act gave the Advisory, Conciliation, and Arbitration Service (ACAS) the task of resolving disputes over union recognition. However, as ACAS was also given the duty of “..... encouraging the extension of collective bargaining”, employers resistant to union recognition saw ACAS not as a neutral arbiter, but as another arm of the union movement. Because employers were not compelled by law to cooperate with ACAS, ultimately its authority was eroded and it became ineffectual. See the description of its activities and a comparison with union
in Britain, but in some firms still invoked.\textsuperscript{14} As a group strongly supporting collective bargaining, the Donovan Commission deplored the lack of formal procedures to handle the issue of union recognition and the disputes that sometimes resulted.\textsuperscript{15} However, to an American audience familiar with the formal procedures enshrined in the National Labor Relations Act to deal with union recognition and representation, what is remarkable is the high union density achieved in Britain without legalistic machinery designed to force unionism on reluctant employers.

In the 1970s, the historical narrative of British unionism highlighted a relatively modest piece of legislation, the Trade Disputes Act of 1906. This established that a union could not be sued by an employer for damages resulting from a strike. This “immunity” had been the practice until 1901 when the House of Lords ruled otherwise in the Taff Vale case and the 1906 Act restored the unions’ rights in law. Prior to the 1980s, this Act giving a union “immunity” from litigation stemming from costs imposed on an employer through a strike was often singled out as the most important statute underpinning British unionism. Though an important piece of legislation, the Act is remarkable by international standards for what little it did. For instance, unlike other countries’ major pieces of statutory law on collective bargaining, this Act did not precisely specify rules about the formation of unions and the manner in which collective bargaining was to be conducted. On the contrary, up to the 1970s, Britain’s industrial relations are distinctive among wealthy economies for the small role played by statutory legislation.

The exceptions to this statement concern the years of and immediately following the

\\textsuperscript{14} A “yellow dog” contract is a document signed by a worker who, as a condition of employment, promises not to join a union. Examples of such contracts in Britain were provided by the Donovan Commission (1968, pp. 54-5).

\\textsuperscript{15} In its evidence to the Donovan Commission, the Trades Union Congress wrote colorfully: “It may from some points of view be unfortunate that many employers only recognize the strength of trade unionism when this strength is exercised overtly in the form of strike action, but it is undoubtedly a fact that strike action to secure trade union recognition is by far the most successful method of dragging such employers into the twentieth century and at the same time, through its stimulus to the trade union recruitment, of exposing the oft-heard shibboleth that it is only a few troublemakers who are claiming to represent the interests of the employees. Strike action to force trade union recognition is a good example of the principle that industrial peace is not the same thing as good industrial relations. Strike action to secure recognition is often the pre-condition for improving industrial relations.” (Royal Commission, Minutes of Evidence (1968), p. 171.)
two World Wars when the state played a much more intrusive role in collective bargaining and these actions had lasting effects. In addition, there was a period between 1971 and 1974 when an Industrial Relations Act specified collective bargaining agreements to be legally enforceable contracts unless the parties specified otherwise. In fact, in these years, contracts routinely inserted disclaimer clauses of the form “this is not a legally enforceable agreement.” The Act was largely inconsequential because it was boycotted by most unions and it was repealed by the Labour Government in 1974. With these important exceptions, private employers and unions in Britain have usually found it in their interest to reach agreements without the law compelling them to do so or how to go about it. This is why it was often described as a “voluntary” system and it allowed Henry Phelps Brown (1959, p.355) to write, “When British industrial relations are compared with those of other democracies they stand out because they are so little regulated by law.”

In Britain, there was no law obliging private employers to bargain with unions nor anything making collective bargaining agreements enforceable in a court. Unlike many other countries, no statement in law exists that gives workers the right to strike. Collective bargaining agreements have an “untidy” appearance in that some cover all workers over the entire country in a particular industry while others are restricted to a small group of workers within a particular plant. Some unions represent workers in a large number of different industries while other unions organize a small number of workers. The law in Britain has taken the position that these issues are best determined by the parties concerned with little need for state regulation.

Indirect Support of Collective Bargaining

This popular characterization of unionism in Britain before the 1980s is misleading. First, in its capacity as an employer, the state championed collective bargaining and, given the important role of the state as an employer by the 1970s, this implied that a large section of the economy was covered by legislation promoting unionism. Second, even in the private sector of the economy, the state intruded to encourage unionism, but this intrusion was largely indirect. Third, the Keynesian macroeconomic policies followed by successive governments in the 1960s and 1970s provided a hospitable climate for unionism.

First, consider the role of the state as an employer. The support of collective bargaining in public employment went back at least to the Whitley Committee Reports of the Great
The outbreak and furtherance of the Great War gave a boost to the role of trade union leaders in the administration of industry and government. This helped to portray unions as responsible organizations representing the legitimate interests of working people. Simultaneously, tight labor markets gave labor organizations at the factory floor the sort of muscle that was largely denied them before the War. To contain the shop stewards movement, Lloyd George’s Coalition Government appointed in 1916 a committee under the chairmanship of J. H. Whitley, a Liberal M.P., to suggest ways “for securing a permanent improvement in the relations between employers and employed”. The reports of the Whitley committees encouraged the recognition by employers of unions and proposed, in sectors where unions were well-established, a hierarchical structure of employer-union industrial councils designed to discuss and negotiate wages, work hours, and other aspects of employment contracts. The reports embraced public employment as well as private employment and, though the government was initially resistant to accord unions rights of negotiation and representation, soon government employees found themselves so represented.

Furthermore, government encouraged private employers to recognize unions. It did so not by setting up procedures by which workers may determine whether they wanted union representation. On the contrary, as noted above, British law had been largely silent on the issue of union recognition. However, the law did specify consequences if an employer refused to recognize

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17 The House of Commons debated in 1923 a resolution stating “.....that local authorities, banks, insurance and shipping companies, and other employers of professional and clerical workers should follow the example of the Government in recognizing the organizations of these workers”. Receiving broad support, the resolution passed without division on a free vote.

18 See Table II.1 of Daniel and Millward (1983).
a union. This became explicit during the Second World War when the National Arbitration Tribunal could impose on a non-union firm wages and working conditions that the Tribunal felt appropriate. When presented with the possibility of having terms of employment imposed on them by the state, many non-union employers felt it preferable to recognize a union and engage in collective bargaining to ensure it had some role in determining its wages. Such compulsory measures were made less draconian in peacetime. Nevertheless, by a series of Fair Wages Resolutions, those private-sector employers with government contracts were obliged to pay their workers wages set by collective bargaining in neighboring or comparable firms.19

Another mechanism bolstering collective bargaining in Britain was provided by minimum wage regulation. Unlike France and the United States where minimum wage laws embrace almost all blue-collar workers, Britain’s minimum wage regulation had been selective. For instance, with legislation in 1917, agriculture was identified as an industry warranting wage floors and other low wage sectors (such as retail trade and catering) were added subsequently by the establishment of sector-specific Wages Councils.20 By 1980, among employers outside of collective bargaining, about one-third of managers claimed that the pay of their manual workers was set by Wages Councils.21 Such wage-setting machinery was regarded as inferior to collective bargaining

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19 Otto Kahn-Freund regarded the 1946 Fair Wages Resolution as “one of the cornerstones of British labour law” while Wedderburn described it as “at least a prop for the British structure of collective bargaining” (Wedderburn (1986, pp.347-9). (The 1946 Fair Wages Resolution was preceded by analogous Resolutions in 1891 and 1909.) The extension of collectively-bargained wages to workers not covered by the collective agreements was effected by arbitration by the Ministry of Labour between 1940 to 1959. The same principle was enshrined in the Terms and Conditions of Employment Act of 1959. (See Royal Commission (1968), pp. 60-1.) The Employment Protection Act of 1975 set up the Central Arbitration Committee which had the power to oblige employers of nonunion labor to observe those terms of employment obtaining in similar unionized activities or in the same district. This was rescinded in the 1980 Employment Act. In September 1983, the Fair Wages Resolution was annulled.

20 It is intriguing to note that, whereas in Britain agriculture was singled out early for statutory wage regulation, in the United States it was singled out for exclusion from the Fair Labor Standards Act in 1938. The exclusion of farm workers from various pieces of New Deal legislation was engineered in the U.S. Congress by Southern legislators who faithfully represented the interests of Southern landowners. See Alton and Ferrie (1999).

21 See Daniel and Millward (1983, p.179-80). The authors maintain that these responses exaggerate the extent of wage regulation by the Councils because “First,.....some managers erroneously took negotiating bodies like Whitley Councils or joint industrial councils to be wages councils.....
and the expressed hope was that, in due course, the Wages Councils would be supplanted by union-negotiated agreements. In practice, Wages Councils set wages with reference to those negotiated by unions in neighboring industries. The consequence was to extend union wage regulation to sectors beyond those where unions were explicitly organized.

There were other ways in which government lent indirect support to unionism. One took the form of encouraging competition in product markets. A monopolistic or oligopolistic firm normally provides a much more hospitable environment for unions to survive and flourish than a competitive firm so government may influence the extent and strength of unionism by its posture toward product market competition.

Though its origins can be traced to the nineteenth century, the view that competitive markets would produce the least objectionable outcomes for society became an increasingly unfashionable doctrine in Britain as the twentieth century evolved. Again, the Great War was a catalyst in this development because the successful conduct of the War was seen to require a sudden and extensive intrusion of the state in all kinds of activities. When peace was restored, some looked to restore a modest role for the state. However, many others had become accustomed to an interventionist state and they viewed the state as the primary vehicle for effecting change within British industry which was diagnosed as too small and balkanized to compete effectively in international markets with larger and more efficient American and German companies. In the 1920s, the “rationalisation” of British industry was the label given to mergers and takeovers that the state expressly encouraged to create benefits of large economies of scale.

In the inter-war period, the monopolization and oligopolization of industry occurred with ownership remaining in private hands. In the years after the Second World War, the same process took the form of creating public monopolies covering large swathes of industry - electricity, gas, coal, railways, urban transport, airlines, telecommunications, and (for many years) steel. The

Secondly, some establishments that did not recognize unions adopted the rates specified by some wages council as the basis for their rates of pay, even though formally they were not bound by those rates.” In either event, through error or voluntary consent, a substantial number of non-union employers set wages in relation to those specified by regulatory bodies.

22 The classic statement of these trends is, of course, found in Dicey (1914).

23 On rationalisation in the 1920s, see Robinson (1931) who defines it as the “semi-compulsory reorganisation” of industry (Robinson, 1931, p.169).
dominant philosophy behind the “rationalisation” movement in the 1920s and the nationalization movement after the Second World War was one of scepticism of the virtues of competition and approval of large and monopolistic enterprises.

Labor unions firmly supported the nationalization of industry. Some unionists believed public ownership of industry would eliminate the adversarial nature of bargaining, but this tenet was soon belied by highly contested disputes whether government was in the hands of the Labour Party or the Conservative Party. Public ownership tended to politicize collective bargaining with government ministers entangled in disputes that were resolved often with little relation to the financial performance of the industries. Being monopolies, strikes in these nationalized industries imposed heavy costs on consumers.

Hence, in summary, collective bargaining in Britain by the end of the 1970s was frequently described as a “voluntary” system because the law was largely silent on important issues such as union recognition, the requirement to bargain, the enforcement of collective bargaining agreements, the right to strike, and the structure of unionism. The dominant attitude up to the end of the 1970s was that these factors were best addressed by the parties concerned with little need for state regulation. However, this characterization is misleading in that, through a number of indirect channels, government in Britain exercised a large influence on unionism and collective bargaining. By its activities as an employer, by setting minimum wages in selected industries, by requiring government contractors often to pay union-negotiated wages, and by discouraging product market competition, the state played an important indirect role. In these activities, the state encouraged collective bargaining and helped to create the conditions in non-union labor markets and in product markets that fostered unionism. On top of this, as noted above, the macroeconomic policies

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24 As noted above, Edward’s Heath’s Conservative Government at the beginning of the 1970s took a very different posture, but it was not acting with a mandate to make industrial relations more legalistic. Indeed, when asked in February 1974, “Who runs the country?” the electorate did not give Heath’s Government the ringing endorsement it was seeking.

25 Roy Adams (1993, p. 295) makes a similar argument: “Despite the absence of extensive legislation, the policy of British governments in the 20th century has not been neutral, as the policy of voluntarism is sometimes interpreted to imply. In fact, British policy has been to encourage collective bargaining. It has done so by notifying all public servants that collective bargaining is the preferred means of establishing conditions of work, by requiring government suppliers to recognize the freedom of their workers to join unions and engage in collective bargaining, and by directly intervening in many disputes in order to pressure intransigent employers to recognize unions
followed by successive postwar British governments and especially the importance attached to the goal of full employment provided the backdrop for unions to assume a conspicuous role in the formation and execution of economic policy.

In providing this indirect support for collective bargaining and unionism, the Labour and Conservative governments from the Second World War to the 1970s were responding to the dominant views in the country. Until 1979, when asked “Generally speaking, do you think trade unions are a good thing or a bad thing?”, the percentage responding “a good thing” always exceeded the percentage responding “a bad thing.” (See Figure 3.) Only once, in fact, shortly after the miners’ strike in 1974 was the percentage responding “a good thing” less than fifty percent.26 The state’s indirect support of collective bargaining, therefore, appeared to be more or less what the electorate wanted. This was not an instance where a small, yet influential, pressure group hijacks government policy to further its own ends without the general public’s acquiescence. On the contrary, whatever doubts economists may have had about the beneficial effects of unionism, a majority of the electorate had a benign and favorable view of unionism.27

In the almost forty years from the outbreak of the Second World War to some point in the 1970s, there was broad consensus regarding the appropriate posture toward unionism: there should be a minimum of direct statutory promotion of unionism but considerable indirect support. This view was explicitly challenged by Heath’s Conservative Government in the early 1970s and issues concerning unionism figured prominently in the 1974 General Election campaign. However, the Government’s attempt to convert the system into something closer to the American legalistic structure was not endorsed by the electorate. At the same time, the Labour Party’s small margin of victory in February 1974 was a signal that the broad consensus on unionism was breaking down.

26 A discussion of these Gallup Poll responses from 1954 to 1985 is provided by Edwards and Bain (1988) and Marsh (1990).

27 Along with the dominant view of the electorate, some employers felt workers were entitled to the protections and representations of labor unions and, instead of fighting them, some employers readily acceded rights of union representation to their workers. This was by no means universal: some employers (especially those operating in highly competitive product markets) stoutly resisted union representation of their workers and actively opposed attempts to organize workers. Nevertheless, in other instances, employers saw unions as the rightful agents of their employees’ concerns.
III. The New Policy toward Unionism

The Change in Economic Policy

After a winter of extensive strikes in 1978-79, the general public tired of the corporatist style of the Labour government in which labor union leaders sometimes seemed to occupy a separate arm of government. For the first time in its history, the Gallup Organization’s question asking, “Generally speaking, do you think trade unions are a good thing or a bad thing?” revealed in 1979 that an equal percentage of the British public replied “bad thing” as “good thing.” See Figure 3. Remarkably, the corresponding Gallup Poll in the United States also recorded a record low “approval” percentage in the same year.28

In 1979, an unhappy electorate voted in the most doctrinaire British government since Atlee’s administration elected in 1945. In contrast to Atlee’s government, Margaret Thatcher’s government was committed to shrinking the public sector and emasculating corporatist institutions such as labor unions. Sure enough, the subsequent Conservative governments reduced the state’s indirect support of unionism and collective bargaining by denationalizing a number of industries, by eliminating minimum wage floors in specific industries, and by suspending the rules extending union wage scales to nonunion employers.

The ideas for reform came in part from the growing influence of laissez faire critics who viewed the state of Britain’s labor markets as illustrative of the pervasive and suffocating role of government on the economy. Britain’s sluggish economic growth and the habitual tendency for inflation to get out of control induced the search for more drastic policies. The dominance of the two party system in Britain meant that, by the late 1970s, the electorate looked to the opposition party, the Conservative Party, for new ideas. Within the Conservative Party, the middle-of-the-road policies associated with R. A. Butler and Harold Macmillan in the 1950s and 1960s had given way to more radical ideas. The key individual funneling laissez faire ideas from the right wing into the Conservative Party in the late 1970s was Keith Joseph who, in turn, had the ear of the Party’s leader.

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28 The U.S. question is, “Do you approve or disapprove of labor unions?” From 1936 to 1972, the percentage responding “approve” was 60 or above. Then, in the 1970s, a decline began that reached a minimum of 55 percent in May 1979 and August 1981. Since then, the approval percentage has climbed to 65 percent in August 1999. See Cornfield (1999).
Margaret Thatcher.\textsuperscript{29}

Trade unions were one of the principal issues of the day so what was the new Government’s posture on unions and collective bargaining? Two key elements can be identified, one concerning macroeconomic management of the economy and the other relating to productivity. On macroeconomic policy, incomes policies and the bargains with unions to secure their cooperation in wage restraint were to be a thing of the past. The postwar Keynesianism that accorded full employment a primacy of place in policy goals and that provided such a hospitable environment for unionism was dropped. The pursuit of price stability became the paramount goal and control over the money supply was supposed to be the principal means.

On productivity and economic growth, by supporting a culture of restrictive work practices (especially in public sector employment) and adversarial labor relations, unions (together with unimaginative management and excessive government regulation) were blamed for Britain’s poor performance. The aspects of industrial relations marked for special attention were strikes, the closed shop, and union governance. Frequent strikes were viewed not only as inconveniencing the community, but also as damaging productivity. The closed shop was seen as making “.... it possible for small groups to close down whole industries with which they have no direct connection.”\textsuperscript{30} On union governance, there was a belief that the union leadership tended to be more radical than the rank-and-file so the Conservative Government proposed making unions more accountable to their members. In general, the goal of greater labor productivity required a shake-up of industrial relations and the trimming of trade union entitlements.

Looking at subsequent events, some components of this program were certainly met: the macroeconomic environment became much less amenable to unionism though price stability proved to be elusive. Labor union entitlements were clipped, industrial relations practices changed substantially, closed shops became rare, union governance reformed, and strike activity fell sharply.

\textsuperscript{29} The arguments of Friedrich Hayek and Milton Friedman were widely disseminated. Hayek in BBC broadcasts in 1978 argued, “These legalised powers [from the 1906 Trade Disputes Act] of the unions have become the biggest obstacle to raising the living standards of the working class as a whole. They are the chief cause of the unnecessarily big differences between the best- and worst-paid workers. They are the prime source of unemployment. They are the main reason for the decline of the British economy in general.” (Reproduced in Hayek (1980, p.52).)

\textsuperscript{30} From Margaret Thatcher’s speech to the Conservative Party Conference in Blackpool on 12 October 1979. See Harris (1997).
To operate on expectations, a trajectory for monetary growth was declared. The Minimum Lending Rate rose to an unprecedented 17 percent in late 1979 and 1980. In the second half of 1979, the rate of change of average earnings increased from 10.1 percent to 18.8 percent and, as this was accompanied by an appreciation in the sterling exchange rate, the impact on British competitiveness in foreign markets was severe. “The degree of overvaluation of sterling in the second half of 1980 was unprecedented in the post-war period and well in excess of the overvaluation resulting from the return to the gold standard in 1925” (Dimsdale (19991, p. 133).

Has this caused a higher growth in productivity? This is less clear. Let us consider these issues in turn. First, consider the changes in the macroeconomic environment and how legislation on strikes, the closed shop, union governance, and indirect support for unionism changed after 1979. The issue of unionism and productivity merits special attention in the section that follows.

The Macroeconomic Setting and Structural Changes in the Economy

The overriding goal of macroeconomic policy was to eradicate inflationary tendencies from the economy, a goal shared by macroeconomic managers in some other countries. The chosen mechanism was a gradual reduction in the rate of growth of the money supply coupled with a reduction in the public sector borrowing requirement as a fraction of gross domestic product. The consequences for unemployment were tremendous as shown in Figure 4. Compared with its level over the forty years since the outbreak of the Second World War, unemployment has remained high in the years after 1979 and it has only been in the late 1990s that unemployment rates have reached levels comparable with the 1970s.

Britain was by no means the only economy to experience a large rise in unemployment in the 1980s, but the increase in Britain was larger than in most. Figure 4 also shows the unemployment rate in the U.K. relative to unemployment rates in the United States and France. From the early 1980s, Britain’s unemployment rate has been consistently above that in the United States. The U.K. unemployment rate was also higher than France’s throughout the 1970s until 1987, but since that time unemployment in the U.K. has fallen gradually to almost half that in France.

It is customary to argue that an increase in unemployment signals a drop in alternative employment opportunities and, consequently, a fall in labor’s bargaining power. If correct, the years of the 1980s until the mid-1990s are characterized by a chronic attenuation of labor union bargaining power. Indeed, this loss may well have been enhanced by the fact that some of the areas of union strength such as manufacturing and mining were especially hard hit both by the recession and by the trimming of the budgets of nationalized industries and the transfer of some

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31 To operate on expectations, a trajectory for monetary growth was declared. The Minimum Lending Rate rose to an unprecedented 17 percent in late 1979 and 1980. In the second half of 1979, the rate of change of average earnings increased from 10.1 percent to 18.8 percent and, as this was accompanied by an appreciation in the sterling exchange rate, the impact on British competitiveness in foreign markets was severe. “The degree of overvaluation of sterling in the second half of 1980 was unprecedented in the post-war period and well in excess of the overvaluation resulting from the return to the gold standard in 1925” (Dimsdale (19991, p. 133).
of their assets to the private sector. This leads naturally to the question of whether the contraction of unionism since 1979 in Britain is simply a reflection of changes in the structure of British industry and, in particular, the consequence of the decline of employment in industries of union strength such as manufacturing and mining and the growth of service employment, some of whose areas have been difficult to organize. Indeed, employment in manufacturing in 1998 was less than sixty percent of its level in 1979 and coal mining employment constituted a trivial fraction of total employment.

In fact, little of the decline in union membership density from 1979 to 1999 arises from simple industrial changes. If the industrial employment structure of 1979 is applied to the union density by industry in 1999, the difference between actual union density in 1999 and that implied by this experiment is only a few percentage points. This is because many sectors of traditional union strength had already contracted substantially by 1979 (thus coal mining employment represented only one percent of total employment) while employment in other areas of traditional union strength such as health services has expanded considerably. Changes in industrial structure are not a principal explanation for the decline in unionism over the twenty years since 1979.

Other changes in the structure of unionism are suggested by the data in Table 2. According to all of the categories of union density listed in this table, the record is one of union decline - by gender, by broad occupation, by industry, by region, and by private-public ownership. These are figures on union membership, but the message is the same if data on the coverage of collective bargaining agreements are examined: in 1973, the wages of about 73% of employees were covered by collective bargaining agreements; this fell to 70% in 1984, to 54% in 1990, and to 40%}

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32 Similarly, if the broad industry structure in 1998 is applied to the union density by industry in 1979, the larger part of the decline in unionism is left unaccounted for. The data for these analyses are derived from Price and Bain (1983), the July 1980 issue of the Employment Gazette (for employment figures in 1979), the June 2000 issue of Labour Market Trends (for employment figures in 1998), and the July 200 issue of Labour Market Trends (for union density in 1999). This analysis is undertaken at the broad industry level (eleven industries identified) because more disaggregated data appear not to be available.

33 This conclusion was reached also by Disney (1990) and Freeman and Pelletier (1990) for the years of the first half of the 1980s.

34 As indicated in the footnote to Table 2, precise comparisons of union density across these years are impossible because of differences in definitions of union membership and in employment. This table is useful, therefore, for broad trends only.
in 1998. In the private sector, the 1998 figure is 21 percent. In other words, there has been a steady erosion in the extent of unionism and in union-negotiated agreements in the economy. Though there were some highly-publicized cases of de-recognition of unions, the principal factor in this membership decline has been the failure of unions to gain recognition in newly formed workplaces: the greatest declines in the extent of unionism are found in plants in private manufacturing that have been established since 1980; by contrast, in the public sector, there is no decline in union recognition in newly-established workplaces. (See Disney, Gosling, and Machin (1996), Machin (1999), and Millward, Bryson, and Forth (2000, pp.84-5).)

Given the critical role of management in determining whether to grant union recognition, the failure of unions to gain a foothold in newly formed establishments is, in part, a commentary on employers’ attitudes toward collective bargaining. From 1979 until 1997, successive Government ministers and “experts” attacked the notion that unionism enhances the performance of the economy and, indeed, they replaced this with the idea that union leaders tend to behave capriciously and without due reference to the wishes and interests of their members. Certainly, some union leaders appeared to fit this profile well. This campaign against collective bargaining and the endorsement of the virtues of narrow self-interest have generated an environment in which managements are less inclined to see unions as the legitimate representatives of the interests of the workers. Compared with the decades of the 1940s, 1950s, and 1960s, the new breed of employers is less altruistic in their dealings with their own employees and this has manifested itself in the view that unions are irrelevant or, worse, damaging to the enterprise. A long and sustained campaign would be required to change these attitudes among those who will be managers in the next few decades. Legislation stipulating that, provided a workplace vote of employees so determines, a union may be foisted onto a reluctant management may be the prelude to more adversarial industrial relations and, ultimately, unsuccessful unionism.

**Strikes**

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35 These figures are from Milner (1995) and Millward, Bryson, and Forth (2000, p. 197). According to Hicks (2000), in 1999, 17 percent of employees who were not members of union claimed their pay and work conditions were covered by a union-negotiated agreement. This implies that, approximately, three million workers are “free riding” on union activities.

36 A conspicuous example was provided by the coal miners’ leader, Arthur Scargill. He refused to hold a ballot before calling a momentous strike in 1984-85 and he managed to have himself elected President of the union for life.
The Thatcher administration’s posture toward strikes belied its laissez faire proclivities. This was because statutory law regulating strikes became more, not less, extensive under her governments. Really radical legislation would have been the repeal of the Trade Disputes Act of 1906 which protected a union from being sued by an employer for damages resulting from a strike. What happened under the post-1979 Conservative governments was that unions’ legal immunity from damages became more qualified: a union became liable for damages if striking against a secondary employer; an employer could sue a union if the strike was not over industrial relations issues that the employer could address, but over, say, political issues or inter-union feuds that the employer had no control over; and a union would lose its immunity if the strike had proceeded without first secretly balloting its members and obtaining the support of a majority for strike action. In 1993, unions were obliged to give seven days’ warning of a forthcoming strike. Regulations on picketing became more stringent with the police granted more power to confine the influence of pickets. In those circumstances where the union lost its immunity, its financial liabilities for damage were proscribed by law. In instances where the union undertook strike action without first balloting its members and ignored court injunctions to desist, the union’s funds can be sequestered.

Employers were granted more discretion over the dismissal of strikers. Early in the

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37 After all, proponents of laissez faire sided with Dicey in describing the 1906 Act as conferring “..... upon every trade union a privilege and protection not possessed by any other person or body of persons, whether corporate or unincorporate, throughout the United Kingdom.....It makes a trade union a privileged body exempted from the ordinary law of the land. No such privileged body has ever before been deliberately created by an English Parliament” (Dicey, 1914, p. xivi). Thatcher’s government could have simply repealed the 1906 Act and allowed employers to take striking unions to court.

38 In some respects, the British law came closer to that in the United States where secondary boycotts and certain other types of strikes are illegal. Also, a case law has built up in the U.S. over what types of picketing are legal. However, the balloting of workers to secure approval for a strike is not the law in the U.S. even though many unions practice it. Whereas in Britain the concern was that union leaders tend to be more militant than the rank-and-file workers, in the U.S. the contract rejection problem seemed to suggest that the union rank-and-file tended to be more militant that the leadership.

39 Unfair dismissal law was introduced in 1971. Before that date, employers had the authority to dismiss any striking worker though such discharges were uncommon. The 1974-79 Labour government ruled that employers could dismiss striking workers and not be liable for damages for
1980s, employers had the authority to re-engage strikers selectively after a certain time had passed while, in 1990, employers could dismiss striking workers selectively if the union had not authorized the strike. Given the tendency for strikes to be unofficial, these seemingly-small modifications in the law sapped the shop stewards’ bargaining power.\footnote{\textsuperscript{40}}

The number and importance of strikes in Britain have fallen considerably. See Figure 2. Whereas in 1980 some 22 percent of establishments reported some sort of “industrial action” during the previous twelve months, in 1998 the corresponding figure was 2 percent.\footnote{\textsuperscript{41}} To what extent can this decline in disputes be attributed to the legal changes in the 1980s and 1990s? Strike activity has fallen in most countries though more in Britain than elsewhere. The last column of Table 3 shows annual working days lost through strikes per thousand employees in the years 1994-98 as a fraction of those in 1976-80. This ratio is consistently less than unity, but its lowest value is for Britain: in the period from 1994-98, annual working days lost per employee in Britain were merely four percent of their level in 1976-80!

There are many competing explanations for this change so it is difficult to determine the particular contribution of the law. Even if the power of unions were throttled, it always takes two parties to strike so an explanation may focus as much on the enhanced opportunity of management to wage a profitable strike as on the reduced power of unions to conduct a successful strike. Current modelling of disputes would suggest that they are the consequence of information asymmetrically shared between the union and management. Did the Conservative Governments’ legislation alter the allotment of information and, in this way, did it result in fewer disputes?

It is plausible that the mandatory balloting of workers before strikes provides information to both management and the union about the workers’ resolve if a strike does occur - provided those voting reveal their propensities accurately. In an analysis of the impact of balloting

\footnote{\textsuperscript{40} Of course, the national union could declare the strike official, but if the necessary balloting had not taken place this exposed the union to damage claims.}

\footnote{\textsuperscript{41} See Millward and Stevens (1986, Table 10.1) and Cully \textit{et al.} (1999, Figure 6.4). It is revealing that, in 1986, Millward and Stevens devote an entire chapter of over thirty pages to “industrial action” while, in 1999, Cully \textit{et al.} allocate a little over a page to the topic.}
In the United States, the closed shop corresponds to the British pre-entry closed shop while the union shop is what in Britain goes by the name of the post-entry closed shop. The Taft-Hartley Act of 1947 made the closed shop illegal in the United States in inter-state commerce while states with “right-to-work” laws prohibit the union shop.

procedures, Undy, Fosh, Morris, Smith, and Martin (1996) argue that these procedures had a small effect on the course of strike activity. However, they did find that “....balloting provided a comparatively low-cost and credible way of demonstrating the resolve of union members without calling on them to engage in strike action” (p. 230) and, in this sense, the legislation contributed to alleviating the informational asymmetry between management and unions and helped to reduce strikes. Undy et al. also conclude that “.....the threat, and demonstration of the damaging financial effects, of legal actions by employers made many union negotiators more cautious and risk-averse in their dealings with employers during disputes” (p. 230). On balance, this balloting legislation helped reduce strike activity although it is unlikely to have been a principal factor.

Of course, the vast majority of strikes occur at unionized establishments so, insofar as the legislation clipped the reach of unionism, the government’s agenda can be said to have caused a decline in strike activity.

Closed Shops

The Conservative Governments directed several pieces of legislation to the closed shop. In 1974, the Labour Government established that an employer could not legally use union membership as a criterion for firing a worker. However, it was permissible to fire an employee if he or she refused to join a closed shop. In 1988, dismissal because of either union membership or non-membership was determined unfair and, in this respect, an equivalence between members and non-members was resolved. Because non-members could not be fired, this dealt a blow to the post-entry closed shop. In 1990, the law turned from dismissal to hiring: employers could not refuse to hire workers based on their union membership status. This undercut the pre-entry closed shop.42

This legislation has contributed to the virtual elimination of the closed shop. In 1980, some workers were covered by a closed shop in 23 percent of workplaces. This number was as high as 88 percent in the nationalised industries. In 1998, according to the responses of managers, merely 2 percent of workplaces were identified where employees had to be union members to retain their

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In some respects, the closed shop has gone underground in that sometimes employers (especially in the public sector) “strongly recommend membership.” Nevertheless, the attack on the closed shop has been largely won.

There are two questions. The first is whether this victory over the closed shop may be attributed to the legislation alone. This is doubtful. The pre-entry closed shop was most extensive in old craft-related activities that have been heavily affected by technological change - newspapers, printing, shipping, and docks - and it is probable that many closed shops would have been swept aside anyway by the onslaught of the new technology.

The second question is whether this victory over the closed shop is an important one. There is no doubt that the closed shop was correlated with a number of outcomes: for instance, in 1980 and 1984, the union-nonunion wage differential tended to be greater when the unionized establishment had a pre-entry closed shop. However, the unresolved question is whether this was the consequence of the closed shop or the consequence of something else that produced also the closed shop. Indeed, this problem frustrates the interpretation of many correlations between variables in industrial relations where cause and effect are especially hard to disentangle. According to this alternative hypothesis, the closed shop is as much an outcome variable as wages or work hours so the closed shop should be seen as an indicator of union influence or as a signal of managerial preferences, not their cause.

**Union Governance**

Laws were introduced strengthening the rights of rank-and-file union members in dealing with their own organization. It was stipulated that direct, secret, elections of union officials must occur within every five years while, every ten years, ballots must be held to approve any political expenditures the union makes. Union members were given rights to examine their union’s accounting records. A worker was required to provide prior written consent to an employer who

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43 The 1980 figures are taken from Millward and Stevens (1986) Table 4.3 and describe workplaces with at least 25 employees. The 1998 figure is from Cully et al. (1999), p. 89 and describes workplaces with at least ten employees. Whereas in Millward and Stevens the closed shop merits a 17 page chapter, in Cully et al. the closed shop receives a couple of paragraphs.


45 It was sometimes argued that management used the closed shop to discourage the formation of more unions and to help enforce discipline in environments with a propensity toward anarchy.
automatically deducts union dues from the worker’s pay check. This consent needed to be renewed every three years. This prompted the unions to wage a campaign to encourage workers to approve automatic check-off and to encourage employers to support the practice. By 1998, some two-thirds of unionized establishments practiced the check-off (Cully et al. (1999) p. 89). In that year, the Labour Government repealed the requirement for written approval of the check-off.

The drop in union membership,⁴⁶ the penalties incurred by some unions for illegal actions, and the effect of various measures (such as balloting before taking strike action) to make the union leadership more accountable to its rank-and-file left the finances of the unions in a more precarious state by the late-1990s than for many decades. Though many unions operate more efficiently than they have ever done and increasingly have the appearance of friendly societies (just as they did in the nineteenth century when they provided a whole array of cash payments to cover untoward events such as accidents, illness, and retirement), their resources to support their members in lengthy strikes have been severely attenuated.

Indirect Effects on Collective Bargaining and Unionism

In describing the state of labor markets before the accession to power of a series of Conservative Governments, I argued that, through a number of indirect measures, the state provided widespread support of unionism and collective bargaining. These indirect measures included the role of the state as an employer, the practice of setting minimum wages in certain industries, the requirement that government contractors pay union-negotiated wages, and the impediments to product market competition. The Conservative Governments explicitly addressed all these indirect measures.

Public sector finances were placed under stringent constraints and pay negotiations were governed less by notions of “comparability” with private sector wages and more by whether

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⁴⁶ It needs emphasizing that not only has union membership as a fraction of employment dropped, but the absolute level of union membership has fallen considerably. According to data published in the Employment Gazette and reported to the Certification Officer, union membership at the end of 1979 was 13,289 thousand whereas at the end of 1998 it was 7,807 thousand, over a forty percent drop. There is a large literature devoted to accounting for movements over time in union membership and density. For example, by constructing their own indicator of the legal climate of collective bargaining and by drawing inferences from the differences between union density in Britain and that in Ireland, Freeman and Pelletier (1990) ascribe most of the decline in density in Britain in the 1980s to the less supportive legal environment for collective bargaining. See Metcalf (1991) for a brief critical review of the research on union density in Britain.
pay levels were generating adequate supplies of labor. Where possible, collective bargaining was decentralized. Indeed, one of the most important changes in bargaining since 1979 has been the notable decrease in multi-employer agreements.\textsuperscript{47} Such decentralized agreements tend to be more sensitive to the particular circumstances of the employer and the plant.

By denationalizing (or “privatizing”) large parts of the public sector, the state became a less far-reaching employer. In 1978, public sector employees represented 31 percent of all employees. Twenty years later, the number had fallen to 20 percent.\textsuperscript{48} The policy was designed also to encourage competition in product markets. However, privatizing industries is not the same as ensuring a competitive environment and, in many cases, the issue became one of choosing between a private monopoly and a public monopoly. Strikes against private monopolies have the same opportunity for imposing costs on consumers as strikes against public monopolies. Moreover, a number of these industries are still in the state’s hands so the unions in these sectors retain considerable leverage. Yet, the public sector itself was obliged to be more sensitive to its costs: in the 1970s most local and central government services were delivered by unionized, state employees; in the 1980s and 1990s, by “contracting out” these services to (often non-union) private firms, competitive pressures were injected into union-supplied activities.

The practice of setting minimum wages in certain industries was attacked by eliminating Wages Councils while the requirement that government contractors pay union-negotiated wages was eliminated by repealing the Fair Wages Resolution in 1983. More generally, statutory rules guided wage determination much less and firm- or plant-specific factors have directed earnings changes. Performance-related pay mechanisms have gained in popularity and earnings structures simplified. The consequence has been for real wages to rise throughout the earnings distribution, but high-paid workers have seen their wages increase much faster than the low-paid. (See OECD (1996) and Schmitt (1995).) More generally, notwithstanding the introduction of a new National Minimum Wage in 1999, the relatively narrow wage differentials characteristic of corporatist economies are not an appropriate description of British labor markets in 2000.

\textsuperscript{47} In 1984, of all workplaces where collective bargaining was the dominant form of pay setting, 69 percent of them were multi-employer agreements. By 1998, this had fallen to 46 percent. Among all workplaces in 1998, just 13 percent had wages determined by multi-employer agreements and 6 percent in private sector manufacturing. See Millward, Bryson, and Forth (2000, pp. 186-8).

\textsuperscript{48} See MacGregor (1999), Table C.
IV. Unionism and Productivity

The Contribution to Changes in Productivity

The relationship between productivity (measured in different ways) and unionism has been the subject of a good deal of research. The basic reason why this has been difficult to unravel is that, even if production functions were identical in unionized and non-unionized workplaces, productivity differences will emerge between the two classes of firms insofar as collective bargaining affects wages. If wages are higher in the unionized firm, if the firm may freely adjust inputs in response to these price differences, and if the firm does not throw resources away, employment will tend to fall and labor productivity will be higher in the union firm. Ideally the researcher would like to present the unionized and nonunion firms with various combinations of the same inputs and then observe their outputs. In fact, the researcher does not select the inputs; the firms select the inputs and this selection is made in response to input prices.

In addition to the wage effects of collective bargaining, unionism has non-wage effects on a firm’s operations which imply that, even when management is free to make decisions about the use of labor, the unionized firm’s labor productivity will differ from that of the non-union firm. For instance, some have suggested that, with an agent - the union - to protect their interests, workers will tend to be more cooperative and forthcoming in unionized workplaces, that unionism involves participation and participation begets higher productivity. Conversely, unionism may protect slothful working habits and defend malfeasance which lower labor productivity. As most scholars have recognized, a priori arguments cannot settle whether, on balance, this effect works to raise or lower productivity in union workplaces.

The previous two arguments assume labor input choices are made unilaterally by management. There is a third effect of unionism on productivity insofar as unions do not grant management a free hand in labor input decisions. Either through explicit bargaining over the level of labor input or implicitly through resisting organizational changes that raise productivity, labor input in unionized establishments may exceed the levels otherwise implied by the wages and technical efficiency of the labor force.49 In fact, when the subject of unionism and productivity was

49 This form of productivity effect of unionism accords well with the stories about the inefficient use of workers in British industry entertainingly illustrated by Fred Kite’s union in “I’m All Right Jack.” If the bargaining power of the union over employment is reduced, then employment will fall and output per worker will rise. This is a once-and-for-all increase in labor productivity, not a
posed in Britain in the 1970s and 1980s, it was this third class of arguments that tended to find most frequent expression.

Other routes by which unionism may affect productivity have been conjectured. For instance, the fear that a union may capture the rents from investment in physical plant and equipment may discourage management from undertaking such investments. (Grout (1984).) This implies lower capital stock in unionized plants. The impact on productivity is less clear. With lower capital, output will be lower and, if output per worker is a positive function of the level of physical capital, then labor productivity will be lower. But whether output per factor input (total factor productivity) will be lower is less obvious. Indeed, in the simplest of cases, in this situation, total factor productivity is likely to be greater in the unionized plant. This illustrates that the impacts of unionism on productivity and on productivity growth are far from obvious and they are likely to depend on prosaic issues of variable definition and measurement (such as whether labor productivity or total factor productivity is being measured).50

Productivity in unionized establishments will compare unfavorably with that in non-union establishments insofar as unions are effective in discouraging the introduction of new production technologies into workplaces. However, the examination of the responses to questions in the 1984 Workplace Industrial Relations Surveys about technological change does not support the popular view of British unions as twentieth century Luddites.51 Thus, Daniel (1987) finds that trade union resistance to technical change is very much the exception. Shop stewards tend to be more supportive of the introduction of advanced technology than the workers who, in turn, are generally favorably disposed. There were exceptions to this finding. Most noticeably, the nationalised industries constituted an important pocket of resistance to technical change. However, in general, unions much more frequently supported, not opposed, such change.

The weight of the evidence seems to suggest the following assessment: up to the early 1980s, unionism was associated with lower labor productivity, but, in the 1980s, this gap was

\[ \text{permanent increase in the rate of growth of productivity.} \]

50 Another awkward measurement issue arises out of the fact that a number of studies use some measure of the value of output in the definition of productivity: if unionism has effects on input prices, these will normally be transmitted to output prices ensuring, by construction, some positive correlation between this indicator of productivity and unionism.

51 Of course, the popular view of the Luddites is also wanting. See Hobsbawm (1964).
narrowed because the highly unionized sector tended to exhibit faster productivity growth.\textsuperscript{52} The causes of this faster growth are difficult to identify, but most frequently mentioned are the combined consequences of a more competitive product market environment and the Conservative Government’s labor relations legislation.\textsuperscript{53} This raises the distinction between the effects of unionism on the level of productivity and the effects of unionism on the rate of growth of productivity. Some authors have gone so far as to suggest that a lower level of union density will result in a permanently higher growth in productivity.

This is exactly the position taken by Bean and Crafts (1996) who argue that “the changed industrial relations scene of the recent past has not only allowed a once-and-for-all productivity gain, but also improved future growth potential” (1996, p. 161). What aspects of this “changed industrial relations scene” have contributed to these permanent productivity gains? The legislation against closed shops is unlikely to have been profound because closed shops are more a symptom than a source of union strength. Similarly, legislation making unions more accountable to their own members is unlikely to have enhanced workplace productivity.

Bean and Crafts (1996) suspect that the decline in multi-unionism (that is, the presence of more than one union at a workplace) was the foremost labor market feature raising Britain’s productivity growth. The key piece of evidence they offer for this is a regression fitted to a pooled data set of about 137 three-digit industries (predominantly manufacturing) and eight sub-periods from 1954-58 to 1982-86. The dependent variable is the annual growth in total factor productivity. However, there is no time series information on their key variable, the fraction of workplaces in which there is more than one manual union, so the 1980 cross-section variation in this variable is assumed to take on the same values over three decades. This is quite heroic: there were

\textsuperscript{52} This assessment conforms to Metcalf’s (1989, 1990) very informed statement of our knowledge by the end of the 1980s. Also see Booth’s (1995) review.

\textsuperscript{53} An example of a study supporting this conclusion is Gregg, Machin, and Metcalf’s (1993) who show that, in a sample of 328 private companies in the late 1980s, real sales growth was greater in those firms employing workers where some union-de-recognition had occurred. Also included in the specification is a variable measuring increased foreign competition although the presence of unionism in this equation implies that the coefficient on increased competition measures the effect of competition on real sales growth holding unionism constant. In fact, increased foreign competition may have been the spur to de-recognize the union in which case the full effects of competition involve consideration of the unionism variables, too. In this study, unionism and the change in union status are treated as predetermined.
over 700 unions in 1954, the beginning year of their estimating period, and about 400 in the early 1980s, the end of their period of study. The assumption that the incidence of multi-unionism is a constant also prevents them from allowing for permanent unobserved differences among these industries.\footnote{A part of their argument involves the use of what they call a “multiple union dummy” that prior to 1979 takes the value of zero and from 1979 equals the value of the fraction of workplaces with more than one union. This allows for the effect of multiple unionism to differ in the 1979-82 and 1982-86 sub-periods from that in earlier periods. The coefficient estimated on this variable is positive from which they infer that the damaging effects of multiple unions was less in the early 1980s. Because the extent of multiple unionism barely changed in the early 1980s (see Millward and Stevens (1986), p. 73), something happened in the early 1980s to ameliorate the impact of multiple unionism. This “something” would seem to be the variable we seek rather than multiple unionism itself.} This specification constitutes a weak reed for any reliable inferences about the impact of multiple unionism on the growth in productivity.

Nevertheless, the issue of multi-unionism recurs in evaluations of industrial relations practices. For instance, using the 1984 Workplace Industrial Relations Survey, Machin, Stewart, and Van Reenan (1993) exploit information on responses by managers who assess their establishment’s financial performance compared with other establishments in the same industry. They find that, where management bargain separately with each of the unions - a so-called “fragmented bargaining structure” - the firm’s financial performance suffers. They suggest that where the unions form a single bargaining committee and management bargains with this committee “around a single table,” unfavorable outcomes are not apparent. In other words, where management insist on the unions joining together for purposes of bargaining with them, there are no untoward effects of multi-unionism on pay, financial performance, and strikes.\footnote{In related work, Machin and Stewart (1990, 1996) report that in 1980, 1984, and 1990, financial performance is lower in unionized establishments although much of this takes the form of unions capturing product market rents.}

The history of unionism in Britain abounds with instances in which groups of workers seek to preserve their identity in separate organizations and find it more effective to pursue their aspirations in their distinct associations. This evidence suggests such multi-unionism does not damage the financial performance of firms provided the unions band together for the purposes of collective bargaining with management. In creating an environment in which managements had greater authority to insist upon the elimination of fragmented bargaining structures, public policy
in the 1980s and 1990s made British industrial relations less of a drag on economic growth or so some observers would have it.

**Labor Productivity, Financial Performance, and Unionism in 1998**

What is the most recent evidence of the effects of multi-unionism and fragmented bargaining and, after all this remarkable retreat in unionism, what is left of the association between productivity and unionism? To address this, I turned to the 1998 Workplace Employee Relations Survey (WERS) and examined the responses concerning financial performance and labor productivity. In this Survey, a representative from management was told, “I now want to ask you how your workplace is currently performing compared with other establishments in the same industry. How would you assess your workplace’s financial performance/labor productivity?” The following five categories of responses were used in the subsequent analysis: “a lot below average”; “below average”; “about average for the industry”; “better than average”; and “a lot better than average”.

There are some obvious shortcomings in assessing an organization’s financial performance and productivity on the basis of management’s perceptions. How well-informed is he of his competitors’ performance and how much wishful thinking goes into his responses? However, there are also severe shortcomings in conventional measures of performance and productivity. When firms produce different goods and employ different types of labor, the configuration of output per labor input across firms must use some price indices to put diverse outputs on a common footing and the quantity of worker-hours ought to be adjusted in some way for skill differences in labor. Most workers are now employed in the service sector where the measurement of output is fraught with special problems.

Similar concerns arise in conventional measures of financial performance. Even when available (and frequently it is not), accounting profits does not map precisely into the organization’s rate of return and, when a workplace is part of a larger organization, its “profits” are not only not defined, they are also secondary to the organization’s “bottom line”. This does not mean that the answers of a manager to these questions provide ideal indicators of a workplace’s productivity and performance. The argument is simply that they contain information that may well

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56 There are two other categories - “no comparison possible” and “relevant data not available” - but few observations are in these categories and they will not be used. Most of these workplaces are in public administration, health, and education.
be useful in drawing inferences about a workplace’s effectiveness.\textsuperscript{57} Indeed, management’s assessments may well embody qualitative considerations that conventional measures of productivity and financial performance have difficulty in recognizing. In fact, Machin and Stewart (1996) report that the less favorable the managers’ assessments of their financial performance in the 1984 WIR Survey, the greater the probability of the workplace having closed down by 1990.

For the investigation in this paper, workplaces were discarded if they had missing values on any variables used in the analysis below and this left 1,484 workplace observations from the 1998 Workplace Employee Relations Survey to investigate. The distribution of responses on labour productivity cross-classified by responses on financial performance are provided in Table 4. Evidently, most managers like to think that their workplaces are either average or better than average. There is a clear positive correlation between the responses on labour productivity and those on financial performance: the null hypothesis of no association between the two responses is rejected on a chi-square test at a very high level of significance.\textsuperscript{58}

Workplaces are divided into four categories based on their union and bargaining status: nonunion workplaces; workplaces with a single union; workplaces with many unions but with joint bargaining; and workplaces with many unions engaging in separate bargaining. In the 1998 Survey, of the 1,484 workplaces, 597 are nonunion, 322 are single union workplaces, 337 are workplaces with many unions engaging in joint bargaining, and 228 are workplaces with many unions engaging in separate bargaining. The distribution of responses on labor productivity by type of workplace is given in Figure 5 and those on financial performance in Figure 6. The proportion of managers in nonunion workplaces who assess their workplace to be “a lot better than average” is greater in the nonunion sector, but this is offset, at least in part, by their lower frequency of assessing their workplace as simply “better than average”. If the percentage of responses of “a lot better than average” and those of “better than average” are aggregated, the distribution of responses across the four types of workplaces are as follows:

\textsuperscript{57} “…..[A] quarter of workplaces did not operate in the trading sector, and for these notions of profit and loss simply do not apply. Similarly, the concept of labour productivity has meaning in all workplaces, but there are no standardised measures in many sectors. For example, there are no conventional measures of value-added which would allow a comparison of the labour productivity of a hospital against a school” (Cully, Woodland, O’Reilly, and Dix (1999), p.120).

\textsuperscript{58} The calculated $\chi^2$ statistic is 622 with 16 degrees of freedom.
For the estimates of the $\alpha$ parameters in Table 5, the $X_i$ variables consist of the fraction of employees who are part-time, the fraction of employees who are women, six dichotomous variables:

- nonunion
- single union
- many unions & joint bargaining
- many unions & separate bargaining

<table>
<thead>
<tr>
<th></th>
<th>nonunion</th>
<th>single union</th>
<th>many unions &amp; joint bargaining</th>
<th>many unions &amp; separate bargaining</th>
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<tr>
<td>labor productivity</td>
<td>50.7</td>
<td>55.9</td>
<td>53.4</td>
<td>46.1</td>
</tr>
<tr>
<td>financial performance</td>
<td>59.0</td>
<td>60.9</td>
<td>56.9</td>
<td>50.8</td>
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The workplaces with the least favorable aggregate responses are those where many unions operate and bargain separately with management. This general theme will recur.

To determine whether union-nonunion differences in labor productivity and financial performance are contained in these data and whether differences exist by bargaining structure, suppose $\pi_i$ is a latent measure of labor productivity or of financial performance in workplace $i$. Initially, posit that $\pi_i$ is a linear function of whether the workplace is unionised ($U_i$) and of other variables $X_i$, and of unmeasured factors, $e_i$, that include the characteristics of the respondent:

$$\pi_i = \alpha U_i + \beta X_i + e_i,$$

where $e_i$ is assumed to be distributed normally with zero mean and unit variance. This standardized normal assumption will permit the estimation of an ordered probit model. Although $\pi_i$ is unobserved, the categorical responses to the questions do provide information on this latent variable. These categorical responses are denoted by $p_i$ where we adopt the convention that $p_i = 1$ for workplaces designated to be a lot below average, $p_i = 2$ for those reported as below average, $p_i = 3$ for those described as average, $p_i = 4$ for workplaces better than average, and $p_i = 5$ for those characterized as a lot better than average. The relation between the observed variable $p_i$ and the unobserved variable $\pi_i$ is given as follows:

$$p_i = 1 \text{ if } \pi_i \# m_1,$$

$$p_i = j \text{ if } m_{j-1} < \pi_i \# m_j, \quad j = 2, 3, 4,$$

$$p_i = 5 \text{ if } m_4 \# \pi_i,$$

where the censoring parameters, the $m$'s, are to be estimated jointly with $\alpha$ and $\beta$. The maximum likelihood estimation of equation (1) yields estimates of the coefficient on $U_i$ given in columns (a) and (b) of line 1 in Table 5. By conventional statistical criteria, the null hypothesis of no

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59 For the estimates of the $\alpha$ parameters in Table 5, the $X_i$ variables consist of the fraction of employees who are part-time, the fraction of employees who are women, six dichotomous variables
association between these indicators of labor productivity and the incidence of unionism cannot be rejected. However, this is not the case for the measures of financial performance where the presence of unionism is associated with lower financial returns.

The implications of these estimates are provided in Table 6 where column (a) lists union-nonunion differences in labor productivity and column (b) lists union-nonunion differences in financial performance as implied by the estimates in line 1 of Table 5. Union-nonunion differences in labor productivity are trivial. Those in financial performance suggest that union workplaces are 3 percent less likely to be a lot better than average and 2 percent less likely to be better than average compared with nonunion workplaces. The superior performance of nonunion workplaces in financial performance is compatible with a rent-reallocation view of unions according to which unions appropriate some of an organization’s rents.

To determine whether the bargaining structure plays a role in this, consider specifying union’s impact in equation (1) in the following manner: \( \alpha = \alpha_0 + \alpha_1 M_i + \alpha_2 S_i \). Here \( M_i \) is a dichotomous variable taking the value of unity in those workplaces where more than one union operates, but where these unions collaborate as far as collective bargaining is concerned. Such workplaces are characterized by joint bargaining. \( S_i \) is a dichotomous variable taking the value of unity for those workplaces with many unions and with separate (or “fragmented”) bargaining. Substituting this expression for \( \alpha \) in equation (1) yields the following estimating equation:

\[
\pi_i = \alpha_0 U_i + \alpha_1 U_i M_i + \alpha_2 U_i S_i + \beta X_i + e_i,
\]

where \( \alpha_0 \) denotes any effect on \( \pi_i \) of a single union workplace, \( \alpha_0 + \alpha_1 \) of a multiple union workplace where the unions bargain jointly, and \( \alpha_0 + \alpha_2 \) of a multiple union workplace where the unions bargain separately. The ordered probit estimates of the \( \alpha \) coefficients of this equation are contained in lines 2, 3, and 4 of columns (a) and (b) of Table 5. By conventional criteria, the estimates of the

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of workplace size, and six dichotomous variables indicating how long the workplace has been at the present location. Workplace size and years of operation seem necessary control variables in a study of productivity. A number of other specifications were applied with small changes in general inferences. The \( U_i \) variable takes the value of unity if any of the workplace’s employees belong to a union. For all the equations whose results are reported, likelihood ratio tests suggest a statistically significant relationship between, in turn, the productivity and performance indicators and the set of right-hand side variables.

\(^{60}\) The union-nonunion differences and the separate-joint bargaining differences are evaluated at the mean values of all the other variables.
coefficients of \( \alpha_0 \) and \( \alpha_1 \) would not be judged as significantly different from zero. However, the estimate of \( \alpha_2 \) would be judged as significantly less than zero both for the labor productivity equation and for the financial performance equation. The implications of these estimates of \( \alpha_2 \) are contained in columns (c) and (d) of Table 6 which reports the difference between two multiple-union workplaces, one where unions bargain separately and one where the unions bargain jointly. For labor productivity, workplaces with fragmented bargaining have a 4 percent lower probability of being a lot better than average and a 4 percent lower probability of being better than average compared with a workplace where the unions bargain jointly. Similarly, in terms of financial performance, when bargaining is fragmented, the workplace is 6 percent less likely to be a lot better than average and is 5 percent less likely to be better than average compared with a workplace with joint bargaining. These results are consistent with the view that, if a union-nonunion difference obtains, it is the bargaining structure that accounts for this difference with fragmented workplaces reporting relatively lower productivity and lower financial performance than multiple union workplaces where bargaining is joint.

Finally, consider fitting equation (2) to the 887 unionized workplaces only (so for all observations \( U_i = 1 \)):

\[
\pi_i = \alpha_1 M_i + \alpha_2 S_i + \beta X_i + \epsilon_i.
\]

The ordered probit estimates of the \( \alpha \) coefficients of equation (3) are given in columns (a) and (b) of lines 5 and 6 in Table 5 and again the suggestion is that what matters for labor productivity and financial outcomes is not multi-unionism per se, but whether bargaining is joint or fragmented. The implications of these estimates are contained in columns (e) and (f) of Table 6 where, among multi-union workplaces, those where fragmented bargaining take place are 3 percent less likely to have labor productivity a lot better than average and 5 percent less likely to have labor productivity better than average compared with those workplaces with joint bargaining. Similarly, on financial performance, workplaces with fragmented bargaining score 5 percent lower on the probability of being a lot better than average and 5 percent lower on the probability of being better than average compared with workplaces with joint bargaining.

These results are compatible with the following interpretation. On average, by the late 1990s, unionism per se has negligible effects on productivity; the state of labor relations is the key variable associated with productivity; and, in Britain, workplaces with fragmented bargaining are associated with poorer productivity. With respect to financial performance, unions tend to reallocate an organization’s rents toward workers and, in Britain, this occurs more substantially in
fragmented bargaining workplaces.

Having arrived at these findings from the 1998 WER Survey, I went back to the 1990 WIR Survey to determine whether similar patterns are evident in this establishment survey, too. Trying to fit the very same equations to the 1990 data as already estimated to the 1998 data, the results are given in columns (c) and (d) of Table 5 with inferences regarding the probability distributions in the bottom panel of Table 6. The results are broadly similar to those for 1998 although there are a few interesting differences. According to column (c) of line 1 in Table 5, in 1990 unionised workplaces have significantly lower labour productivity than non-unionised workplaces. Thus, as reported in column (a) in the lower panel of Table C, unionised workplaces have a 6 percent lower probability of being classified as “better than average” and a 9 percent lower probability of being classified as “a lot better than average” compared with non-unionised workplaces. It appears again as if it is workplaces with fragmented bargaining where this differential is concentrated. This is suggested by the estimates in lines 2, 3, and 4 of Table 5 and the probability differences in column (c) in the lower panel of Table 6.

With respect to financial performance, there is again the suggestion that workplaces with fragmented bargaining tend to report lower financial performance compared with workplaces with joint bargaining. However, this is less evident than it was in the 1998 data. The point estimates in column (d) of Table 5 are not much greater than their estimated standard errors. The implications of these point estimates for the probability distributions (Table 6) suggest that meaningful differences occur only for the probability of being “a lot better than average” where workplaces with fragmented bargaining have a 6 or 7 percent lower probability compared with workplaces with joint bargaining. All this is compatible with the view that such fragmented workplaces are the

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61 Regrettably, by trying to fit the very same equation and dropping observations on workplaces if a missing value is encountered on any one variable, we arrive at a much smaller number of establishments: 380 workplaces. Of these, 66 consist of nonunion workplaces, 139 are single union workplaces, 20 are workplaces with many unions but with joint bargaining, and 155 are workplaces with many unions and fragmented bargaining. (Note that, in the 1990 Survey, 11 of the single union workplaces were said to have more than one bargaining unit. For our analysis, we assumed that such multi-unit bargaining by a single union may be interpreted as joint bargaining although, in principle, this is something that could be tested.) As in the 1998 Survey, the responses on labour productivity and those on financial performance are strongly positively correlated on a conventional chi-square test. The cross-classification of workplaces by labour productivity and financial performance in 1990 is given in Table 7.
establishments where remnants of the industrial relations climate of the 1970s live on.

Conclusion on Unionism and Productivity

A maintained hypothesis throughout this Section is that the association between $\pi_i$ on the one hand and unionism and the bargaining structure on the other hand reflects the impact of unionism and bargaining structure on $\pi_i$. In other words, I follow the assumption (mostly tacit) in this literature that the relationships computed embody the effects of unionism on productivity and on financial performance. There is ample reason to question this maintained hypothesis: the incidence of unionism (and different bargaining structures) may well depend on an establishment’s productivity or financial standing so the associations computed reflect the effects of productivity (or financial performance) on patterns of unionism and the bargaining structure. As mentioned in the Introduction to this paper, identifying causal relationships in these labor issues is hard.

Subject to this important qualification, this empirical research suggests that, by the end of the 1990s, average union-nonunion differences in labor productivity appear to be negligible. Where differences emerge, they are in those establishments with fragmented bargaining. Such bargaining is unusual - approximately only 7 percent of workplaces in 1998 were characterized by fragmented bargaining. This allows the generalization that unionism may serve as an agent permitting employees to participate in shaping their work environment with little or no loss in productivity.

V. The Benefits of Unionism to Workers

The ultimate mission of unionism is to enhance the lot of employees in various ways. Some of these ways are through increasing the employee’s monetary compensation. In addition, unions aim to increase the participation of workers in fashioning their work environment. One might expect that the decline in unionism in Britain over the past two decades would have been accompanied by a fall in employees’ monetary and non-monetary rewards from work. Is there evidence that this has happened?

Unions and Wage Differences

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62 This figure of 7 percent is arrived as follows. According to WERS, collective bargaining was the dominant form of pay setting in 1998 in 29 percent of workplaces. (Millward, Bryson, and Forth (2000, p. 186).) Among these workplaces, the proportion not using single table bargaining fell from 60 percent in 1990 to 23 percent in 1998. (Millward, Bryson, and Forth (2000, p. 203).) Hence, among all workplaces, the incidence of fragmented bargaining is about 7 percent (23 percent of 29 percent).
First consider the benefits from unionism as suggested by the gap between the wages paid to unionized and to nonunionized workers. Here there appears to be more disagreement than there is in the United States over each economy’s patterns of union relative wage effects. For manual workers in Britain, the central tendency of the estimates of the gap between union and nonunion wages was approximately ten percent in the 1980s. This estimate varied by plant and worker characteristics so that, for instance, it was near to zero for a very large number of establishments, but as much as 14 percent for semi-skilled manual workers in a pre-entry closed shop condition. (See Stewart (1987, 1991).) The union-nonunion wage differential is higher when product markets are not competitive and is close to zero when product markets are competitive (Stewart (1990)). However, there are studies where both smaller and larger wage differentials have been estimated (see, for instance, Andrews, Bell, and Upward (1998) and Hildreth (1999)). Some of these variations may be attributed to differences in the workers being studied and to control variables used. There is need for a systematic explanation for the variations among these estimates.63

There is also not a consistent pattern regarding estimates of the change in the union-nonunion wage gap over time. Some researchers (e.g., Blanchflower (1999)) infer that the union-nonunion wage gap has remained remarkably constant since the early 1980s, others suggest small declines (e.g., Stewart (1991), Hildreth (1999)), while still others hint at rising union-nonunion wage gaps (e.g., Andrews, Bell, and Upward (1998)). In view of these mixed results, it is difficult to be confident about the movements over time in union-nonunion wages. However, I am inclined to accept the implications from the more straightforward computations (such as those of Blanchflower (1999)) that suggest small variations over time in union-nonunion wage gaps.64 If this is true, then is this stability in the face of declining unionism a paradox? Not necessarily: suppose union-nonunion wage gaps in 1980 varied across workplaces and suppose workplaces where these gaps were least have dropped out of the union sector; then declining unionism will be accompanied by

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63 An important step toward that systematic explanation is supplied by Andrews, Stewart, Swaffield, and Upward (1998) who apply different estimating procedures and specifications to a single data set.

64 This preference derives from what seems to be the case with the U.S. research where ingenious, sometimes baroque, estimating methods yield much more fickle and unreliable estimates than more prosaic methods. See Lewis (1986). This does not mean necessarily that the same will be the case in Britain, but it does affect the way I place my bets.
rising union-nonunion wage gaps. This example illustrates how the changing composition of workplaces in the union sector may yield average union-nonunion wage differentials that are rising, falling, or constant over time. But taken at face value, the typical union worker’s higher pay over his non-union counterpart has changed little over the past twenty years. Or expressed differently, for those who believe that unions raise the pay of nonunion workers as well as those of union workers, the decline in unionism since the late 1970s has not hurt the average nonunion worker’s pay any more than the average union worker’s pay.

**Unions and Work Life**

Consider now some non-monetary aspects of the work environment. Drawing on data from the repeated British Social Attitudes surveys, Figure 7 graphs the percentage of employees who give unfavorable responses to questions regarding labor relations and the quality of management. For instance, the series “poor employee relations” measures the percentage of employees who believe they work at establishments where labor relations are unsatisfactory. The series “not well managed” measures the percentage of employees who have unfavorable views of the quality of management at their place of work. These two series may have drifted up slightly over the decade since 1983, but whatever changes there have been look very small by comparison with the decline of unionism. Not surprisingly, the percentage of employees who believe they have no voice in workplace decisions (given by the series “no say in work decisions”) has risen although again the change is very much smaller than the drop in union representation and most of the change took place in the 1980s, not the 1990s as unionism continued its retreat. Given the sharp drop in union density over this same period from the 1980s to mid-1990s, the absence of a strong movement in these perceptions is noteworthy.

The 1998 Workplace Employee Relations Survey reported that about half of employees felt managers treated them fairly and that 65 percent agreed or strongly agreed that they felt loyalty toward the organization they worked for. (See Cully *et al.* (1999), Table 8.3 and Figure 8.6.) A suppressed resentment of management is not evident from these figures. Workers are much more likely to have unfavorable attitudes regarding labor relations at their place of work if those workplaces were unionized. Employees at establishments with no worker representation were most

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65 The unfavorable percentage response in 1996 for “poor employee relations” is significantly greater than that for 1983 on a standard normal test while the response in 1996 for “not well managed” is not significantly different from the response in 1983. Regardless, the argument in the text is that the changes between 1983 and 1996 are very much smaller than the retreat of unionism.
likely to see their industrial relations as “very good”.\footnote{39} Moreover, the belief that unions make a meaningful difference to work life is not widely maintained: 46 percent of union members and only 30 percent of nonunion members believe that unions make a difference to what it is like at work.\footnote{67} Even among union members in recognized workplaces, about the same fraction felt the union was no better at representing an employee’s interests about work complaints than the individual himself. (See Tables 9.6 and 9.7 of Cully \textit{et al.} (1999).) In the 1999 British Social Attitudes survey, among employees in unionized workplaces, less than two in five (37 percent) felt the union helped in running the establishment. (Bryson (1999).) Though there are some exceptions, the fall in unionism within continuing workplaces in the private sector is not attributable to management’s hostility to unions, but to “a withering of support for membership among the existing workforce, plus a lack of recruitment as the workforce evolved” (Millward, Bryson, and Forth (2000, p. 92). Management attributed the decline in the recognition of unions at the workplace to a drop in employees’ interest in union representation and to a rethinking of policies toward employee relations by management. (Millward, Bryson, and Forth (2000, p. 105.) The impression from these figures is that unions are not being successful in persuading employees that they need union representation so there is little in these numbers to support Towers’ (1997) claim that there is a serious representation gap in British workplaces.

One reason why workers appear not to have grieved over the loss of union representation is that various “direct” forms of participation - workplace meetings, briefing groups, and problem-solving groups - have grown in place of “indirect” forms such as unions and

\footnote{66} It has sometimes been argued that unions are inclined to make workers more aware of shortcomings in their work environment and this explains why union members tend to report less favorable labor relations. However, in the 1999 British Social Attitudes survey, non-members working in unionized workplaces had significantly less favorable perceptions on labor relations than non-members in workplaces without unions. See Bryson (1999).

\footnote{67} In fact, employees were divided into three groups: union members; never union members; and those who were once union members, but are no longer union members. When asked whether “unions make a difference to what it is like at work”, 46 percent of current union members agreed, 30 percent of never union members agreed, and 26 percent of former union members agreed. In a separate survey, “...participation through union representation was associated with a generally more negative view of the effectiveness of work arrangements” (Gallie, White, Cheng, and Tomlinson (1998, p. 113)).
consultative committees. Asking employees for their assessment of the effectiveness of these direct mechanisms, Millward, Bryson, and Forth (2000, pp.128-35) find that these nonunion voice mechanisms seem to work well in informing employees of proposed workplace changes and in making management responsive to suggestions from employees. On only one dimension - whether workers feel they are being treated fairly by management - is it the case that unionized workers (when represented on a consultative committee) are more satisfied with their workplace environment than nonunion workers with these “direct” forms of representation. Though unions may derive solace from this result, what is striking is that this is the only issue on which unionism scores significantly better than these other mechanisms. Moreover, it is not unionism per se that produces this result, but the combination of union recognition and union presence on a consultative committee, a combination found in merely four percent of workplaces in 1998.

These findings should be of real concern to union leaders. To express the issue starkly, they raise the question of whether unions are becoming irrelevant. Instead of interacting with the agents of the union, management (especially in the private sector) are making use of other means to communicate with their employees, many of whom have ambivalent feelings about unions. Neither workers nor employers are expressing strong preferences for the need for unionism at the workplace. While the Gallup Opinion Poll reports general sympathy (and growing approval in the 1990s - see Figure 3) among all adults for the activities of unions, this does not appear to translate into a great unmet need among workers for union organization. Unions have lost five-and-a-half million members since 1979 and yet the labor force appears not to be clamouring for much more representation.

VI. A Summing-Up

The British experience over the past forty years or so offers an opportunity to draw some particular conclusions about unions in Britain and also to speculate on unionism in general.

First, what explains the retreat of unionism in Britain? The changed legal framework for unionism provides an obvious explanation. However, laws never operate in a vacuum, but in a particular context and the context defines their impact. It is the context that accounts for the fact that the legal changes introduced by Heath’s government in the early 1970s failed to reform industrial relations. What are the principal features of the 1980s and 1990s context that explains why the changed legal environment had so much bite?

One feature is the abandonment in the 1980s of the goal of full employment macro-
economic policies which meant that organized labor operated in a much more inhospitable environment. The second key feature is that the rigors of considerably greater product market competition in the 1980s and 1990s were transmitted to labor markets as firms recognized the necessity of reforming their labor practices. The new legal backdrop permitted managements to take charge of industrial relations, the “harder” product market environment made the reform of labor relations practices urgent, and the increased unemployment weakened the ability of unions to resist them. Above all, the legal framework allowed new firms greater flexibility in choosing labor relations procedures that fitted their circumstances and, in fact, these procedures often involved no union presence. According to this argument, the new legislative framework of the 1980s and 1990s permitted the development of a new climate of industrial relations policies, but it was the renunciation of full employment goals and the harsher competitive environment that complemented the new legal setting and produced unionism’s decline.68

How did the decline in unionism affect the growth and distribution of incomes? The growth in real incomes ultimately matches the growth in productivity and there is some slight evidence that the decline in unionism contributed to faster growth than would have otherwise occurred. It was argued above that, by the end of the 1990s, the association between unionism and low labor productivity appears to have been broken except in those workplaces where many unions bargain separately. Such fragmented bargaining is now unusual so that, in general, unions are no longer a factor depressing labor productivity.

With respect to the distribution of incomes, the sharp rise in wage inequality coincides with the decline in unionism and it is difficult to resist the temptation to link the two. This

68 Other assessments of the causes of the decline in unionism have come to conclusions consistent with this. Thus, Brown and Wadhwani (1990) conclude, “...the driving force behind changes in industrial relations practices in the 1980s....has been increased product market competition, precipitated by a variety of circumstance, which has obliged employers to put their own houses in order” (p. 68). In the same vein, Dunn and Metcalf (1996) determine that “....unemployment, including two deep recessions, and stiffer product market competition remain of paramount importance in weakening unions and stimulating management.....where we can pinpoint the law’s impact, legislative intrusion does not automatically bring the expected economic changes. Notably, when management eliminated closed shops in favour of merely recommending union membership, some economic consequences of ‘compulsory’ unionism survived.” (p.93). Haskel’s (1991) empirical analysis of labor productivity growth in 81 manufacturing industries from 1980 to 1986 suggests that the effects of greater product market competition were transferred to the labor market by shedding productivity-restraining practices.
presents the familiar dilemma: suppose the decline of unionism contributed, first, to a faster growth in productivity and thus in income and, second, to greater inequality in incomes; is greater income inequality at a higher level of real income preferred to narrower inequality at a lower level of income?

How has the decline in unionism affected the workplace experience of employees? Given the sharp reduction in union representation, the change in indicators of the quality of work life has been surprisingly small. There does not appear to be a pervasive, unmet, demand for union representation. On the contrary, the creation of new “direct” forms of communication between management and employees have made many workers believe that union representation is unnecessary. Increasingly, unions are returning to their nineteenth century role as “friendly societies” providing members with personal services such as group insurance policies, adult learning opportunities, and legal advice.

Although the statutory agenda of the Conservative Governments’ approach to labor markets in the 1980s and 1990s was contentious at the time of its introduction, today much of it has passed into general acceptance. What has not been accepted? First the removal of wage floors by abolishing Wages Councils at a time when the wage structure widened considerably has left observers disturbed by the consequences for low paid workers of unregulated labor markets. The response has been the imposition of a National Minimum Wage (NMW) in April 1999. Introduced at a time when general unemployment is not regarded as a principal policy problem, there appears remarkable agreement on the value of a NMW. In part this is a by-product of the fact that it has been set at a level that risks only small employment consequences.69

The second area of policy disagreement with the deregulation of the 1980s and 1990s concerns procedures for the recognition of unions in workplaces. To address this, in situations where an employer rejects a union’s request for recognition, the current Labour Government proposes a version of the North American system of representational elections.70 How this will change the climate of industrial relations and the extent of unionism is difficult to forecast. Much

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69 The NMW was introduced at £3.60 for those aged 21 years and over and at £3.20 for those aged 18-20 years. Metcalf (1999) estimates the NMW affected 8 percent of previously employed workers.

70 If the union can show that a majority of workers in the bargaining unit are union members, no representation election is needed and the union will be granted bargaining rights.
depends on the precise operation of the system. However, even with the cooperation and goodwill of employers, if the evidence brought forward in Section V above is correct, workers’ attitudes toward unions need to become more favorable before the drop in union representation is reversed.

There is no general nostalgia for the 1970s brand of unionism in Britain. There is a sense that British labor markets are working more effectively than some on the European Continent. The drop in unemployment in Britain compared with Continental Europe is sometimes attributed to a delayed reaction to the deregulation of the 1980s and 1990s. Cross-country comparisons are fraught with difficulties, but among large economies there does seem to be a pattern such that those countries that have avoided increases in unemployment have done so only at the cost of greater earnings inequality. And this trade-off seems to be related to changes in collective bargaining: unemployment has tended to increase least where collective bargaining has shrunk the most. This is suggested by the data in Table 8 which lists changes in male unemployment rates, changes in male earnings inequality, and changes in the coverage of collective bargaining contracts in nine major economies. There is no general nostalgia for the 1970s brand of unionism in Britain. There is a sense that British labor markets are working more effectively than some on the European Continent. The drop in unemployment in Britain compared with Continental Europe is sometimes attributed to a delayed reaction to the deregulation of the 1980s and 1990s. Cross-country comparisons are fraught with difficulties, but among large economies there does seem to be a pattern such that those countries that have avoided increases in unemployment have done so only at the cost of greater earnings inequality. And this trade-off seems to be related to changes in collective bargaining: unemployment has tended to increase least where collective bargaining has shrunk the most. This is suggested by the data in Table 8 which lists changes in male unemployment rates, changes in male earnings inequality, and changes in the coverage of collective bargaining contracts in nine major economies. Figure 8 graphs the relationship between unemployment changes and changes in collective bargaining for these nine countries: where the range of collective bargaining contracts has grown (in France, Sweden, and Germany), unemployment rates have increased the most; where the coverage of collective bargaining has contracted (Britain and the United States), unemployment rates have increased least. It appears as if, over the past twenty years or so,

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71 The unemployment rates of men are used to avoid the persistent differences among countries in the propensity of women to work. In fact, it would be better to use not merely unemployment rates to measure labor utilization rates, but also employment propensities, hours of work, and early retirement rates. Earnings inequality usually changes slowly while cyclical movements in unemployment rates are much more evident. Therefore, the association between unemployment changes and wage inequality changes is much more sensitive to choice of the year to compute unemployment rate changes than earnings inequality changes. Presumably “permanent” unemployment rates and other measures of labor utilization should be used, not those in column (1) of Table 8.

72 Some smaller economies do not conform easily to this story. Thus, New Zealand provides an example of an economy where both unemployment and earnings inequality have increased while the extent of collective bargaining has fallen considerably. In the Netherlands, unemployment has not risen while earnings inequality and the coverage of collective bargaining agreements have changed little. The trade-offs suggested in Table 8 seem more evident in the larger than the smaller economies.
competitive and technological pressures on labor markets have tended to manifest themselves in changes in labor utilization in economies where government and labor union wage-setting institutions are extensive and in earnings inequality where these wage-setting institutions are less intrusive or where they have been brushed aside.

This is a sweeping simplification of a much more complex situation. Though this emphasizes the similarity of the experience of British and U.S. labor markets, there are very important differences. For instance, it appears as if flows of individuals into and out of unemployment in Britain are nothing like as large as those in the United States. Also the increases in earnings inequality in Britain and the U.S. are around different trends in real wages, rising trends at the tenth earnings decile in Britain and falling trends at the tenth earnings decile in the United States. Moreover, while the case for a “representation gap” may be moot for Britain, it is far less so for the United States. (See Freeman and Rogers (1999).) Further, Britain’s place in the European Union points to the likelihood of new regulatory initiatives in the future including a growing role for Works Councils. All this cautions against simple classifications of countries that gloss over the richness of experiences.

However, it is palpable that British labor markets look far less “corporatist”, far more like textbook competitive markets, than they did at the close of the 1970s. And the retreat of unionism is very much a part of this change. Indeed, because British labor markets today have a much more exacting competitive character, unions in the future will need to run much faster to stay in the same place. The relentless decline of unionism in Britain since 1979 testifies to its somewhat fragile character. The decline cannot be traced to a single event or circumstance yet, bit-by-bit, through a slow yet inexorable process, British unionism has become marginalized in the private sector of the economy. Given the birth and death character of firms in a market economy, when the locus of unionism is at the workplace, unionism must constantly recruit new members and organize new firms simply to stay in the same place. To extend their reach, unions have to run even faster, something that has happened neither in Britain nor in the United States. The new environment that will change this is not at all evident. Yet it seems to be in the nature of unionism that its cycles of growth and decline are often unexpected. Perhaps a period of union growth in Britain (instigated by the growing influence of European Union legislation) is just around the corner. If so, it will be another surprise.
References


Machin, Stephen, and Mark Stewart, “Trade Unions and Financial Performance”, *Oxford Economic*


Marsh, David, “Public Opinion, Trade Unions, and Mrs. Thatcher”, British Journal of Industrial Relations, 28 (1), March 1900, 57-65.


OECD, “Earnings Inequality, Low-Paid Employment, and Earnings Mobility”, Employment


Number of Unions and Union Membership Density, 1970-1999

- union density as recorded by the Certification Officer (Y1)
- union density as implied by the Labour Force Survey (Y1)
- number of unions (Y2)

Source: Data drawn from issues of the Employment Gazette and Labour Market Trends.
Figure 2

Disputes, 1970-1999

Source: Data on stoppages are taken from issues of the Employment Gazette and Labour Market Trends.
Percentage responding “a good thing”, “a bad thing”, and “don’t know” (or refused to respond) to the question, “Generally speaking, do you think trade unions are a good thing or a bad thing?”. There were two surveys in 1974 and the entry in the graph for this year is a simple average of the two responses. Source: The Gallup Political and Economic Index, the Gallup Organization and the Daily Telegraph.
Figure 4
U.K. Unemployment Rate, Absolute and Relative to Unemployment Rates in the U.S. and France, 1970-99

U.K. Unemployment Rate, 1970-99

Source: The unemployment rates in this graph are “standardised” unemployment rates from the OECD drawn from issues of OECD Economic Outlook.
Figure 5

Labor Productivity by Unionism and Bargaining Structure, 1998

Percent of Workplaces

Types of Workplaces

- nonunion
- one union
- joint bargaining
- separate bargaining

Categories:
- a lot below average
- below average
- average
- better than average
- a lot better than average
Figure 6

Financial Performance by Unionism and Bargaining Structure, 1998

- Nonunion
- One union
- Joint bargaining
- Separate bargaining

Types of Workplaces

- A lot below average
- Below average
- Average
- Better than average
- A lot better than average
Notes to Figure 7. The series measuring employees’ perceptions are drawn from Bryson and McKay (1997). Union density data are the same as those graphed in Figure 1.

The series “poor employee relations” measures the percentage of employees who respond “not very” or “not at all” good to the question: In general, how would you describe relations between management and other employees at your workplace: very good, quite good, not very good, or not at all good? The values for 1988 and 1992 are interpolated.

The series “not well managed” measures the percentage of employees who respond “not well managed” to the question: In general, would you say your workplace was very well managed, quite well managed, or not well managed? The values for 1988 and 1992 are interpolated.

The series “no say in work decisions” measures the percentage of employees who respond “no say” when asked: Suppose there was going to be some decision made at your place of work that changed the way you do your job. Do you think that you personally would have any say in the decision about the change or not? The values for 1986, 1988, 1990, 1992, 1994, and 1995 are interpolated.
Figure 8

Changes in Unemployment Rates and in the Coverage of Collective Bargaining Contracts: Selected Countries

Sources: See beneath Table 8.
Table 1
Working Days Lost through Stoppages per Thousand Employees in all Industries and Services, Annual Averages 1971-80

<table>
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<td>575</td>
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<td>115</td>
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<td>163</td>
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<tr>
<td>United States</td>
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<td>484</td>
<td>420</td>
<td>452</td>
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</table>

Source: *Employment Gazette*, February 1982, p.69. Stoppages cover both strikes and lock-outs. Definitions and coverage of stoppages vary across countries so these data should not be relied upon to justify strong inferences about inter-country differences.
Table 2

Union Membership Density by Various Characteristics, 1979 and 1999

<table>
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<tr>
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<td>female</td>
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<td>Greater London</td>
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<td></td>
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<tr>
<td>by occupation:</td>
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<td></td>
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<td>61</td>
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<tr>
<td>non-manual</td>
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<td>67</td>
<td>34</td>
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<tr>
<td>by broad industry:</td>
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<td>manufacturing</td>
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<td>82</td>
<td>60</td>
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Source: The data for 1979 are taken from Price and Bain (1983) except for the regional data that are from Millward and Stevens (1988). The regional data are for 1984. (The South East excludes Greater London.) The data for 1999 are from Hicks (2000). These three sources define union density differently and the delineation of the regions is not the same for the two years.
Table 3
Working Days Lost through Stoppages per Thousand Employees
in all Industries and Services, Annual Averages 1981-98

<table>
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<td>137</td>
<td>72</td>
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<td>80</td>
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<td>425</td>
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<td>0.31</td>
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<td>86</td>
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Source: Employment Gazette, December 1991, p. 653, Labour Market Trends, April 1997, p. 130, and Labour Market Trends, April 2000, p. 148. Stoppages cover both strikes and lock-outs. Definitions and coverage of stoppages vary across countries so these data should not be relied upon to justify strong inferences about inter-country differences.
Table 4
Cross Classification of Workplaces by Labor Productivity and Financial Performance, 1998

<table>
<thead>
<tr>
<th>labor productivity</th>
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<th>below average</th>
<th>average</th>
<th>better than average</th>
<th>a lot better than average</th>
<th>total</th>
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<td>2</td>
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<tr>
<td>average</td>
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<td>343</td>
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<td>better than average</td>
<td>2</td>
<td>13</td>
<td>209</td>
<td>337</td>
<td>41</td>
<td>602</td>
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<tr>
<td>a lot better than average</td>
<td>0</td>
<td>2</td>
<td>39</td>
<td>98</td>
<td>115</td>
<td>254</td>
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<tr>
<td>total</td>
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<td>70</td>
<td>637</td>
<td>595</td>
<td>173</td>
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Table 5

Maximum Likelihood Estimates of the Effects of Unionism and Bargaining Structure on Labor Productivity and Financial Performance

(Estimated asymptotic standard errors in parentheses.)

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<td>$S_i$</td>
<td>-0.198</td>
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Table 6
Implications of Estimates for Differences in Labor Productivity and Financial Performance by Union and Bargaining Status

<table>
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<th>equation (2)</th>
<th>equation (3)</th>
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<td></td>
<td>difference between union &amp; nonunion workplaces</td>
<td>difference between separate &amp; joint bargaining</td>
<td>difference between separate &amp; joint bargaining</td>
</tr>
<tr>
<td>column(a)</td>
<td>labor prody.</td>
<td>labor prody.</td>
<td>labor prody.</td>
</tr>
<tr>
<td>column(b)</td>
<td>financial perform.</td>
<td>financial perform.</td>
<td>financial perform.</td>
</tr>
</tbody>
</table>

1998 Survey

| prob(a lot below average) | 0 | 0 | 0 | 0 | 0 | 0.01 |

| prob(below average) | 0 | 0.02 | 0.02 | 0.04 | 0.02 | 0.03 |

| prob(average) | 0 | 0.04 | 0.06 | 0.07 | 0.06 | 0.07 |

| prob(better than average) | -0.01 | -0.02 | -0.04 | -0.05 | -0.05 | -0.05 |

| prob(a lot better than average) | -0.01 | -0.03 | -0.04 | -0.06 | -0.03 | -0.05 |

1990 Survey

| prob(a lot below average) | 0 | 0.01 | 0 | 0.02 | 0 | 0.01 |

| prob(below average) | 0.05 | 0.02 | 0.06 | 0.02 | 0.06 | 0.02 |

| prob(average) | 0.10 | 0.06 | 0.09 | 0.04 | 0.10 | 0.04 |

| prob(better than average) | -0.06 | -0.01 | -0.08 | -0.01 | -0.07 | -0.01 |

| prob(a lot better than average) | -0.09 | -0.08 | -0.08 | -0.06 | -0.09 | -0.07 |
Table 7
Cross Classification of Workplaces by Labor Productivity and Financial Performance, 1990

<table>
<thead>
<tr>
<th>labor productivity</th>
<th>a lot below average</th>
<th>below average</th>
<th>average</th>
<th>better than average</th>
<th>a lot better than average</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a lot below average</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>below average</td>
<td>0</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>average</td>
<td>1</td>
<td>11</td>
<td>72</td>
<td>38</td>
<td>11</td>
<td>133</td>
</tr>
<tr>
<td>better than average</td>
<td>0</td>
<td>10</td>
<td>27</td>
<td>29</td>
<td>26</td>
<td>92</td>
</tr>
<tr>
<td>a lot better than average</td>
<td>0</td>
<td>5</td>
<td>38</td>
<td>68</td>
<td>10</td>
<td>121</td>
</tr>
<tr>
<td>total</td>
<td>1</td>
<td>37</td>
<td>150</td>
<td>142</td>
<td>50</td>
<td>380</td>
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</table>
Table 8

Changes in Male Unemployment Rates, Male Earnings Inequality, and the Coverage of Collective Bargaining Contracts from the late 1970s to 1990s: Selected Countries

<table>
<thead>
<tr>
<th></th>
<th>(1) proportional changes in male unemployment rates</th>
<th>(2) percent changes in male earnings inequality</th>
<th>(3) percent changes in coverage of union contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>0.50</td>
<td>7.30</td>
<td>-9.09</td>
</tr>
<tr>
<td>Canada</td>
<td>0.20</td>
<td>8.96</td>
<td>-2.70</td>
</tr>
<tr>
<td>France</td>
<td>1.58</td>
<td>1.18</td>
<td>11.76</td>
</tr>
<tr>
<td>Germany</td>
<td>2.32</td>
<td>-5.46</td>
<td>1.10</td>
</tr>
<tr>
<td>Italy</td>
<td>0.88</td>
<td>15.28</td>
<td>-3.53</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.95</td>
<td>4.46</td>
<td>3.49</td>
</tr>
<tr>
<td>Japan</td>
<td>1.27</td>
<td>6.95</td>
<td>-25.00</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.24</td>
<td>36.78</td>
<td>-32.86</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>-0.18</td>
<td>36.79</td>
<td>-30.49</td>
</tr>
</tbody>
</table>

Definitions and Sources

Column (1). Let $U(i, t)$ be the male unemployment percentage of country $i$ in year $t$. Column (1) lists $\frac{(U(i,1999) - U(i,1979))}{U(i,1979)}$. The data are drawn from the September 1983 and June 2000 issues of OECD’s Employment Outlook.

Column (2). Let $D(i,t)$ be the ratio in year $t$ and in country $i$ of the earnings of male workers at the 90th percentile to the earnings of male workers at the 10th percentile. Column (2) lists $\frac{100*[D(i,1995) - D(i,1979)]}{D(i,1979)}$. The data are drawn from the July 1996 issue of OECD’s Employment Outlook.

Column (3). Let $C(i,t)$ be the percentage of workers in country $i$ and year $t$ covered by collective bargaining contracts. Column (3) lists $\frac{100*[C(i,1994) - C(i,1980)]}{C(i,1980)}$. The data are drawn from the July 1997 of OECD’s Employment Outlook.
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<th>Area</th>
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