THE CLOSED SHOP REVISITED: 
AN ESSAY ON METHOD

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INTRODUCTION

The need to research and study the effects of the closed shop stem from both political and economic factors. In many countries there has been a noticeable change in policy regarding the practice of the closed shop (Hanson et al, 1982; Niland, 1989; Berry & Kitchener, 1989). In the U.K. the Thatcher government has consistently legislated against the closed shop, to the point where analysts question its future viability (Dunn, 1985; Metcalf 1990; Brown & Wadhwani, 1990). This legislation has been justified on the basis of recent empirical work which has focused on the economic impact of the closed shop (Metcalf, 1989a; Stewart, 1987; Blanchflower & Oswald, 1988). This work, itself, however, requires closer examination, as some suggest that it has been presented and interpreted incorrectly (Nolan & Marginson, 1990; Machin & Wadhwani, 1989).

The worldwide decline in union membership poses a major challenge for the future viability of trade unionism. Where the existing membership levels are buttressed by arrangements such as the closed shop, the removal or continuance of these arrangements will obviously affect the future of unionism (Crean & Rimmer, 1990).

What do we need to examine? First, what purpose does the closed shop supposedly serve? We will examine its function as seen from an industrial relations perspective and from an economics perspective. Secondly, what has the impact of the closed shop been? We will use some of the available data sources to examine this issue. The data is of two main varieties: secondary analyses that have utilised the UK Workplace Industrial Relations Survey (WIRS), and the recent survey of establishments by the Business Council of Australia (BCA, 1989). Case study evidence is also essential, but will not be examined in this paper (see Morris, 1981; Dunn & Gennard, 1984; Metcalf, 1989b).

This paper outlines the state of play with respect to analyses of the closed shop from the industrial relations and economics perspectives, evaluates the statistical analysis used in much of the recent studies, and attempts to draw the two perspectives together, to move towards an integrated analysis for the examination and study of the closed shop. As Littler et al point out, if workplace survey evidence is not to degenerate into crude empiricism, a conceptual framework for analysing workplace industrial relations is necessary (Littler, Quinlan & Kitay, 1989). It is our view that both perspectives complement each other, and in this vein our approach is one of viewing labour market phenomena (broadly defined) with a truly multidisciplinary approach. Recent developments in the micro-economics of labour have led to a recognition that economists need to sharpen their understanding of industrial relations phenomena (Carruth & Oswald, 1989), and that industrial relations specialists have unduly ignored insights offered by formal economic models. That is not to say that all is moving smoothly in this endeavour, as Turnbull (1988), Mayhew & Turnbull (1989) and Brown (1988) have pointed out. We feel the closed shop provides a good opportunity to advance the cause of interdisciplinary analysis of labour market issues.
THE STATE OF PLAY

The Industrial Relations Perspective

The industrial relations literature has focussed on three interrelated but distinct issues with respect to the closed shop. First, an examination of the closed shop with the union as the prime mover and beneficiary (McCarthy, 1964). Secondly, the more recent literature has focussed increasingly on the proposition that management as well as unions are beneficiaries of closed shop arrangements (Hart, 1979; Purcell, 1983; Dunn & Gennard, 1984). Finally, this literature has sought to consolidate the two approaches by drawing attention to the historical context within which various closed shop arrangements emerge, grow and decline (Dunn & Gennard, 1984).

For trade unions the closed shop primarily assists in terms of increasing and retaining membership. If union membership is required in order to remain in a job, then the threat of unemployment if one does not belong to the union is a powerful motive to join and remain a union member. The closed shop may strengthen the financial position of the union through maximising the quantity and consistency of union dues. This can also be achieved through what is commonly referred to as the 'check-off' system. This is where an employer agrees to automatically deduct the union fee from the wages bill paid to its employees who are union members. Although the 'check-off' is not strictly speaking a closed shop, the two often overlap. The above factors may then assist the union in increasing discipline over its members, and as a means of effecting worker solidarity, especially in times of strike action. Once again, the threat of exclusion from the union, and hence the loss of employment, can act as an incentive for members to obey union rules, customs and leadership.

The closed shop has been used by unions as a means of overcoming worker indifference. For instance, many unions sought closed shop agreements in Australia in the post-war period in order to ensure that the large numbers of newly arrived migrant workers, who were considered to lack union consciousness, did not become an alternative non-union labour supply for employers (Patmore, 1990).

Related to this point is the traditional union aim of job regulation. Removing the possibility of alternative labour supplies, having a disciplined and financially secure membership base, enables the union to more effectively regulate (unilaterally or bilaterally) workplace rules and bargaining relationships. In the strongest variants of the closed shop, it may enable unions to gain control over the quantity and composition of the labour supplied in a particular industry or workplace. This is most common in industries where the use of casual labour has played or plays an important role, such as the waterfront or construction industries. It also may exist in many professional occupations such as the law and medicine. These 'professional closed shops' are receiving greater scrutiny from industrial relations scholars (Milner, 1990).

Finally, the closed shop has been used as a method of limiting the number of possible rival unions in a workplace, and hence to prevent poaching of union members. This is particular important for craft based union movements such as in the UK and Australia (for Australian evidence see Wright, 1984). This may be an important reason in explaining why the closed shop appears to be a peculiarly anglo-saxon phenomena (Kassalow, 1980).
In summary, McCarthy suggested the closed shop should be "viewed as a device which unions want to assist in dealing with particular problems concerned with organizing, controlling or excluding different categories of workers" (McCarthy, 1964,146).

Thus far the focus has been on the union as the motivating force, but more recently attention has focussed on why management may 'love the closed shop' (Hart, 1979). In many ways, the management reasons closely mirror the union based explanations. We may explain them according to three broad areas: procedural, stability, and strategy.

The closed shop can assist managements' task of job regulation, it is argued, by standardising industrial relations procedures, facilitating the day-to-day decision making at the workplace. That is, it can use the unions increased discipline as a result of a closed shop to further its own ends. As Hart argued, managers "prefer to make terms which can be agreed with a single set of union negotiators, who then ensure that these are observed by all their own members" (Hart, 1979,353).

The closed shop assists stability in three main forms. First, the closed shop may provide greater stability in union/management bargaining relationships. Unions may not feel as threatened by potential membership losses resulting from the introduction of new technology or work re-organisation, and may hence facilitate rather than impede change. A second factor promoting stability is that once a closed shop is agreed, the number of trade unions in a workplace tends to remain fixed. That is, it can be used as a way of avoiding or minimising the consequences of multi-unionism in a plant. This is taken one step further in the Australian situation with management initiating preference clauses or closed shop agreements with a particular union (usually moderate) in order to avoid the possibility of having a more militant rival also present. Thirdly, the closed shop may provide stability in terms of the social order within a workplace. The idea that workplace industrial relations is essentially about the process of rule generation and regulation, or the revival of the 'Oxford School' approach is being increasingly accepted amongst industrial relations scholars (Zappala, 1990). Streeck has argued that legitimate workplace governance requires rules, which are accepted and seen as fair by both parties. He sees the closed shop as assisting the process of legitimate rule formation and acceptance. Furthermore, Streeck argues that social order in the workplace and in the labour market as a whole is difficult to maintain without an independent organisation which allows workers to express 'voice' and also establish organisational links across enterprise boundaries (Streeck, 1987, 300). He suggests that this could explain, for instance, why many British employers maintained their closed shop arrangements with trade unions despite the anti-closed shop legislation of the early 1970s (ibid, 300, 305).

The industrial relations literature on management strategy in the 1980s stressed that large corporate management often attempt to maximise their general business objectives through collaboration rather than opposition with unions. One of the means through which management could do this, it was argued, was through supporting and encouraging the closed shop (Purcell, 1983). This role was acutely understood by industrial relations and personnel managers in the U.S during the 1960s and 1970s. The stability which union security provisions brought to the bargaining table were seen to outweigh any loss of managerial prerogatives which may have resulted (Kochan & Cappelli, 1984). Kochan and Cappelli also show how labour relations managers secured their own positions and
justified their expertise by also securing the position of the union. That is, a symbiotic relationship existed between Industrial Relations/Personnel managers and the closed shop.

In attempting to explain the existence and growth of the closed shop in the U.K, Dunn and Gennard have provided a useful industrial relations theoretical framework. This is their 'hard/soft' theory of the closed shop. The 'hard theory' essentially applies to the union objectives of the closed shop discussed above. The spread and existence of the closed shop was primarily a matter of power; a means by which unions could redress their unequal bargaining power vis-a-vis management. It was mostly imposed by unions unilaterally, in industries and workplaces where "industrial relations had been hardest" (Dunn & Gennard, 1984,42).

The 'soft theory', however, does not assume the closed shop necessarily achieves the above objectives. It is precisely for this reason that management may have allowed the practice to grow, especially in the 1960s and 1970s, if not to use it for their own objectives. For instance, a high degree of union density in a workplace may provide the stability, discipline and rationalisation of procedures for both parties, rather than the closed shop per se, or as Dunn and Gennard state, the closed shop may merely be "the last piece of the jigsaw puzzle" (Dunn & Gennard, 1984,46). The 'soft theory' is particularly important to keep in mind when we examine some of the empirical studies of the closed shop, as it cautions against seeking dogmatic patterns of cause and effect relationships when looking at the possible impact of the closed shop.

Dunn and Gennard found evidence to support both 'hard' and 'soft' theories of the closed shop and argued that the process of closed shop growth must be viewed historically. Indeed, institutional arrangements evolve through time in a manner reflecting both their own internal life-cycles and the impact of the changing economic and political environment. With the passage of time, some institutions become more widely accepted; others run their course, bringing upon themselves their own demise. When labour markets are tight, management, being keen to bring down the rate of labour turnover, may have an economic interest in the closed shop. When the tide reverses, however, management's interest wanes but the unions will become more anxious to control labour supply. In other words, institutional arrangements in general, and the closed shop in particular, cannot be adequately comprehended within a static frame of analysis. The historical perspective and the economic context are both vital.

The industrial relations literature has identified a list of factors which could explain the phenomenon of the closed shop. Economic theory also has some insights to offer, as outlined in the following section. While they remain cast within a static framework, however, the various analytical propositions remain disparate. An historical perspective should permit a substantial measure of integration, of what otherwise remain disjoint, if not outright conflicting, analytical observations.
The Economic Perspective

Economic theory has tended to portray unions as monopolies focussed on the sole aim of attaining higher pay rates. If successful, this approach suggests, the number of jobs in unionized sectors declines, and the less lucrative job markets become overcrowded. The inevitable result is then a widening of pay gaps between the unionized and non-unionized workforces. In other words, the main economic impact of union activity is seen as being the redistribution of income from one group of workers to another. The possibility that the primary impact of collective bargaining is the distribution of income between profits and wages, or that pay rises may be financed entirely by rises in productivity brought about by collective bargaining, is ignored. This view, known as the 'monopoly union' model, still has a major influence on the manner in which economists perceive trade union activity.

However, theoretical developments within Labour Economics during the last two decades have offered alternative conceptual perspectives. New models have emerged which allow for the possibility that collective bargaining brings about both wage and employment increases. These may be financed either by a redistribution from profits to wages, or by productivity growth which is brought about by the very existence of collective bargaining. Firms are still seen as profit maximisers, and unions as maximizing the value of an objective function which postulates that the union is willing to trade employment for pay rises. Yet, according to these models, the presence of unions is not incompatible with simultaneous increases in wages and employment level. Although the main focus of these recent developments is collective bargaining, they inherently suggest new interpretations for the closed shop.

The four main analytical constructs to consider are: (i) the efficient contracts model, (ii) the transaction costs approach, (iii) the exit-voice paradigm, and (iv) the monopsony model. The second and third of these, transaction costs and the exit-voice paradigms, contend that an organization such as a trade union stimulates organizational innovations which are capable of making substantial contributions to productivity. In contrast, the efficient-contracts model is silent about their impact on productivity, focusing instead on the economic scope for collective bargaining contracts which can deliver both wage and employment growth simultaneously. These issues are central to the reality of the labour market.

The efficient-contracts model was put forward by McDonald and Solow (1981), building on foundations laid by Leontief in 1946. The contract is described as efficient because, when compared to the monopoly union regime, both the workers and the firm are better off. That is, both the union and the firm stand to gain from abandoning the monopoly union situation (where the union's input is restricted to extracting higher pay rates) in favour of an efficient contract specifying both minimum employment and minimum wage levels. The result of such an efficient contract may be a simultaneous increase in both employment and wages. The distributional consequence can then be a shift of income from profits to wages rather than a rise in inequality within labour itself.
 Needless to say, the question of whether most contracts between labour and capital are efficient in the above sense remains open. It is likely that many are not. Nevertheless, the contribution of the model is invaluable since it offers a prism which widens the spectrum of possible distributional consequences of collective bargaining. The view offered by the monopoly model permits only one possible impact: unions, if successful in their aim of increasing wages, must achieve it at the expense of less fortunate workers. In contrast, the efficient-contract model suggests that this is only one of a number of possible results. If unions fail to reach contracts which increase employment, this does not necessarily reflect their attitudes (or preferences). Rather, it may reflect the fact that efficient contracts are not within their reach because of factors beyond their control. The attitudes of management and the political environment, for example, have a role to play.

The transaction costs approach has opened up the possibility that the presence of trade unions facilitates productivity growth. It suggests that an important factor underpinning the phenomenon of internal labour markets is their ability to increase the productive efficiency of an enterprise. Although the proponents of the transaction costs approach (Williamson, Harris and Wachter, 1975) did not see unions as indispensable to internal labour markets, they can be described as a vital aspect of them.

The explicit link between collective bargaining and the productive properties of internal labour markets was put forward by Freeman and Medoff (1976, 1979), drawing heavily on the transaction-costs approach. At the same time, their analysis represents a new model, built on the foundations laid by Albert Hirschman’s exit-voice dichotomy (1970). In the ordinary neo-classical spot-auction model, workers disenchanted with a particular employer have automatic recourse for redress; unencumbered by firm-specific skills or any other mobility costs, they can readily ‘exit’ the establishment. In the presence of such obstacles, however, the exit option is greatly diminished; the alternative is ‘voicing’ the complaint and seeking redress within the establishment itself. This imparts to collective actions a function not recognized within the monopoly approach. Freeman and Medoff also emphasize that a range of work conditions have features that allow them to be viewed as public goods and are therefore more efficiently managed by a collective, rather than individual, voice.

Finally, one more analytical construct must be added to this array of economic models, representing yet another case where wage and employment increases may be attained simultaneously. This describes (in neo-classical terms) the consequences for employment levels when unions are formed in order to stave off the power of a monopsony (a firm, or collusive industry, which is a relatively strong buyer in the labour market). It is well known, although often forgotten, that the imposition of a compulsory minimum wage (exceeding the wage prevailing in the absence of regulation or collective action) should lead to expanded employment (see Mulvey, 1978:50-3).

Indeed, considerations of power imbalances become explicit, even within a neo-classical framework, as soon as the most minor relaxations of the assumptions underpinning the perfect competitive model are made. The monopsony model is one such example. Another is offered in Gill (1984), where the introduction of mobility and training costs into an otherwise ordinary neo-classical model permits trade unions to be depicted as forces vital to guarding individual workers against exploitation. In this model, wages can increase without having any adverse effects on employment levels. The consequent redistribution of income is then confined to transfers from capital to labour.
Power concerns are latent in the exit-voice dichotomy because of the asymmetry of power between the firm and the individual worker who is encumbered by specific skills and mobility costs. There remain, however, other important aspects of power asymmetry between capital and labour which are vital to the understanding of trade unions as social, political and economic institutions, but they unfortunately remain unrecognized within conventional economic analysis.

In conclusion, the monopsony, efficient-contracts and exit-voice models all conclude that overcrowding of disadvantaged markets is not an inevitable consequence of a successful bid (by unions) to raise wages. Their principal (or entire) impact may be confined to a redistribution from profits to wages. Alternatively, it may be an improvement of organizational efficiency, generating gains which can then finance wage, and/or employment, and/or profit growth.

So, what can we say about the role played by the closed shop as far as employment, pay and work conditions are concerned when it is examined through this expanded theoretical prism? The closed shop, is not a monolithic entity. Rather, it is an umbrella term covering a whole range of situations, from those where the unions exercise a high degree of control over the supply of labour to situations where the closed shop exists on paper only. The first question, then, is whether we can establish a case for the closed shop, of any type, under any circumstances in terms of conventional mainstream economic theory.

The attainment of efficient-contracts, the exercise of voice and the attempt to neutralise the monopsony's market power all entail collective action. If a critical mass of participants is a strict pre-requisite for the success of collective action, either because of strategic reasons or because the financial costs of attaining a given goal for an individual or a small group are prohibitive, then the establishment of an 'optimal sharing group' is a pre-requisite for performing the tasks envisaged in each of these conceptual frameworks. If the goals of the 'optimal sharing group' are deemed socially desirable, then the group should merit legislative support. In particular, such support could be crucial when hostility on the part of the employer would deter otherwise willing workers from joining a union under a purely voluntary regime.

Another argument which has been advanced in support of the closed shop is the vulnerability of collective action to 'free-riding'. Olson (1965) drew attention to the fact that, unless the fruits of collective action can be secured exclusively for those who partook in the action, the door is open to 'free-riding'. Indeed, it is commonly agreed that free-riding is a danger which besets the provision of public goods in general. A public good is defined by two crucial properties. First, the good can be consumed simultaneously by a variable number of agents. Secondly, it is not feasible either physically or economically to exclude others from its consumption. If, as the exit-voice model suggests, many of the gains achieved by trade unions can be described as public goods, the closed shop can be advocated as a safeguard for the fruits of co-operative behaviour against the temptation of free-riding.

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1. The inability to exclude others may be for purely physical reasons (e.g. safety, sanitary conditions, speed and length of breaks in assembly line work) or where the costs of achieving exclusion may be prohibitive.
Nevertheless, the idea of compulsory unionism has not won the unanimous support of economists. Burton (1978), for example, opposes it, maintaining (i) that services procured by trade unions cannot be described as public (or collective) goods, and (ii) that, in any event, trade unions are merely 'collective bads' (p. 49), and do not merit legislative support.

The proposition that pay and work conditions do not represent public goods is difficult to accept. Burton cites one example - the provision of better toilet facilities in the workplace. This, he posits, has erroneously been seen as an example of a public good because there are neither physical nor economic barriers to exclusion. He says: "... if the price system is used, exclusion becomes feasible and economic, as we can see from coin-operated 'public' toilets in the streets and the British Rail toilet on Victoria Station ..." (Burton, 1978:47). Bargaining on health and safety measures, and setting the pace of work on the assembly line, to mention just the most obvious examples, are simply ignored.

Having dismissed the case for the closed shop in terms of the public goods argument, Burton examines the case for it in terms of the unions acting as an 'optimal sharing group'. Deeming them "... 'collective bads' of labour cartels extracting monetary monopoly returns" (Burton, 1978:59) he, not surprisingly, concludes that, though trade unions can be described as optimal sharing groups, they merit no legislative support.

Burton's argument demonstrates the grip which the monopoly model has had on habits of thought - trade unions are harmful simply because they tamper with market prices. They would presumably be decreed to be collective bads even when generating a countervailing power against a monopsony. Similarly, if efficient-contracts (for which collective action is indispensable) succeed in bringing about a rise in both wages and employment in a given establishment (thereby avoiding overcrowding of less lucrative markets) this would have presumably no bearing on Burton's position, since his analysis rests on the implicit primacy of a laissez-faire economy, regardless of the ultimate consequences for the distribution of income or for the conditions under which money income is earned. Indeed, the possibility that improvements in work conditions could be welcomed for ethical reasons is altogether ignored.2

A somewhat different argument against compulsory unionism is offered by Bennett and Johnson (1979). This argument is two-pronged. First, like Burton, they see little role for unions in the provision of public goods. Health and safety issues are recognized as examples of public goods but, the authors claim, they belong in the domain of governments, not unions.3 Secondly, they maintain that, even if services provided by unions can be described as public goods, it does not follow that free riding will ensue, "... because of the value systems of individuals and groups". They cite Hardin (1971), who suggests that it can be shown "... that it remains a theoretical possibility that all individuals in a community could decide to contribute to the provision of collective goods

2. Instead, it seems, such improvements would be categorically denounced as activities in the pursuit of the "...easy working life" (Burton, p. 49), regardless of the circumstances.

3. Bennett & Johnson (p.170) also sees little role for unions in securing pay conditions, citing studies which conclude that unions have little, if any, impact on relative pay (e.g. Schmidt and Strauss, 1976).
without coercion" (Bennett & Johnson, 1979:159). They also cite other experimental studies, concluding that "... free-riding is an aberration or exception rather than the rule" (Bennett & Johnson, 1979:160).

This is an interesting proposition. Society does indeed have solid value systems without which no amount of coercion could secure social cohesion. However, the blanket rejection of all coercive measures certainly does not follow. Instead, attention must return to the merits of the case at hand. In addition, Bennett's discussion does not address the case where hostility on the part of the employer forms a deterrent to trade union membership, discouraging otherwise willing conscripts.  

In conclusion, the verdict on the closed shop depends crucially on the light in which collective bargaining in general is seen. Furthermore, since neither unions nor closed shops are monolithic entities, the verdict may vary from one case to another. Finally, collective bargaining does not operate in a vacuum. Where the employer's antagonism is sufficiently high, fear of reprisal may deter union membership independent of any desire to free ride. The closed shop then becomes vital to the very existence of collective bargaining. That is, just as the industrial relations literature has been able to find a rationale for the closed shop in terms of union and management objectives, so too, recent models of economic behaviour can be seen as providing a valid explanation for the existence and rationale of the closed shop.

STATISTICAL ANALYSES

A number of studies spurred by the wealth of statistical information generated by the Workplace Industrial Relations Surveys (WIRS) I and II in 1980 and 1984 have attempted to explore the impact of the closed shop in the UK. Some of these studies have addressed the question of the impact of unions on the level of pay, productivity and profitability of the enterprise (see Blanchflower & Oswald 1988 for a summary), while others have focussed specifically on the closed shop (Stewart, 1987; Machin, 1987). For Australia, however, there exists only one survey-based study, of members of the Business Council of Australia (Drago and Wooden, 1989).

The wealth of detail generated by WIRS has allowed a fine delineation of statistical patterns, representing a vast improvement over the past. The statistical lens is better focussed, permitting the rejection of some conjectures made when the available statistical data was much poorer. Wide information gaps which plague highly aggregate data sets, have been narrowed significantly, permitting the replacement of conjectures regarding hitherto unobserved empirical patterns with actual empirical observations. The combination of enriched data sets with sophisticated econometric techniques certainly represents a remarkable advance over the past. It provides an invaluable organization of quantitative evidence, which otherwise would remain subject to rather crude casual empiricism. This contribution, therefore, must be acknowledged.

Yet, statistical analyses, however sophisticated they may be, yield no more than a set of measures of statistical correlations. They offer us sets of descriptive statistics which invite questions about the intriguing issue of causality, rather than providing solutions to those questions. There has been an unfortunate tendency to treat statistical results as

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evidence of a direct causal link, as the final proof rather than the starting point of an intellectual journey into the issue of causality. We see the statistical endeavour as carrying out an invaluable task akin to land surveying; the constructive task which must follow entails a merging of case studies, theoretical and historical investigation.

What is offered in this present section is a bird's eye view of the empirical work, having immediate bearing on the broader issue of what the impact of the closed shop has been, the emphasis being on the question of analytical method.

**Britain**

Stewart (1987) explores the statistical relationship between pay rates and a number of indices representing a range of bargaining structures in the UK, employing data generated by WIRS. The study controls for the possible effects of establishment size (below and above 100 workers), sector (private vs. public), level of bargaining and bargaining form. The bargaining form is categorized according to its level (establishment, firm or industry), the number of unions present at the workplace (one or more), whether the unions bargain jointly or separately, whether closed shop arrangements exist and, if so, whether these involve the pre-entry or only the post-entry type. The study also separates workers into two groups, skilled and semi-skilled.

The empirical results of Stewart's study show that differences in rates of pay between the unionized and non-unionized sectors are largest where at least some of the workers are affected by pre-entry closed shop arrangements. For skilled workers this is the only circumstance where union membership is associated with higher pay. That is, the pay rates of skilled workers reveal no significant statistical difference between unionized and non-unionized establishments except in establishments affected by pre-entry closed shop arrangements, where mean earnings are 7 per cent above those for establishments without pre-entry closed shop arrangements.

In contrast, the mean earnings of semi-skilled workers in the group of establishments which recognize unions are significantly higher than in the remainder, regardless of whether or not closed shop arrangements exist (conferring a premium of 8 per cent). Mean earnings where post-entry closed shop arrangements are present are nearly 9 per cent above the mean in the non-unionized sector. Where a pre-entry closed shop exists, the mean is 15 per cent above the non-unionized rate. In other words, the pure effect of the closed shop in the case of the semi-skilled appears to be only 1 per cent in the post-entry type, whereas the pre-entry closed shop appears to confer a premium of 7 per cent over the unionized sector as a whole. This latter figure is the same as that for skilled workers, as mentioned above. Hence, according to Stewart, for both skilled and semi-skilled workers, only the pre-entry closed shop shows a significant statistical association with the level of pay.

5. The data distinguishes between ordinary time, shift and piece rates.

6. The incidence of the closed shop is measured only as a binary variable, assuming one value when it is absent and another when at least some of the manual workers are affected by such an arrangement. The proportion of workers affected plays no role in the analysis.
An interpretation of these results must address two fundamental issues. First, although the study controls for a number of variables (other than those involving bargaining mechanisms) which are likely to have a systematic impact on the level of pay, there may remain additional variables with a systematic impact on the difference in pay between unionized and non-unionized establishments.

Secondly, even if all systematic influences on the difference in pay between the unionized and non-unionized sectors have been accounted for, can we treat the non-unionized sector as a counter-factual which charts out pay and work conditions which would prevail in the putative union-free world? In particular, what should we make of the fact that skilled workers seem to earn higher wages in the unionized sector only when employed under pre-entry closed shop arrangements? Is it reasonable to conclude that unions are altogether redundant in a world where pre-entry closed shops do not exist? Or is it, alternatively, the case that the wages of skilled manual workers in the unionized sector operate as price leaders, effectively setting the wage for both unionized and non-unionized establishments? In a similar vein, semi-skilled rates in unionized firms might exert a positive effect on pay rates in firms in the non-unionized sector.\footnote{This is hard to understand within the analytical framework of spot-auction market and monopoly union models, but other analytical descriptions of the labour market can readily accommodate such a proposition. For instance, an attempt to ward off unionism may compel firms to set wages which are anchored to union rates.}

Returning to the first question, the study runs into the inevitable limits of the existing data sets. As mentioned above, Stewart (1987) controls for a range of establishment characteristics. These, he estimates, explain two thirds of the raw pay difference between union and non-union pay levels. The remaining one third is then assigned to collective bargaining factors. Leaving aside other establishment characteristics for which the study could not control (such as the age of the capital stock), because of a lack of data, there remains a need to control for differences between the workforce employed in each of the two sectors. Stewart (1983) informs us that the likelihood that they do vary systematically between these two sectors is extremely high. Stewart (1983) found that on average workers in the unionized sector posses higher qualifications, a larger range of responsibility and are more experienced, to mention just some characteristics. The study suggests that once the statistical analysis controls for individual characteristics, the raw pay differential between union and non-union members is reduced from 20 per cent to 7 per cent (Stewart, 1983, 121).

The natural question to ask is what would have happened to the union/non-union pay differential in the 1987 study had the data base permitted simultaneous control for both establishment and individual (workers) characteristics? Unfortunately, it is likely that such an attempt would run into severe multicollinearity problems. It is important to realize that multicollinearity is only sometimes a problem associated with a dearth of suitable data, to be solved in the world of statistical plenty. At other times, multicollinearity may be in the nature of things themselves. That is, it may reflect a structural association between variables themselves, in which case no amount of data will permit an empirical estimate of the contribution of individual variables.
Whereas Stewart (1987) as well as Blanchflower, Oswald and Garret (1988), detected a systematic statistical association between the presence of a pre-entry closed shop and the level of pay, Machin and Wadhwani (1989) (using the same data set) find that the closed shop has no systematic impact over and above the presence of unions and the incidence of organizational change (i.e. relaxation of restrictive work practices etc) during the period 1981-1984.

Finally, a study by Machin (1987), confined to engineering firms in the UK over the period 1978-1982 has been quoted in the literature (Metcalf, 1989:Table 1), concluding that Machin's measure of productivity is negatively correlated with the incidence of the closed shop. This was especially the case with large firms.

However, Nolan and Marginson (1990) take issue with the manner in which Metcalf (1989) interpreted Machin's empirical results. Their discussion raises some fundamental methodological issues, and the essence of their argument therefore merits restatement. Nolan and Marginson make four main points: (i) that Machin himself cautioned against generalization of his results beyond the engineering industry "where unions have specific traditions and structures", (ii) that even within the engineering industry, the data set exhibited negative statistical association between union density and productivity only in firms with more than 1000 employees, (iii) that, as Machin himself pointed out, the data set did not allow any test of the dynamic effects, and (iv) that in Machin's study there is no attempt to control for variations in the performance of management.8

Australia

In 1988 a study was commissioned by the Business Council of Australia (BCA,1989). As the survey was confined to the members of the BCA, it contains a disproportionate number of large firms. Nevertheless, it offers an invaluable insight into the perceptions currently entertained by management (both corporate and establishment) about the impact of the closed shop on the activities of the enterprise. This study found that 75 per cent of the sampled workforce was unionised. 81 per cent of the unionized plants had a closed shop while, overall, 65 per cent of the workforce was covered by a closed shop. This shows a much higher incidence of the closed shop than that reported by Wright (1983) (who reported only 25 per cent of employees being covered by a closed shop), perhaps indicating that the closed shop is more common among large firms. Certainly the BCA found the closed shop to be more prevalent in blue collar establishments, and those where a large proportion of the workforce is male.

8. They also point out that the sample of the 52 engineering firms contains only one union-free firm (productivity was correlated with union density); as for the results themselves, in the majority of firms there was either a positive or insignificant relationship between union density and productivity.
When establishment managers were asked about the impact of the closed shop on productivity, a large majority answered that the impact was limited. Only 11 per cent answered that the impact on productivity was high (BCA, 1989:26). When directly asked about their views on the closed shop, the study found that "...closed shop arrangements are nearly always supported by management". Of the corporate level managers surveyed only 17 per cent saw "... ending such arrangements (closed shop agreements) as one of the five most important changes that could be made to the industrial relations system".

In addition to presenting managers with a direct question on the degree of their support for the closed shop, establishment managers were asked to record their perceptions about the work ethic of their workforce. These were subsequently used to construct three surrogate measures of worker productivity. The latter were then regressed on a number of indices of union power among them a variable representing the extent to which unions have a say in the workplace (this, again, records managers' perceptions on this matter). Other variables, such as firm size, the proportion of blue collar workers, and the existence of payments by results, were included in an attempt to control for other factors which might influence the work ethic.

The empirical results of the BCA survey indicate that a lower performance rating of the workforce was more common in establishments where the manager perceived relatively high levels of union say. Thus, unless the 'union-say' variable picks structural features of the establishment which have very little to do with the presence of unions, the answers seem to suggest that employers perceive the presence of unions as deleterious to the work ethic. This result does not sit easily with answers provided by managers to the direct question on the impact of closed shop arrangements on productivity. The authors hypothesise that closed shops are deemed beneficial to management because they keep union organizers out of the establishment. A recent critique has suggested that the researchers' hypothesis rests on a confusion of cause and effect. That is, it is not that the involvement of union officials results in poor workplace performance, but that problems at the workplace result in either managers or union members calling on the services of trade union officials in attempting to resolve the problem (Dabscheck, 1990).

It is odd, however, that none of the three regressions (each trying a different proxy for the work-ethics in the establishment) included the incidence of the closed shop among its independent variables. Possibly this variable was dropped because the analysis ran into severe multicollinearity problems. But, if so, this raises serious questions about the ability of the data set to discriminate between the roles of the variables, even in terms of descriptive statistics. The authors state, without presenting the actual data, that they

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9. An additional 12 per cent said the impact is moderate, and the remainder said the impact is small or non-existent, with well over half of these opting for the latter (BCA, 1989:26).

10. These include a measure of the perceived tendencies to shirk, to reduce flexibility in the employment of labour, and to engage in restrictive work practices (BCA, 1989: 36).

11. These include a 'union say' and 'cooperation' variables representing the interviewees' perception of the degree of union say and the cooperative disposition of the union respectively, and a number of other variables representing other organizational aspects of bargaining.
tested for an interaction effect between the 'union-say' variable and the closed shop variable, but the variable 'performed poorly' (BCA, 1989:41). They report that "where it did achieve significance...the results suggest that the closed shop arrangements actually reduce the effect of union influence in reducing worker effort" (ibid). Hence, their conclusion that closed shops reduced the likelihood that external union organisers would be greatly involved in the industrial relations of the enterprise. These results suggest that the data is impaired by severe multicollinearity problems.

Unfortunately, the possibility of multicollinearity seriously undermines the robustness of these conclusions. The data, in that case, would not satisfy the basic conditions of a controlled experiment, and the contribution of an individual variable could not be gauged.

Discussion

The body of empirical analysis which has been generated by the data from WIRS I and II in the UK has provided us with some valuable insights. Analyses carried out before establishment data were made available were of necessity confined to industry data. Two consequences flowed from this. First, a range of important variables which affect economic and industrial relations outcomes were ignored. Secondly, the studies were unable to distinguish between union recognition per se, and density levels.

Earlier estimates (e.g. Mulvey, 1976) showed a union/non-union wage differential of the order of 15 per cent. Being unable to control for establishment characteristics, the maintained hypothesis was that the variation in establishment characteristics was totally uncorrelated with union density. Thus, such studies implicitly assumed that within each industry, union and non-union firms were (on average) alike in all matters pertinent to the level of pay, productivity, and employment. In the absence of more suitable data, most observers tended to understate the possibility that systematic differences between the composition of the workforce, capital stock, influence of product markets, management conduct and size of firms in the unionized and non-unionized sectors can introduce large biases into the estimated impact of unionism as such. The bias could have gone either way. If workers in unionized firms are better qualified on average, then the independent contribution of unionization is over-stated in cross-industry studies. If the opposite obtains, the estimates understate the impact of unionism. The omission of establishment characteristics could have similar effects.

The thrust of Stewart's (1983, 1987) and Machin and Wadhwani's (1989) studies discussed above is that industry estimates grossly overstate the statistical correlation between unionization (either recognition or density) and pay, investment or employment levels. As noted earlier, Stewart (1987) found that two thirds of the raw non-union union pay differential was due to systematic variations in establishment characteristics between the unionized and the non-unionized sectors. Similarly, Stewart's earlier study (1983) found that systematic variation in the characteristics of the workforce explained more than half of the union/non-union pay differential (ibid., Table 2). A similar pattern is evinced by Machin and Wadhwani's (1989) study. Once they controlled for the statistical contribution of a range of variables (among them firm size, firm-specific cyclical effects, financial position, technological change) the systematic (negative) impact which unions seem to exert on changes in the level of employment in the firm entirely disappeared.12 At the

12. Similarly, unionism ceased to reveal a systematic statistical association with investment levels once all
same time, it must be borne in mind that multicollinearity obstacles may defeat any attempt to genuinely separate the individual contributions of variables.

We face yet another problem. Many statistical studies (including those based on WIRS I and WIRS II) employ variables which record attitudinal disposition (usually of management) as surrogates for more objectively measured entities. Yet, often the results are reported as if objectivity is under no risk of being compromised. The possibility that such surrogates could mar the analysis with systematic estimation biases is swept under the rug. These risks are particularly great with certain issues, such as the closed shop, where the responses to questions depend greatly on the context in which they are asked. For instance, one study of Australian Personnel Managers found that 83 percent of managers thought trade union membership should be purely voluntary (Deery & Dowling, 1988). This may be illustrative of a philosophical position. Yet one wonders, given our earlier review, how many would have been willing to translate this position into practice at the workplace level? Attitudes are not always adequate proxies for observable behaviour.

These empirical studies have also highlighted the limitations inherent in excessive reliance on econometric analyses. These analyses understate the heterogeneity of the phenomena dealt with. The studies based on WIRS I and II, and the BCA study, have (or should have) unsettled our confidence that on average the effects of the omitted variables simply cancel one another out. Thus, the dearth of data remains an issue. At the same time, however, multicollinearity is likely to set limits on our ability to include the necessary controls. Hence, inferences about the causal roles of variables such as union density are bound to remain extremely contentious. Even if the data were ample, there remains the methodological question of what is the proper quantitative representation of a given conceptual term.

Finally, there is the problem of treating the non-union sector as the counterfactual for the unionized sector, which suggests that the non-union sector describes the state of affairs which would have prevailed in a world free of unions. This implies a lack of any interdependence between the unionized and non-unionized sectors, a proposition which is far from readily acceptable.

TOWARDS A MORE COMPREHENSIVE CONCEPTUAL FRAMEWORK

Industrial relations has evolved as an antinome to the economist’s vision of human conduct. It has rejected the fact that economic analysis views the actions of individual workers in complete disregard to the social context, ignoring the fact that society in general and the labour market in particular are governed by an array of institutions and regulations which have significant discretionary power over matters economic. In particular, it has rejected the neo-classical tenet that individuals can disregard customs and social norms of behaviour whenever they conflict with pure profit motives or self-centered utilitarianism.

However, in posing a counter to the static atomistic exchange model of neo-classical economics, industrial relations has fostered an equally static frame of analysis. Its attention has focused primarily on shifting the centre of discretionary power from the

feasible controls were implemented.
atomistic individual to institutions. Relatively little attention has been paid to the intellectual task of developing a theory of institutional change.

Yet recent changes in the fabric of industrial relations institutions have revealed that the institutions may be far less robust than they previously appeared. These changes clearly occurred in response to changes in both the political and economic environments. Further, much of the change in the political climate can be attributed to changes in the economic environment (for example, see Streeck, 1987).

These developments point to an urgent need for a conceptual framework capable of analysing institutions within a dynamic context. The emphasis should be not on the primacy of the institutions per se, but rather on the process by which they interact with the changing economic environment. Indeed, the question is not one of primacy of either the institutional or the economic environment. A variety of institutional arrangements can be found in otherwise similar economic environments. Similarly, a variety of institutional responses are compatible with a given economic cataclysm. However, what can be said is that recent economic cataclysms have left few institutions unaffected. Herein lies the need for a theory of institutional change as it relates to the changing economic (and political) environment.

Economists have put forward models which they feel provide a valid and comprehensive synthesis between the perspective of economics and industrial relations (Oswald, 1985; Carruth & Oswald, 1989). However, as Turnbull (1988) emphasises, these are still usually located within a narrowly based neo-classical frame of analysis because the intellectual input of industrial relations in this literature is confined to a small set of stylized facts (such as bargaining levels, the presence of closed shop arrangements or rules regulating lay-offs according to seniority). The social context of worker behaviour, strategic considerations, the external political context, and the internal process by which unions reach their policy plan remain by-passed. Similarly, management is depicted as bent on static profit maximization with little thought of strategic considerations.

Yet, neither the notion of rationality nor the proposition that firms are seriously concerned with attaining maximal profit rates suggest that the social context of collective bargaining can be ignored, or that firms are not guided by strategic choices when bargaining with labour. Firms whose vision extends beyond the present will naturally try to shape the environment within which they operate in a manner deemed conducive to future profit levels. Attempts by management to shape this environment naturally focus on attaining a favourable balance of power. Strategic considerations, therefore, are likely to play a central role, quite possibly relegating immediate (or even medium term) profit considerations to a more subordinate position. Furthermore, an environment deemed conducive to the cause of profit is likely to be highly affected by the social, as distinct from the purely economic, context. In other words, actions consciously guided purely by the profit motive are likely to be also subject to a drift caused by forces within the social context of action.

A major irritant to those in neighbouring disciplines is the economist’s notion of rationality. However, the true culprits are the ancillary sets of assumptions which are usually wedded to it. The first of these is the static frame of analysis, which of necessity ignores the historical and social context of human conduct and the process by which aspirations and perceptions about present and future opportunity sets are formed. The second is the excessive focus on the pecuniary and egocentric motives of behaviour.
Hargreaves Heap's (1989) illuminating treatise argues that the fault is not with rationality *per se* but, rather, with the notion of 'instrumental rationality' which forms the core of much of standard economic analysis. He offers a taxonomy which draws boundaries between 'instrumental rationality', 'procedural-rationality' and 'expressive-rationality'. Procedural rationality recognizes the historical and social context of conduct, while the expressive rationality further extends the domain of rationality to encompass *concerns* not accounted for by the neo-classical notion of 'preferences'. Hargreaves Heap, does not reject the notion of instrumental rationality. Rather, he argues that it is suitable for the analysis of only a subset of the problems commonly addressed by economists. The remainder are more properly analysed within a framework which employs the notions of procedural rationality or expressive rationality.

We propose that the issues which occupy the interface between economics and industrial relations cannot be analysed adequately within the confines of instrumental rationality. The expansion of the notion of rationality beyond the narrow confines of its instrumental version should offer a bridge for a more fruitful interchange between industrial relations and economics. The social and historical context, and concerns other than pecuniary and the physical work conditions, all of which have had a more natural place within the industrial relations research agenda, cannot be ignored. Our discourse, having emphasised the historical context of action, implies that history is the repository of experiences which play a major role in shaping both desires and the perception of opportunities at the present. At the same time, the economic environment, periodically challenges prevailing perceptions of what is within the realm of feasibility. It also challenges entrenched notions about individual and group rights.

It is the interface between experiences, perceptions and institutions inherited from history, and the economic currents at a given junction of time and place which offers a challenging research agenda for joint ventures between industrial relations and economics.

We conclude by suggesting that we should perhaps pay heed to a statement made half a century ago:

> Industrial Relations may have something more than a practical contribution to make to knowledge and might perhaps contribute something to our knowledge of the social conditions of human welfare by extending the scope of economic studies. If it does that, as well as leading economists to reconsider some of the fundamentals of their subject, the independent study of Industrial Relations will perhaps be justified. (Hare 1943)

13. Central to the notion of 'expressive rationality' is the proposition that individuals seek to affirm a sense of self-worth, and this often affects their economic choices.
CONCLUSION

As the title indicates, this paper is primarily an essay on method. Specifically, it emphasises the need for a close interchange between industrial relations and economics. Since we believe that the phenomenon of the closed shop vividly illustrates the need for a broadly based conceptual framework which trespasses across established boundaries of intellectual disciplines, we employ this institution as our analytical vehicle.

The review of the industrial relations literature on the closed shop seeks to highlight the evolution which has taken place regarding its function. Historically, trade unions were the prime movers behind the introduction of closed shop arrangements. Early literature thus identified this institution as providing services for labour only. With the passage of time, the theoretical literature has expanded the spectrum which describes the nature of these services, ultimately involving management itself as an important beneficiary. This literature, however, examines the closed shop in exclusively strategic terms, the economic context within which institutional arrangements are conceived, and subsequently altered, are often ignored.

The economic literature mirrors this situation but in reverse. It analyses union actions within a conceptual framework which is focused primarily on pay and employment levels, strategic considerations being altogether ignored. We have shown, however, that this literature has undergone a process of evolution which has progressively expanded the range of functions attached to the union. Originally depicted as simply a monopoly of sellers, it has been endowed more recently with the ability to perform a whole range of vital economic functions.

We argue that because of their lack of a truly dynamic frame of analysis, both intellectual traditions fail to provide scope for a satisfactory explanation of institutional change. Neither can they account for the interplay between economic and industrial relations issues.

We emphasised that there is a very large measure of complementarity between the two traditions. However, a simple mechanical adjoining of analytical propositions will not do. In particular, economics must acknowledge a definition of rationality which goes far beyond the instrumentalist version. This will need to encompass the dimensions incorporated in Hargreaves Heaps' (1989) concept of expressive rationality. The analysis must also make room for considerations of power, which thus far have been studiously sidestepped (Scitovsky, 1990: 238). Industrial relations, needs to open itself to the possibility that formal economic models have some useful insights to offer, despite their narrow conceptual base. The economic context of institutional change should be accounted for. Finally, we also believe that industrial relations should take an interest in analytical results presented in the statistical literature, even if these often constitute little more than sets of sophisticated descriptive statistics.

The closed shop calls for an integrated frame of analysis because the strategic considerations of both management and labour vary with the general state of the economy. Management may favour the closed shop in times of a sustained shortage of labour because of a pure economic interest. Unions, on the other hand, are more likely to have economic interest in such arrangements when the economy settles into a low level
of activity. Arrangements sought at one junction of time and place become entrenched or generate disillusion among previous supporters with the passage of time. They are also transformed, albeit sluggishly, by the changing economic and political environment. An historical perspective, therefore, is also indispensable.

It is the interface between experiences, perceptions and institutions inherited from history, and the economic currents at a given junction of time and place which offers a challenging research agenda for joint ventures between industrial relations and economics.
REFERENCES


Freeman, R.B and Medoff, J.I (1979), "The Two Faces of Unionism", Public Interest, Fall, 69-93.


Hanson, C., Jackson, S and Miller, D (1982), The Closed Shop, Gower Press.


Hare, A.E.C (1943), "Industrial Relations and Economic Theory", The Economic Record, June.


Hart, M (1979), "Why bosses love the closed shop", New Society, 15, February.


McCarthy, W (1964), The Closed Shop in Britain, Basil Blackwell.


Mulvey, C (1978), The Economic Analysis of Trade Unionism, Martin Robertson.


Patmore, G (1990), Australian Labour History, Longman Cheshire (forthcoming)


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