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LABOR MARKET ANALYSIS AND CONCERTED BEHAVIOR

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Labor Market Analysis and Concerted Behavior

Abstract

In the first part of this paper, the importance of concerted behavior by workers emerges from examination of some prominent theories which set out to explain wage rigidity in the face of declining demand or excess supply without abandoning key elements of competitive theory. In the second part, the importance of certain Keynesian and satisficing behavioral postulates in motivating concerted worker behavior is suggested by the shortcomings of some contemporary economic models of the trade union which assume expected utility maximization and accurate knowledge of market conditions under ordinary circumstances.

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Contemporary economic analysis has been generating models which make unorganized labor markets behave, in some important respects, as if they were unionized, or which make unions behave, in some important respects, as if they were not. Models of the first variety have been invoked to explain the phenomena of rigid wages and unemployment in the face of a slump in demand; they can be found in the literature on Keynesianism, human capital, implicit contracts, and efficiency wages. While these theories, plus theories of market segmentation, may have been regarded as competitive entrants in an intellectual sweepstakes, they have all made important contributions to the analysis of labor market behavior.

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But none of them has succeeded convincingly in reaching a common (if implicit) objective, which was to explain gross market failure without recourse to concerted behavior by workers or restrictive regulation by public authority. (Design, deployment, and reinforcement of these two instrumentalities have of course constituted the principal functions of modern trade unions, but the two have also been found in the absence of "continuous associations of wage earners.")

#### Keynesian workers

Keynes attributed downward rigidity of money wages to what he regarded as reluctance by any worker or group of workers to countenance the prospect of a reduction in both their "relative" money and their real wage. He regarded such resistance as reasonable and understandable even when (a) the cost of living was already falling and (b) jobs were getting scarcer and the threat of layoff was rising and when, therefore, orthodox economics would brand that behavior as irrational. But what would prevent an employer from simply posting a lower wage if that is what he wants, and what would prevent an involuntarily unemployed worker from accepting it? (By definition, the latter is willing and able to do the work at a lower wage.) Under the circumstances, an effective deterrent would appear to require concerted resistance to a wage cut by workers currently employed. Indeed, Keynes

evidently distilled his theory of individual worker psychology from his observation and (sympathetic) interpretation of union behavior and labor unrest in Britain's interwar period (Keynes, 1963 ed.; Renshaw, 1975). Inversely, however, one can infer a Keynesian theory of the formation of trade unions: if workers cannot individually give effect to their unique propensities in the face of employer opposition, they will be impelled to seek (contramarket) effectiveness through "combination on the part of a group of workers" (Keynes, pp. 15 and 16). But subsequent economists who have sought to explain wage rigidity under competitive conditions as well as adverse market conditions have hypothesized situations under which it might be accepted by employers as well as their employees.

#### Human capitalists

The problem has been addressed inferentially by human capital theory in attempting to explain, not equilibrium unemployment, but temporary labor hoarding -- i.e., employment in excess of labor demand at the going wage. This theory holds that firms would retain some employees whose training is highly specific to their operations during temporary downswings in demand, not only as long as revenues attributable to their work cover their wages, but even after they fail to do so (Becker, 1964). The employer's object in hoarding these workers

would be to protect his investment in their training by minimizing the risk of losing them permanently.

Therefore employment in excess of currently depressed demand at current wages might be preferable to layoffs and/or wage reductions.

Although the analysis of specific human capital has frequently been offered as an explanation of labor hoarding during recessions, it can be regarded as consistent with layoffs. For, according to the theory, employers have been deemed to protect their human capital investments by offering workers with more firm-specific training higher wages in order to deter them from quitting. And a wage high enough to preclude (or significantly reduce the probability of) quitting should also ensure a high recall rate, and should thus enable the firm to apply a policy of temporary layoffs to these workers as well as to more generally trained employees. Moreover, the employer should be able to link a layoff policy with reductions in wages and still rest secure in the expectation that all (or most) souls departed will faithfully return to the fold when demand picks up. What attracts the specifically trained worker to the job for which he is best qualified is the premium which his wage commands over such alternative employment as the more general component of his training fits him for; and since wages for general training (in which employers make no investment, under competitive conditions) should fall

during a downswing in overall demand, wages of the more specifically trained workers can also decline without reducing the premiums and hence the incentives to remain on -- and return to -- the jobs in question. But, wage flexibility combined with layoffs does not generate involuntary unemployment (in a static and perfectly competitive economy). That is freely acknowledged by human capital theorists (Oi, 1962, p. 543), but it is the result which Keynesian and most other rigid-wage models have been driving at.

#### Implicit contracts

According to a theory that won considerable acceptance in the seventies, a combination of rigid wages and equilibrium unemployment can result from "implicit contracts" between employers and their employees, whereby the former insure the latter against the risk of wage reductions in bad times while the workers pay for this insurance in the same coin in which they supposedly pay for the acquisition of general, or transferable, skills-- by accepting lower wage levels over the long haul than they might have secured if (in this case) they were less risk-averse (Azariadis, 1975; Baily, 1974; Gordon, 1974). Implicit contract theory appears to reach Keynesian conclusions more effectively than the original analysis: it ranges employers on the side of wage rigidity rather than in opposition; and it credits workers with

conventionally "rational" decision-making, while its own special psychological assumption of differentially greater risk aversion appears not implausible (and indeed could claim an ancient and respectable academic pedigree).

Nevertheless it was soon claimed that there was less to this model than meets the innocent eye. I don't pretend to follow the tortuous trail blazed by the theoretical critics, but two critical objections can be readily appreciated. First, why would not the firm be willing to offer the risk-shunning worker protection against reductions in employment as well as -- or even in preference to -- wages? (Akerlof and Myazaki, 1980) Second, if it is assumed that management knows more about the true state of business than its workers do, why could it not take advantage of such "private information" to cheat the latter; and, if it could, why would the workers buy insurance from such double dealers?

Two theoretical counterrebuttals have been filed in reply to the first theoretical objection. Employers, it is claimed, would be reluctant to guarantee both wage rates and jobs against cyclical decline, because a guarantee of the wage bill would shift all of the variability in the firm's income to profits. And while workers may seek to minimize the risk of (downward) variation in their incomes, the willingness of employers to take risks has limits of its own. (The assumption of

differential risk aversion is thus weakened.) As for the workers, they might be unwilling to buy a contract which precludes reductions in employment while allowing wages to vary if their employers cannot be prevented from taking advantage of their ignorance by falsely claiming that business is worse than it really is and then proceeding to reduce wage rates. Since employers would not gain any advantage by reducing employment under a jobs-only contract in the same situation, the wage-only guarantee would appear to be rehabilitated (Grossman and Hart, 1983). But since under the latter the employer may require that his employees work more hours in good times than in bad times, he now has an incentive to claim that business is better than it really is and proceed to make his employees work more hours than they would wish. The upshot seems to be that such a constant-wage contract is associated with "overemployment" and hence can't explain involuntary unemployment (Azariadis and Stiglitz, 1983; Green and Kahn, 1983).

Be all that as it may, the existence of long-term employment relationships which offer workers significant elements of security along with sticky wage rates in downswings, while also permitting temporary layoffs (at least in the U.S.), is well known to observers and historians of industrial relations. However, the incidence of these arrangements has been highest in large-scale firms located in the more oligopolistic

sectors of the economy; and when the latter become subjected to more intensely competitive pressures -- as assumed in this theory -- their guarantees are often weakened or even abandoned. Moreover, wage levels have tended to be relatively high, not low, which might suggest that the workers involved have not been paying (or not paying much) for insurance and that employers have not been selling it. The arrangements have depended for their observance on what Arthur Okun (1980) called the "invisible handshake," backed by the firm's concern for its reputation as an employer. And finally, breaches have occurred under adverse conditions, recognized as such by both sides; and when employees have sought more binding instruments of enforcement, they sometimes (notably in the 1930's) turned unionist in an effort to replace implicit contracts with explicit contracts.

#### Efficiency wages

A less conventional theory of sticky wages and involuntary unemployment -- but one of long standing -- holds that employers are reluctant to reduce wages when confronted by a downswing in demand because they fear that doing so would result in a reduction in worker efficiency. According to a recent version of this theory (Shapiro and Stiglitz, 1984), the individual worker is deterred from "shirking" only by the probability that he will be caught and fired from a job that pays him more

than he could hope to receive elsewhere (i.e., on another job or on unemployment compensation). If employers wish to reduce wages, they would have to spend more on "monitoring" (supervision) to prevent increased shirking and loss of productivity; if, instead, they hold the line on wages, shirking will be restrained by the resulting increase in unemployment throughout the economy and the consequent fear of job loss.

Thus the degree of wage stickiness and the level of unemployment depend (among other things) on the cost of monitoring to the firm; but this theory conveys an exaggerated impression of the importance of detection of employee inefficiency by shrugging off or ignoring some well-known facts of plant life. Shirking includes absenteeism and tardiness, which are not costly to detect. Workers with bad work habits can be detected and weeded out during short probationary periods. Moreover, discipline is "graded" and applied "progressively," depending both on the gravity of the offense and the number of individual infractions. Hence the probability of dismissal -- which is the ultimate punishment and the bottom line for the worker in this model -- can be increased even if the probability and cost of detection are not.

Under a different and older version of what is now called the efficiency wage hypothesis, the worker is viewed as regarding a lower level of wages, not as a new

equilibrium to which he will adjust with a correspondingly reduced level of effort, but as a disequilibrium situation which he aims at rectifying by an instrumental and temporary withdrawal of efficiency. This response is triggered by a common feeling of inequity and resentment over the breach of an implicit contract, not by a lessened fear of losing a job which appears to have suffered a loss in its relative attractiveness. It takes the form of concerted action, and management's defenses against concerted withdrawals of efficiency are weaker than are their defenses against individual infractions of discipline, which are less likely to be bunched together for strategic reasons. Detection is not the primary problem when everyone is breaking some rule or other. Potential economies of exemplary discipline (singling out ringleaders) are restricted in the presence of group cohesiveness; and the cost of multiple replacements is "lumpy" (Ulman, 1987).

Still, restriction of output by unorganized workers has its limitations as a wage-earner weapon. It may avert wage reductions, but the threat of strikes by continuous associations, established over wider competitive areas, is better able "to exact higher wages or more favorable working conditions" (Slichter, 1920). Informal and ad hoc collective action has not infrequently given way to full-fledged trade unionism and collective bargaining. That sequence, however, is

neither inevitable nor irreversible; nor could refusal by employers to reduce wages in bad times always be taken as evidence of a credible threat of unionization.

But (wrote Hicks in 1932)...even in a market where labour is still unorganised, the principal check of this sort on the action of employers is generally their fear that reductions will stimulate combined resistance (1964, p. 137).

### Segmented markets

Some of the factors that have been assigned causal roles in the theorizing about unemployment and unresponsive wage levels have also been cited in attempts to explain unresponsive wage structures which mark the boundaries separating labor markets containing good jobs at good wages from labor markets containing bad jobs at low wages. Instead of exerting downward pressure on the higher sectoral wages, the excess supplies of labor available to the "primary" market exert downward pressure on the "secondary" markets. How can this economically perverse result be explained?

One influential account (Doeringer and Piore, 1971) attributed high wages in the internal markets in major part to what its authors regarded as the "tremendous amount of power" conferred on workers who possessed job-specific skills (or human capital) and on whom enterprise managers must depend for the training of junior employees; and they also assigned to "custom" a role in motivating employees to resist changes in wages and other

conditions which they had come to regard as established under the terms of what later became known as implicit contracts. But what was to prevent competition among job applicants (attracted from the secondary sectors) from holding down entry-level wages sufficiently to equalize rates of return on human capital investments and present values of career earnings among the different sectors?

An obvious candidate was trade unionism, which became a ubiquitous feature of these high-wage sectors in the United States after the mid-1930's or, before that, the threat of unionism in large-scale oligopolistic firms (often with relatively high rates of growth in productivity (Gordon, Edwards, and Reich, 1982; Reich, 1984). Slichter (1929) had found the origin of internal labor markets in attempts by big corporations to preclude a return to unionism by maintaining wages relative to prices in the depression of 1920-21, as a result of which "employers were compelled to make their men more efficient." This they did "by developing a stable work force and maintaining the good will and cooperation of the men" through an array of benefit programs, promotion ladders, and other paternalistic devices which came collectively to be known as "Welfare Capitalism" and which, it might be added, made it more feasible for employers to invest in the development of those firm-specific skills that were later assigned a causal role in the analysis of wage differentiation and market

segmentation. The imposition of high wages for these reasons meant that individual workers were denied the competitive option of paying for the acquisition of general, or transferable, skills by bidding down entry-level wages; but low rates of turnover resulting from the high wages -- and other features of welfare capitalism -- presumably made it worthwhile for their employers to finance general as well as specific training. Meanwhile a study by Hildebrand and Delahanty (1966) had attributed excess supplies of unskilled labor in the fifties and sixties in good part to the role of collective bargaining in maintaining and increasing relatively high entry-level wages in high-wage jurisdictions.

A more recent analysis invites one to view unionism less as a cause of economically inefficient market segmentation than as a beneficent by-product, generated in reaction to and as a preventive of "opportunistic" exploitation of individual monopoly positions by workers endowed with firm-specific knowhow. This line of analysis has constituted an important contribution to information and organization theory; but as an implicit theory of unionism I find it less convincing than the Keynesian and the historically based models. It is not readily reconciled with the high adversarial content of union-management relations. And one might also wonder whether it does not impute too much individual monopoly power to members of blue-collar work forces so many of

whom hold jobs which, however "idiosyncratic" might be their content, are designed to be mastered by semiskilled production workers. Nevertheless, this panglossian model could claim kinship (more or less extended) with more explicit theories which present the union either as improving an otherwise imperfect economy in the course of its collective efforts on behalf of its own members or as ultimately unable to prevail against salutary competitive forces.

## II

While some economists, who believe that wages tend to be relatively unresponsive to declines in demand, have been trying to explain that phenomenon in the absence of unionism (or other institutional restraints), others have been trying to explain whether, how, or why unions can act "rationally" in opposition to competitive market forces. Ever since the clash between those two ideological Titans of the nineteenth century, the Wages Fund theory and the Lump of Labor cum Purchasing Power theories, differing assessments of the elasticities of labor demand and supply have underlain differences in the assessment of both the economic strength of trade unions and their social utility. Economists in the main stream ultimately wriggled out of the strait jacket in which Wages Fund had confined them; and Marshall (1928 ed.) even derived special theoretical conditions (monopsony)

under which unions could raise wages (of low-paid and immobile workers) at the expense of profits rather than jobs. But he also warned that normally and in the long run union power would be subject to restraint by strong forces of competition, substitution, and mobility. A union could find it possible to raise wages significantly and "permanently" only where specified conditions combined to make the demand for the labor of its members "stiff and inelastic" (Marshall, 1928 ed.) and, further, only where the supply of such labor is also inelastic -- lest "interlopers find their way in" and undermine the union wage. It might be noted, however, that this early analysis ignored the possible existence of barriers to entry consisting of fixed set-up costs and also of costs of resisting organization that might vary directly with the level of the union's wage "premium."

Friedman (1951), applying the Marshallian analysis to postwar conditions in the U.S., argued that unionists favored by conditions of inelastic demand were largely confined to a relatively small minority in skilled crafts and that "In many cases, so to speak, unions are simply thermometers registering the heat rather than furnaces producing the heat." This model of the weak union proved very influential among economists for a while. However, most empirical studies estimated that in the 1970's the wages of union members were significantly and substantially higher than those of union members in

otherwise comparable circumstances; nor is there evidence that these differentials (mostly between 15 and 25 per cent) were neutralized by favorable differentials in productivity. On the other hand, these postwar premia might be interpreted as a transitory, if long-lived phenomenon. They were associated with a steep decline in the degree of union organization in the U.S., and this could be taken as evidence that the unions had been helping to put themselves out of business by attracting "interlopers" (foreign as well as domestic) and by making it more worthwhile for established nonunion firms to put resources into resisting organization.

#### Analogy to the firm

Nevertheless, acceleration of the decline of American unionism in the eighties was matched by an upsurge in the production of academic models of the union, which assumed its ability not only to set wages at premium levels but even, in most cases, to set them at whatever levels they saw fit. This work had been anticipated by a pioneering model produced by Dunlop (1944) in the 1940's. Analogizing to profit-maximizing by the firm in monopoly theory, he postulated the wage bill as the union's maximand. This was less satisfactory to most of his fellow institutional labor economists and other students of industrial relations than to later economists in the conventional mode.

The Institutionalists

The institutionalists, led by Ross (1948), maintained that union wage policy is driven essentially by internal political considerations, instead of conforming to the contours of the relevant economic environment. A more up-to-date institutionalist model might view the union's target wage as a function of the employment position of the membership, but more importantly of such Keynesian variables as relative and real wages and also the profitability of the employer. Employment can be as much of a political variable as the others (each job is a vote) but it may not count for as much as a determinant of wage policy -- whether due to the myopia of unionists (ignoring the long-run effects of wage increases on employment via substitution by employers and consumers), to unionists' reliance on their employers to keep employment high by keeping settlements sufficiently below union demands (Mitchell, 1972), or to wishful thinking (or willingness to incur risk of job loss -- in contrast to the high risk aversion conventionally imputed to the individual wage earner).

On the other hand, this union is a "satisficing" institution which will not always exploit its potential bargaining power to the fullest extent possible. When economic stagnation or decline threaten what its members regard as minimally acceptable -- and equitably

imperative -- levels of wages or employment, it may well push for the latter to a point where the costs of striking exceed obtainable gains. But in terms of economic growth or recovery, the union may be content with settlements which equal or exceed the expectations of the membership while permitting profits, output, and employment to expand. Thus while unions can be called forth by conditions of stringency which disappoint expectations held by working people, it is economic growth which supplies the lubricant conducive to the continuing viability of collective bargaining.

The New Utilitarians

The payroll maximization model can be regarded as a special case of (as well as a precursor to) the new conventional theory which assumes that the union

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the expected utility of its "representative" member. [The latter is determined by the wage and the probability of being employed at that wage, between that wage and nonpecuniary compensation not so employed assumed to a level of the union. It also varies directly with whatever compensation (including nonpecuniary satisfaction) the individual can obtain when not so employed, but it varies inversely with the (remaining) probability of not being employed at the union wage.

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chosen by the union varies inversely with the elasticity of labor demand. It also varies inversely with the degree of risk aversion of the unionists. In view of the rather high values normally imputed to both variables in conventional analysis, the union wage yielded by these assumptions might be regarded as lower than the wage generated by institutionalist models -- but hence lending less plausibility to the initial assumption of wage-setting power. More recent models, however, have sought to uncover additional sources of union strength.

The union as a collective "voice" (Or as an echo?)

In their adaptation of the "exit-voice" theory to industrial relations, Freeman and Medoff (1976, 1979, 1980) argue that unions can offset their negotiated wage increases by negotiated grievance procedures which, by providing employees with an alternative to quitting and a source of heightened dignity and morale, reduce turnover costs, encourage employer investment in training, and raise productivity. This, however, is a somewhat idealized view of how grievance systems under collective bargaining have worked in practice and one which ignores their adversarial content. Moreover, the theory does not specify any institutional mechanism which links the grievance procedure to the process of wage determination, so that cost increases generated by the latter might be constrained to the productivity increases resulting

(allegedly) from the former. In any event, initial claims that unions exerted as strong a positive effect on productivity (apart from effects attributable to their wage increases) as on wages were dropped as the result of later empirical work. It has also suggested that, if unions do raise productivity as advertised herein, employers would have looked on them in a more kindly fashion, or at least would have more faithfully replicated union grievance procedures, with the final stage of impartial arbitration, in their nonunion establishments.

According to another view, the flip side of the sort of increased productivity associated with unionism by the voice theory consists in more onerous or otherwise undesirable conditions of work. The latter might be taken as given and elicit unionism as a way to secure compensatory wage differentials for the workers involved, in which case the union voice is really a market echo. Alternatively, the poorer nonpecuniary conditions of work can be regarded as adjustments made by employers to offset wage increases wrested from them by union muscle (Duncan and Stafford, 1980). Evidence on the qualitative nature of nonpecuniary conditions of work, however, has tended to be (not surprisingly) tenuous and contradictory. Moreover, this argument ignores the fact that, at the same time that unions have bargained over pay, they have also sought to reduce required effort or

increase security by "bargaining over the production function." Thus instead of a combination of poor working conditions and higher productivity, collective bargaining could be associated with a combination of favorable working conditions and lower productivity. In contrast with both of these possible outcomes, the voice theory envisions a combination of better conditions and higher productivity. But whatever its shortcomings, this theory has the merit of focussing attention on some of the nonwage bargaining activities of the union in its quest for equitable treatment, security, and protection against the imposition of onerous working conditions on its members.

#### Efficient contracts

If the voice theory suggests that unions, through devices like the grievance procedure, make it profitable for employers to hire more labor at the union wage, the "efficient contract" theory asserts that unions oblige employers to hire more labor than they would wish to at that wage. However, the economist regards the outcome of this double-barreled deployment of union monopoly power as "efficient" because it is not characterized by a level of employment which would simultaneously leave the employer wanting to hire more labor and the members of the work force wanting to sell more labor at some lower wage. (One example of such an efficient contract would

occur if the firm agreed to employ exactly as much labor at the union wage as it would have at a competitively determined wage (Hall and Lilien, 1979).

Although collective agreements have only rarely specified minimum overall levels of employment or total wage bills, as Leontief (1946) had anticipated, it was suggested (by McDonald and Solow, 1981) that the same result might -- although it need not (Ulman, 1955) -- be approximated via the large variety of working arrangements which have been frequently negotiated or protected under collective bargaining. Like the voice theory, these models take important nonwage bargaining activities of unions into account. But it is ironic that arrangements which are labeled in everyday life as "restrictive practices" because they result in the wasteful deployment of labor should be classified by economists as "efficient contracts" because (in effect) they prevent management from employing too little labor. Such efficiency must be recognized to be a very narrow and private concept and can indeed make for inefficiency in a global context.

#### The competitive theory

According to this model (Lazear, 1983), workers are displaced by the imposition of a union wage on their employers, but, instead of becoming unemployed, they are hired by nonunion firms in the same sector, as the latter

find it profitable to resist the union and pay a lower wage. Thus the union's bargaining power is determined by (inter al.) costs of nonunion operation. In this model, however, employees in nonunion firms are included as members of the union, whose welfare varies directly with the level of the nonunion wages as well as the union wage. Thus the union must make the best of a wage-wage instead of a wage-employment tradeoff: it will set the union wage high enough to induce a nonunion sector within its jurisdiction, but not one so large that it will make the probability of working at that wage too low or that it will induce too low a nonunion wage for which some of its members must work.

In depicting the economy as a group of partially organized sectors, this theory accords with the reality of the contemporary American scene. And if more unions were to allow their wage policies to be more influenced by nonunion competition, they might yet become better able to achieve a state of equilibrium in their current environment. But in most cases, of course, membership in a union does not extend beyond the territory occupied by its collective bargaining contracts. And even in jurisdictions where the duration of the job is short and members may go in and out of nonunion work, unions have been as likely as not to rationalize their wage policies on the belief -- or in the hope -- that "the best organizing weapon is a good contract" and that raising

the union wage might shrink the nonunion sector rather than their own domain.

### End game

In the case of international competition, the wage level in the foreign "nonunion" part of an industry obviously cannot determine the utility of the representative worker in the manner described by the competitive model, because the worker does not have the option of working in the foreign sector. Presumably the union would be confronted once again with a wage-employment tradeoff, and the latter would reflect the strength of the Marshallian determinants of the responsiveness of employment to wage changes. In fact, a recent application of Marshallian demand analysis found a source of increased union bargaining power in declining - - rather than increasing -- levels of growth in demand in the 1970's. Lower (or in some cases zero) investment in more modern labor-saving plant and equipment could be counted on to reduce management's ability to substitute capital for labor and therefore to encourage the unions to press for higher wage increases (Lawrence and Lawrence, 1985). It has been widely presumed, on the other hand, that, as demand for the output of these U.S. manufacturing industries declined under the stimulus of increased foreign competition, it became more elastic; and increased price elasticity of product demand would

make for increased wage elasticity of labor demand. Thus if labor became relatively more essential in production, its output became less essential to its employer's customers. Moreover, even if labor substitutability in production is assumed to be a more important influence than product substitutability in consumption, the argument implies that negotiated wage increases should decline during periods of industrial growth, as the authors themselves observe. It might strike one as more plausible to argue that unions, having demonstrated a tendency to underestimate their employers' capacity to substitute capital for labor in better times, happened to get things right in bad times; and, further, that they could distill short-term bargaining power from their employers' financial and even competitive weakness.

#### Insiders and outsiders

Another theory, based on the relationship between "insiders" and "outsiders," has also regarded economic decline as a source of union-imposed wage increases, but only when that decline is unanticipated and comes as a "shock" (Blanchard and Summers, 1986). The union is regarded as intent on setting the highest wage for its current members that is consistent with their continued employment. If it anticipates a decline in demand, it would accordingly reduce the wage by enough to induce the employer to leave the level of employment unchanged

(provided labor demand is sufficiently elastic, or responsive to a wage cut). But if the decline in demand comes as an unanticipated "shock," the employer makes the first adjustment by reducing employment. Because membership is conditioned on employment in the bargaining sector (in sharp contrast to the competitive model), reducing employment reduces the current membership. After employment has been cut, the union would not seek to reduce wages in order to regain its former level; indeed, if demand is expected to recover (following the shock), the union would now press for a higher wage that would preclude an increase to the pre-shock levels of employment and membership. Yesterday's employment is yesterday's membership is history. Thus, the reduced level of employment tends to perpetuate itself (i.e., "hysteresis") by inducing the surviving insiders to ratchet up their wage.

The hypothesis that the union would not be particularly interested in restraining its wage in the interests of those beyond the pale of membership has been invoked to help explain the concentration of unemployment among new entrants to the labor force (mainly school-leavers and women) under centralized bargaining in European countries in the second half of the 1970's (Flanagan, Soskice, and Ulman, 1983, p. 655). And this theory, with the inclusion of the shock hypothesis, has been used to explain the persistence of high levels of

unemployment in the major European countries since the early 1980's (Blanchard and Summers, 1986).

However, the usefulness of the first proposition -- that the union would restrain its wage in the interest of its current membership when adverse conditions are anticipated -- is problematical. Given that assumption, the occurrence of a shock is required to explain subsequent wage rigidity or advancement; but why would not an employer feel encouraged to respond to an adverse shock by requesting a wage cut, or similar "concession," from a union which he knows to have been "normally" congenial to such a course of action before he decides on whether or not to pass out the pink slips? This model denies that option to the employer because it is one of those theories that assume that the union has the exclusive power to set wages. Therefore the union must act as if in unilateral conformity with some Doctrine of the Immaculate Concession, under foreseeably adverse conditions. In real life, of course, concession bargaining typically originates with employer requests. When, therefore, adversely impacted employers do not approach unions before laying off their members, it is presumably because they are deterred by the belief, based on accumulated experience, that the quest would have been futile (or, if pushed past "the point of impasse," too costly). The union snub would have issued from an ingrained belief in the inelasticity of demand and hence

the suspicion that wage restraint is a highly dubious venture as well as one in which those who bear the costs stand to reap little (if any) gain. And if unions do not subordinate their wage policies to the job security interests of their own members, it should come as no surprise that they fail to subordinate their wage policies to the employment interests of other workers.

Finally, union rejection of wage flexibility as a means of maintaining or increasing employment does not necessarily imply a lack of concern about unemployment; nor does it connote a lack of determination to reach that objective by other means. Hiring of outsiders may result from a variety of make-work and share-work rules and incentives, which have been referred to in connection with efficient contract theories. Thus the introduction of "penalty pay" for overtime in the U.S. was originally intended to induce the hiring of additional shifts. Recent negotiated reductions in the length of the standard work week by major German unions have also been designed to reduce unemployment. Unsurprisingly, the results of make-work and share-work measures, which increase unit costs, have often disappointed their sponsors. Their effectiveness in maintaining or increasing employment is likely to be greater in the short run than in the long run, when demand becomes more elastic -- just as the effectiveness of wage flexibility

is likely to be greater in the long run than in the short run.

We might also note that the hiring of outsiders may serve the interests of those already inside the union. We have already discussed how a union (modeled on institutionalist lines) might realistically settle for a wage which permits expansion of output and employment provided that it can thereby satisfy some "externally" generated conditions of acceptability to the membership. And in so doing it could reduce not only the probability of occurrence or probable duration of a strike but also (via an increase in membership) the per capita fixed costs of unionism. Thus, we are led to reject the implication of insider-outsider theory that a union will necessarily exploit an anticipated growth in demand by raising wages to levels high enough to preclude growth in employment. And with it we must also reject Henry Simons' (1944, p. 132) classic precursor of contemporary insider-outsider theory, according to which a labor leader, "should...seek, controlling prices via labor costs, to restrict production as rapidly as consistent with decline of my membership by death and retirement...." (Since the last surviving member happily rakes in a handsome pot, I have dubbed this model of institutional suicide the Cheshire Cat Theory, for pedagogical purposes.)

A majority on the inside

Yet another theory locates the key to union wage behavior in the institution of seniority, combined with majority rule. This combination should result in the determination, at any point in time, of a wage level that causes a loss of employment which is concentrated in a large minority of lower-seniority employees. Presumably the wage will be set low enough to accommodate the continued employment of the "median voter" in the union and high enough to terminate the employment of the minority with lower seniority. This model can be regarded as an extension of the insider-outsider model, in which some of the insiders (as well as nonmembers) are excluded from employment by a wage voted on by the majority of insiders in full knowledge of its probable employment consequences. It betrays the same tendency to institutional suicide characteristic of the Cheshire Cat model: each successive wage-setting leaves a smaller (and more senior) work force in its wake. (This has been regarded as "a disturbing implication" by two proponents [Blair and Crawford, 1984, p. 556].)

American unions have in fact pushed very hard for the seniority principle (in opposition to managerial criteria of "ability, merit, and capacity"), primarily because it has served as the most tangible embodiment of their historic objectives of job security and "equity." In this respect, however, they have viewed it primarily

(although not exclusively) as administering temporary layoffs in the course of a continuing and long-term employment relationship, and they have invariably combined layoff seniority with recall seniority. Now in this capacity layoff seniority could command the support of short-service as well as senior employees, because the former could (as Slichter noted in an early assessment of guaranteed employment systems) "see a reasonably good prospect of soon becoming members of the preferred group" (Slichter, 1941, p. 129). The younger worker might expect to enjoy the gains from a current settlement over a longer period in the future than an older worker could look forward to. And while the younger worker must accept a greater chance than the older one of being laid off after a given settlement, his or her costs of layoff will be lower because wages foregone will be lower (both in absolute terms and relative to income from alternative sources). Thus, it by no means follows that the layoff cost of a settlement that is demanded by the more senior and secure members of a union would be regarded by their lower paid and less secure junior colleagues as unacceptably high.

Hence, the divergence of economic interests between workers with greater and less seniority is probably smaller than would be suggested by the difference between their average layoff probabilities. Nor is there reason to believe -- as this theory would suggest (Blair and

Crawford, 1984) -- that the wage policies of unions that ration work through rotary hiring halls (which conform to the usual theoretical assumption that all members face the same probability of employment) have been any more restrained than the wage-policies followed by seniority unions.

### Conclusions

My comments on the first half of the double-barreled proposition with which this paper opens have largely ignored a familiar line of criticism of theories of wage rigidity under conditions of declining demand or excess supply of labor. This type of criticism issues from standard theory which stresses the power of competitive pressures and the pervasiveness of individualistic utility-maximizing behavior. Instead, I have tried to concentrate on various features of these models which might be of interest to an observer of industrial relations. Some might appear to be insightful and valid. Other features might strike one as artificial and contrary to fact; and I have tried to suggest that some of the latter might be dispensed with by appealing to the influence on wage determination of concerted behavior by workers. Indeed, some of the models of wage determination in unorganized labor markets might be regarded as providing implicit theories of collective action. Sources of concerted behavior, whether informal

and ad hoc or formalized in trade unions, can be found in the reactions of Keynesian workers, in both the prevalence and breaching of implicit contracts, in the urge to reduce efficiency in response to threatened wage cuts, even (although more questionably) in reaction to the selfish exploitation of individual monopoly positions based on the possession of specific human capital.

If the first part of the opening proposition inferentially reflects the importance of concerted behavior, the second may be held to reflect the importance of certain traditional worker predispositions in motivating such behavior. Unionists have long been regarded by institutional economists and other observers of industrial relations as prone to view changes in wages and changes in employment as largely independent events - a tendency which has been conducive to the adoption of policies of "nonaccommodation" to adverse market conditions. According to economists in the Marshallian tradition, unions sowing that wind would reap the whirlwind sooner or later. Many have, but later rather than sooner; and if that is the lesson taught by history, unionists seem to have been slow learners.

Later economists who do believe (or assume) that unions are capable of leaving a lasting imprint on wages have rejected the traditional behavioral premises as inconsistent with the orthodox assumption of individual "rationality." Many have replaced the folk wisdom with

assumptions of a constrained utility maximization borrowed from the theory of atomistically competitive markets; but this has obliged them to seek out alternative sources of inelasticity of membership employment and union strength. Their efforts have reflected favorably on their ingenuity and have also yielded interesting insights. But their models have in some cases featured sharply divergent behavioral characteristics and have not infrequently caricatured reality.

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