

## De-Unionization and Macro Performance: What Freeman and Medoff Didn't Do

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Most, if not all, unions have monopoly power, which they can use to raise wages above competitive levels.

– Freeman and Medoff (1984: 6)

The inequality of bargaining power between employees who do not possess full freedom of association or actual liberty of contract and employers who are organized in the corporate or other forms of ownership association substantially burdens and affects the flow of commerce, and tends to aggravate recurrent business depressions, by depressing wage rates and the purchasing power of wage earners in industry and by preventing the stabilization of competitive wage rates and working conditions within and between industries.

– Preamble to the Wagner Act of 1935

### I. Introduction

Freeman and Medoff's seminal book, *What Do Unions Do?*, covered the gamut of research on collective bargaining and its economic impact with one major exception. It had little to say about the macroeconomic impacts of unions. Of course, no book can cover everything, and judgments must be made about what issues are most critical. Moreover, the decision to downplay the macro side in a book that was published in the mid-1980s is understandable, although unfortunate in hindsight for reasons described below.

By the early 1980s, union representation in the private sector had been slipping relative to the size of the U.S. work force for almost three decades. Gradual relative erosion had turned into dramatic absolute declines in union representation during the years immediately preceding the book's appearance. And concession bargaining was in full swing in the union sector — with freezes and cuts in nominal wages and benefits in many industries. Looking to the future, observers could see little sign of a union turnaround.

The political climate was unfriendly to unions in the 1980s. And product markets in sectors with relatively high union concentrations were reeling from such diverse forces as deregulation, an appreciating dollar, low-wage competition from abroad, etc. At the same time, union organizing, as measured, for example, by the number of NLRB representation elections, had fallen sharply. It was hard to conceive of unions having an influence much beyond their immediate declining sector.

Prior to the 1980s, the macro literature on unions, outlined more fully below, largely revolved around some version of “wage-push.” In this view, powerful unions used their bargaining power to push up wages. Their influence extended to the non-union sector through spillover mechanisms. The push on wages contributed to a wage-price spiral that could be checked (perhaps) by governmental direct intervention or — if that approach didn’t work — by sufficiently high unemployment. Thus, unions were seen as potentially raising the unemployment rate over the long term.

Whatever might be said about that view, going forward from 1984 — the year in which the Freeman and Medoff book appeared — it could not have seemed likely to them that unions would in the future be able to trigger wage-price spirals. Freeman and Medoff wrote about more micro-level concerns, e.g., the voice effect of unions, the contrast between union and nonunion benefit packages, issues surrounding internal union affairs and corruption, etc. In a two-page segment, they dismissed the idea that unions could be a cause of inflation mainly on the grounds that the union share of total labor costs had become too small (Freeman and Medoff, 1984: 58–59). Reasonable as their decision to limit discussion of such issues may seem to many readers, it nonetheless left the macro side open. To the extent that macro appears in the book beyond the two-page segment, it involves how unions react to the business cycle (pp. 111–21). Since macro performance with union influence was not much discussed, macro performance without that influence was inherently omitted as well.

As the introductory quote from Freeman and Medoff suggests, they did think that unions had “monopoly” power. Perhaps readers were simply to infer that if there were wage-price spirals related to union monopoly power in the past, there wouldn’t be in the future. Wages would no longer be subject to an “artificial” push from unions except within a shrinking union sector; presumably wages would be determined in the dominant nonunion sector by competitive supply and demand forces. Left unanalyzed by Freeman and Medoff was how a nonunion labor market would actually function.

The micro side more was clear, although — we argue later — incomplete for the same reasons. Unions provided extra employee voice. Nonunion employers would provide less voice. Unions tilted the benefit package toward health insurance and defined-benefit pensions, programs that favored more senior workers. Nonunion employers would be less generous with their benefit offerings.

In short, a reasonable hypothesis is that Freeman and Medoff looked to the future and saw union macro effects as yesterday’s issue, with “yesterday” being the post-World War II period ending around 1980. But as the quote above from the 1935 Wagner Act suggests, if “yesterday” had been extended back to the Great Depression and before, the authors might not have been so quick to drop macro as an important topic. There was a significant body of opinion in the 1930s and before that saw the alternative to the union monopoly face featured in Freeman and Medoff not as textbook competition but as monopsony. In turn, some who held that opinion saw monopsony as affecting macro performance adversely and therefore looked to unions as a corrective force.

We take a somewhat different view of the union-macro interaction below than those pre-war observers. However, we do agree with the older view that monopsony is a good way to look at nonunion labor markets, even if we see some of its macro implications differently. And we note that once monopsony is seen as the default alternative to union representation, there are also *micro* implications that would have rounded out that side of Freeman and Medoff’s analysis. That is, omission of the earlier pre-Wagner Act view left gaps in the book on both the macro and the micro side. Although we focus here primarily on the former, we provide brief reference to the latter as well.

Finally, we point out below that although it may have seemed to Freeman and Medoff that no one going forward from the mid-1980s would be much worried about unions from a macro perspective, with hindsight we know that wasn’t entirely so. There developed a European literature, which we touch on below, that linked macro performance to the nature of the industrial relations system, distinguishing between corporatism, atomistic wage determination, and systems in between. And in the United States, records now available show that macro policymakers — particularly at the Federal Reserve — persisted with viewing unions through the lens of wage-push — despite union erosion. Indeed, even when unions are not explicitly discussed, contemporary macro policy makers and academics often seem stuck on an implicit bargaining model of wages. In effect, they seem to maintain a model of union-style wage setting without unions. In sum, if there ever is a second edition of *What Do Unions Do?*, it would benefit greatly from an added chapter on what nonunion employers do, both in macro and micro terms.

## II. *Unions and Macro Thought Before World War II*

The early idea that union upward pressure on wages would benefit the macro economy was largely based on notions of income distribution and consumer behavior. In essence, the idea was simple enough: Workers were consumers who spent the bulk of their incomes. If their wages were higher, they would have more to spend on consumer goods. But businesses, left to their own devices, would push down wages, a rational strategy for each firm but one leading to a Marxist-type contradiction in capitalism collectively. By pushing down wages, firms would in aggregate cut demand for their own products, thus fomenting business depressions. Unions could prevent this Marxian contradiction, in modern terminology a “coordination failure” on the part of employers, by counteracting the downward pressure on wages.

However, it was not just those on the left of the political spectrum who perceived a danger in competitive wage setting. Herbert Hoover, in the early 1930s, famously urged employers not to cut wages as the economy declined on the same logic followed by those with leftist leanings. Wage cuts would mean reduced worker incomes and therefore reduced demand for consumer goods (Hoover, 1953: 43–46). Note that the Hoover view that wages were set by employers in discretionary fashion (and so could be kept up by businesses in the face of a business downturn at presidential urging) is

implicitly a monopsonistic view. Buyers in truly competitive markets (T-bills, wheat futures) do not have discretion in the prices they pay. They are price takers. In contrast, monopsonistic employers do not take wages as given; they are wage makers, not takers.

In the period before the Great Depression, the federal government was small. Federal expenditures were less than 3 percent of GDP (in contrast to about 15 percent in the early post-World War II period and about one-fifth today). The Keynesian notion of using fiscal policy as an anti-Depression instrument would not have seemed an option to most observers. Moreover, fiscal orthodoxy emphasized the virtue of balanced federal budgets. Thus, in depressions — with revenue declining — cutting expenditures to match revenue seemed prudent (and was attempted). Monetary policy to resist business downturns was also not seen as appropriate. Yes, the monetary authorities might provide liquidity in the short term if a financial “panic” occurred. But policy should otherwise focus on maintaining the gold standard and allow the economy to function on its own. In any event, business downturns were not necessarily seen as exclusively bad outcomes. Rather, they were inherent adjustments of the economy that would clean out prior excesses.

If monetary and fiscal policy were not to be used to cushion the downturns, that left doing something on the wage side as the option. Herbert Hoover on the right was not anti-union. He signed the Norris-LaGuardia Act of 1932 that limited injunctions in labor disputes. Earlier in his presidency, Hoover toyed with the idea of making John L. Lewis, president of the United Mine Workers, Secretary of Labor (Hoover, 1952: 221–22). But although Hoover reported that he supported “collective bargaining by representatives of labor’s own choosing” (Hoover, 1952: 101), he was not about to promote unions actively. So he contented himself with the exhortations noted earlier. Those further to the left, however, were more likely to see encouragement of unions and collective bargaining as a desirable form of anti-depression public policy (Kaufman, 2003b: 20–21; 1996).

When the Roosevelt administration came into power, it abandoned many of the orthodoxies of the past. But it continued the Hoover notion that wage cutting was a process that could only aggravate the Depression. The administration first pursued a strategy — embodied in the 1933 National Industrial Recovery Act (NIRA) — of fostering industry codes with minimum labor standards and encouragement of collective bargaining. There was admittedly fuzziness in the administration’s approach to macro policy since raising prices (“reflation”) seemed also to be part of the agenda. A policy of raising both wages and prices might end up not raising real wages.

In fact, there was a complex of agendas at work in the early New Deal. These involved such matters as the abandonment of the gold standard, pleasing the remnants of the free-silver movement still represented in Congress, supporting farm prices and preventing farm foreclosures, avoiding bank failures, etc. (Mitchell, 2000). While it would be inappropriate to try and elaborate on these varied objectives here, suffice it to say that the Wagner Act’s wage-boosting objective was one of the main survivors.

By 1935, the NIRA had been declared unconstitutional and the National Labor Relations Act (NLRA), or Wagner Act, thereafter continued its approach in fostering collective bargaining. In 1937, the Wagner Act survived a Supreme Court challenge to its constitutionality. And in 1938, minimum wage standards reappeared at the federal level in the form of the Fair Labor Standards Act.

It is sometimes said that the New Deal’s support of wages through unions was an application of “Keynesian” policy in the United States. This interpretation is not entirely correct. It is true that Keynes thought that wage cuts wouldn’t cure the Depression. Nonetheless, raising wages was also not the primary Keynesian cure for underconsumptionism. Keynes emphasized fiscal policy and socialization of investment to increase aggregate demand in the face of business downturns. Thus, it is also worth stressing the influence of the other main logic behind the NLRA, which is not strictly Keynesian: to take wages out of competition in order to stop what was widely labeled as “destructive competition.” But Keynes’ doctrines spread only gradually across the Atlantic. In the postwar period, American Keynesians advanced his agenda, later acknowledging a major role for monetary policy as well by the 1970s.

The fact that unions were not seen as central to avoiding depression after World War II may have been one factor in Freeman and Medoff’s lack of discussion of the macro side of collective bargaining. But that can’t have been the whole story. While unions were not seen as a key to boosting the economy, they were — as outlined below — seen as potentially inflationary. And while inflation (reflation) in the 1930s was an objective of official policy, rising prices were seen as a major problem to be avoided from the 1940s onward. In short, the Wagner Act view was that unions would stabilize the economy by averting wage deflation. But the post-World War II perspective was that unions might destabilize the economy by causing inflation. Both approaches regarded unions as playing a macro role, but the normative nature of that role was quite different: In the 1930s, inflation (and thus the main implication of the monopoly face of unions) was viewed as a desirable outcome, while in the post-World War II era inflation was viewed as undesirable. One might thus say that there are in effect “two faces of the union macro effect,” depending on whether or not the economy is at full employment and in danger of the deleterious effects of inflation.

### III. *Macro Policy and Union Wages in the Post-World War II Period*

Before the 1980s, the importance of union wage determination was reflected in official economic policy. Indeed, much of what might be termed empirical Keynesianism was based on an implicit notion that a bargaining process explained such phenomena as downward wage rigidity. Explanations of wage rigidity from Keynes onward were generally phrased in terms of what workers would “demand,” what they expect and believe is fair, and what they would accept. Downward pressure on the nominal wage would not be acceptable, either because it would likely cut the real wage or because — in the presence of decentralized wage determination — it would lower one group’s wage relative to others (Mitchell, 1993).

As we indicate later, this bargaining approach to wage setting persists in contemporary rhetoric, despite substantial de-unionization of the American work force. But in the era following World War II, the bargaining model was more plausible. Many workers could effectively make their demands and notions of acceptability felt through collective bargaining. The idea that nonunion employers were potentially monopsonistic continued in the literature (e.g., Bronfenbrenner, 1956). But the focus on the union sector and its spillovers tended to eclipse this approach; if there were sufficient spillovers, nonunion employers would be unable to activate their monopsony potential.

During World War II, and again during the Korean War, formal wage-price controls were imposed in the United States to hold down inflation. That is, the official view was that too much wage push would cause inflation — a “Bad Thing” that direct controls were designed to avert. The assumption underlying controls was that wages and labor costs were a key element in pricing. Thus, these programs sought to constrain wages and then allow businesses a markup form of pricing above their costs.

In the Eisenhower years following the Korean War, however, use of formal controls in peacetime was viewed as distortionary and an overreaching of government. Nonetheless, there was much fretting in that period about an upward inflationary creep in wages relative to productivity (Gordon, 1975). And when empirical Keynesianism came to power in the Kennedy-Johnson era, “voluntary” wage-price guideposts were put into place in an explicit attempt to link (and limit) wage setting to national productivity gains (Sheahan, 1967).

As might be expected, the Kennedy-Johnson guideposts program — even with its voluntary character — was controversial and sparked much debate among economists of that period (Shultz and Aliber, 1966). But econometric work supported the notion that union-sector wage “rounds” played an important part in overall wage setting, a belief that was already widely held among labor relations specialists. “Key” settlements in a few major union situations were viewed as setting the pattern for others. Survey research also seemed to provide empirical support for key settlements and wage imitation (Eckstein and Wilson, 1962; Rees and Schultz, 1970: 44–46).

The key settlement idea had a macro implication. If government could affect these key settlements through an “incomes policy,” it could achieve a faster rate of economic growth with lower unemployment and less inflation. The idea was usually phrased in terms of shifting the “Phillips curve” to the left, thus improving the trade-off between inflation and unemployment. Views of this type were not found solely in the United States. Such notions were widely held in other developed countries — especially in Western Europe and Australia, where various forms of incomes policy could be found (Edelman and Fleming, 1965; Ulman and Flanagan, 1971; Hancock, 1981). In turn, the foreign experience with incomes policy was seen in the United States as informing American macro policy (Galenson, 1973).

Clearly, the simplistic view that a few union settlements not only determined most other union wages but also mechanically fixed nonunion wages — through some

sort of threat effect — was an overstatement. Union wages could move up or down relative to other wages over time. Thus, there tended to be a widening of the union wage differential in the period after the Korean War. But given the substantially higher unionization rate than exists at present, it was nonetheless plausible to think that union pay practices influenced nonunion practices, even if they did not completely determine them. Moreover, because union workers received more pay per hour in both wages and benefits and because union workers were more likely to be full-timers than nonunion workers, the private compensation bill in the 1950s disproportionately reflected union wages, even apart from any spillover effects (Jacoby and Mitchell, 1988).

A combination of the rise of union wages relative to nonunion and a recession in the early 1960s, provoked an employer backlash. There followed a concession movement that proved to be a milder version of the concessions that developed in the early 1980s. However, the early 1960s episode occurred without the dramatic membership losses seen in the 1980s. Still in both cases — the early 1960s and the early 1980s — union weakness corresponded to a period of decreased strike incidence. But strike incidence rose again after the early 1960s, although it diminished after the early 1980s. In sum, union militancy, measured by strike activity, did not return in the 1980s as it had two decades before. The early 1960s proved to be a lull; the 1980s, in contrast, proved to be a more durable era of declining union representation with a continued undertow of concession bargaining.

Job insecurity worries related to concerns about displacement due to “automation” seemed to play a role in repressing union wage demands in the early 1960s, along with sluggish economic performance. Thus, wage moderation in exchange for job security was a feature of union wage bargains in such diverse industries as longshoring, meatpacking, and metals. The Kennedy-Johnson guideposts may also have had an initial influence in retarding wages and strikes (Perry, 1967). Notably, a number of unions gave up escalator clauses that linked wages to consumer prices by the mid-1960s. Thus, when the economy recovered and inflation accelerated during the Vietnam build-up, union wage gains under long-term contracts tended to fall behind those in the more frequently adjusted nonunion sector. The result was a drop in the union wage premium during the late 1960s.

Significantly, during this period of temporary reduction of union bargaining power, there were growing complaints of worker scarcity and yet only a gradual uptick of wage inflation. Without upward wage pressure from unions, the result was not demand = supply in the labor market but labor shortages. These transitional phenomena foreshadowed more permanent tendencies seen again in the late 1980s and 1990s (Mitchell, 1989). As we note later, labor shortages in the face of union weakness do not fit well with a model of nonunion wage setting as simple textbook competition. But they do dovetail with monopsony as the default alternative to union influence. The proponents of the Wagner Act would not have been surprised.

#### IV. *Direct Controls and Guidelines in the 1970s*

A move by unions to catch up in wages (restore the union wage premium) began at the end of the 1960s, just as the Nixon administration and the Federal Reserve hoped to engineer a modest anti-inflation slowdown of the economy. The upward push on union wages — even if it could be rationalized as catch-up for an earlier inflation surprise — was seen as a threat to the official anti-inflation strategy. When the attempt at a soft landing turned into outright recession, a new economic policy was announced in 1971.

The history of incomes policy in the United States up through the 1960s might have suggested that such direct interventions were the province only of Democrats. Democrats had imposed controls during World War II and the Korean War and had promulgated voluntary guideposts in the Kennedy-Johnson era. But in 1971 — much to the consternation of some of his key advisors — Republican Richard Nixon imposed formal wage-price controls as an anti-inflation device (Stein, 1994: 159–63). Although it was never officially stated that the program was focused on union wage settlements, officials of organized labor certainly perceived the program that way (Robinson, 1981: 304–20, esp. 312). In much the same manner as their Kennedy-Johnson predecessors, those in the Nixon administration who designed the program had in mind a mechanism to deal with (union) wage push. They even adopted the Kennedy-Johnson notion that the national productivity trend should be factored into the program guideline for wage settlements.

The Nixon controls program went through various phases before being abandoned in the face of inflationary shocks from dollar devaluation and an OPEC oil price hike (Weber, 1973; Weber and Mitchell, 1978; U.S. Office of Economic Stabilization, 1974). Controls did temporarily retard the wage catch-up movement in the union sector during 1972. Strike incidence also fell briefly. However, demand pressures — combined with the abovementioned dollar depreciation and the OPEC oil shock — led to an abrupt resumption of inflation. Termination of controls in 1974 coincided with a period of anti-inflation Federal Reserve restraint and deep recession.

Although inflation declined after the recession of the mid-1970s, there continued to be an upward push on union wages and on the union wage differential. In place of Nixon's formal controls, the Ford administration substituted a vague "Whip Inflation Now" (WIN) voluntary program. Ford created a new Council on Wage and Price Stability to monitor inflationary developments and make reports on troubling trends.

By this time, the notion of a "natural rate of unemployment" — later termed the "Non-Accelerating Inflation Rate of Unemployment" or NAIRU — was replacing the Phillips curve as a macro construct in the economic literature (Friedman, 1968). Pessimism increased about the degree to which unemployment could be reduced without causing inflationary pressure, i.e., about a high NAIRU. However, even on the assumption that there was no long-run Phillips curve, direct intervention might still be rationalized as lowering the NAIRU. Following this logic, the Carter administration created a new program of "voluntary" wage-price guidelines. It also recom-

mended that Congress enact a program of "real wage insurance," essentially tax incentives for workers whose wage settlements met the federal standards.

Congress never enacted Carter's complex tax proposal. But the guidelines program was maintained through the end of Carter's term and the Council on Wage and Price Stability that Carter had inherited from Ford was continued. The focus on union settlements under Carter was clear; the director of the Council adhered to the longstanding notion of key settlements that set the wage pattern.<sup>1</sup> However, the appointment of Paul Volcker as the new chair of the Federal Reserve in the later years of the Carter administration led to a shift in policy at the nation's central bank.

Volcker officially moved the Fed to a monetarist policy focused on control of the money supply rather than control of interest rates. Whether Volcker and his Fed colleagues were ever confirmed monetarists — or whether monetarism was simply a pragmatic choice of an instrument thought necessary to wring inflation out of the system — has been disputed (Neikirk, 1987: 5, 35, 68). Strict monetarism as guide to policy was more plausible in 1979 than it later became, as financial deregulation in the 1980s changed the relationship between measures of the money supply and inflation (Hafer, 2001: 19). Nonetheless, the Volcker appointment by Carter seemed to foreshadow a move toward monetary policy as the key anti-inflation instrument and away from direct intervention in wages and prices.

Organized labor criticized this Fed shift as a violation of its anti-inflation "accord" with the Carter administration. But Carter's policy makers had no hand in the design of the new Fed policy apparently and learned of it after the fact (Greider, 1987: 113; Neikirk, 1987: 65–66). And the new monetary approach continued into the Reagan years where it was to have its major impact on the macro economy and on unions. Moreover, the Reagan administration brought an immediate end to wage-price controls and guidelines. Upon taking office, the Reagan administration dismantled what remained of the Carter guidelines. In the era of deregulation, direct government involvement in wage and price setting was quickly viewed as an anachronism.

#### V. *Weitzman's Solution for Stagflation in the 1980s*

Reducing inflation through recession alone in the early 1980s proved to be a painful process, as many had predicted. By that time, the phrase "stagflation" was commonly applied to a situation in which unemployment and inflation were both high, as they were in the early 1980s. Although Freeman and Medoff did not dwell on union wages from a macro perspective, others in academia did view wage setting as a contributor to stagflation. In particular, Martin L. Weitzman proposed that tax incentives should be provided to move pay practices away from the traditional wage system and towards a "share economy." Weitzman's popular book on the subject with its subtitle — "Conquering Stagflation" — was put out by the same publisher and in the same year (1984) as Freeman and Medoff's volume (See also Weitzman, 1983, 1985, 1987).

Practices such as profit sharing, revenue sharing, and gain sharing were to be encouraged under the Weitzman "share economy" plan through a tax subsidy.

Weitzman's view was that the wage system was rigid in the sense that nominal wages did not move (down) to clear the labor market. He argued for an alternative system in which the share parameter, rather than the wage parameter, would be the rigid element. Thus, workers would have, say, a rigid percentage share of profits or revenue rather than a rigid wage. Weitzman assumed that micro incentives were insufficient to produce widespread share economy pay systems. Firms would not internalize macro-level gains in selecting share economy pay practices and, therefore, a tax incentive was needed to change their pay systems.

The Weitzman plan attracted considerable media attention — far more than the Freeman and Medoff book. Weitzman's proposal was labeled by the *New York Times* as the “best idea since Keynes.”<sup>2</sup> The idea also had resonance because some highly visible union concession settlements had already incorporated profit sharing, notably in the auto industry. Unions, which had traditionally been hostile to profit sharing prior to the 1980s, were being induced to accept such plans as an offset to concessions. The promise was that if their concessions paid off and made their employers more competitive, workers would eventually share in the resulting future profitability.

In Weitzman's model, share economy pay systems expand labor demand by reducing the marginal cost of labor. If all or most employers were induced to shift to a share system, a chronic labor shortage would be created, thus lowering the NAIRU and lessening the impact of recession. In effect, modest negative demand shocks would result in “layoffs” of vacancies rather than of real workers. Only if the shocks were sufficiently severe would employers resort to actual layoffs. Thus, the macro economy would tend to be more stable since it would have a built-in anti-layoff cushion. The NAIRU would be lowered and, despite chronic labor shortages, inflation would not be triggered by the resulting persistence of low unemployment.

Given the interest in alternative pay systems, and Martin Weitzman's close physical proximity (in the Harvard economics department) to Freeman and Medoff at the time he was writing, we can again only speculate on the lack of a macro focus in their volume. One factor may simply have been timing. There were discussions of the macro effects of alternative pay systems prior to Weitzman's proposal. Weitzman's work began to circulate before Freeman and Medoff's book appeared. However, it may nonetheless have come into prominence too late for inclusion. Another factor may have been that Weitzman was not particularly interested in union wage setting, as opposed to wage setting in general. In fact, he tended to think that unions might get in the way of a share economy by limiting employer hiring (so that the share would not be diluted).

With the benefit of hindsight, however, we can see that had some discussion of Weitzman found its way into Freeman and Medoff, the authors might have been led to a deeper analysis of macro wage setting processes under alternative institutional arrangements. Weitzman's share economy plan in essence produced its macro benefits by creating a chronic labor shortage. There was certainly dispute in the economic literature as to whether a Weitzman share economy would work as advertised

(Nordhaus, 1988; Weitzman, 1988). However, the main idea in Weitzman had a certain similarity to monopsony that we explore below more fully. Wages would be lowered (because the tax-favored share would be a substitute) to produce the shortage. In monopsony, of course, wages are also repressed. So under monopsony and under Weitzman the macro economy gets the shortage. But workers don't get the share under monopsony, unlike under the Weitzman approach.

If nonunion employers operate normally as monopsonists, not perfect competitors, we might expect Weitzman effects to occur as a result of de-unionization, even without the tax-based inducements for share plans.<sup>3</sup> And, of course, we did begin to see Weitzman effects without the Weitzman plan by the late 1980s: low unemployment without surging inflation, labor shortages, and only a mild recession when one occurred. Such effects were even more pronounced in the following decade.

## VI. *Union Decline and Monopsony*

[T]he want ads are not a reliable measure of the actual jobs available at any particular time. They are . . . the employers' insurance policy against the relentless turnover of the low-wage workforce. Most of the big hotels run ads almost continuously, if only to build a supply of applicants to replace the current workers as they drift away or are fired, so finding a job is just a matter of being in the right place at the right time and flexible enough to take whatever is being offered that day.  
—Ehrenreich (2001: 15)

It might be assumed that union decline should have made the U.S. labor market more “competitive.” But a key question is what being “competitive” implies for macro analysis in the context of a nonunion labor market. Truly competitive markets are highly sensitive to shortages and surpluses and quickly eradicate both through price adjustments. Thus, one might have expected that if U.S. labor markets were highly competitive by the late 1980s, the labor shortages that developed then should have produced dramatic wage increases. And the same result should certainly have been expected during the labor shortages of the late 1990s, since even more union erosion had occurred.

The fact that there was no wage explosion suggests that if indeed labor markets are now more competitive, the expected characteristics of such “competitive” (i.e., nonunion) markets need further elaboration. Those markets clearly do not work the way competitive markets for Treasury bonds or wheat futures do. Where were the wage increases in the late 1980s and late 1990s that should have been clearing nonunion labor markets? Since such market-clearing wages were not seen, we argue below that a reasonable model of what nonunion employers do is monopsony, not perfect competition. While the union monopoly face is prominent in Freeman and Medoff, the nonunion monopsony face is missing.

It could be argued that for purely empirical micro purposes, Freeman and Medoff did not need to provide much analysis of the nonunion sector. What unions provided “more” of, nonunion employers would provide less of, e.g., more voice in the former,

less in the latter. However, as a justification for unions, Freeman and Medoff did provide a rationale for why the union “more” was better than the nonunion less. In the voice case at least, they could argue that voice is valuable to employers, but that voice requires an outside party to induce workers to provide it. However, if standard classical supply = demand is taken as the default case for nonunion employers, other aspects of unionism at the micro level are suspect as “distortions.”

After all, in the textbook view, “competitive” labor markets match up worker and employer preferences, producing just the right amount of safety, pensions, or whatever. Any deficiency in an area such as safety is made up by a compensating wage differential. On the other hand, if the default model for the nonunion sector is monopsony, there will be underprovision of benefits and of other positive conditions just as there is underprovision of wages.

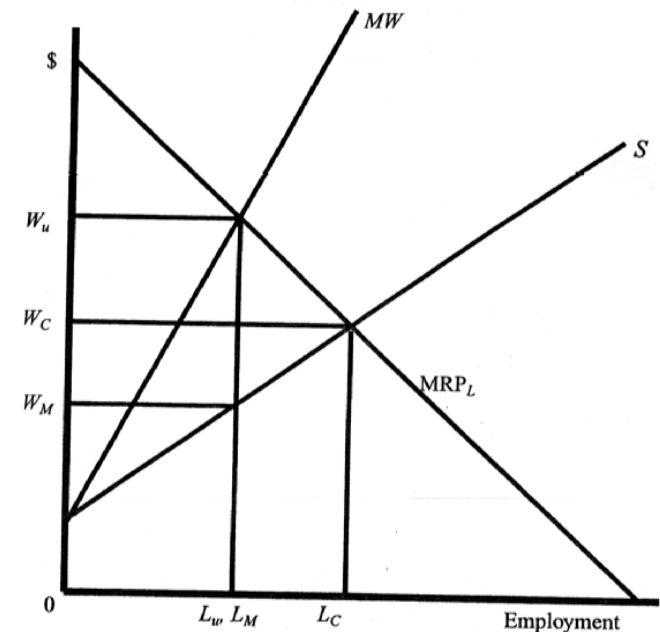
Thus, it is not enough to argue — as some do — that under competition non-union employers will be led to “follow principles of human resource management” (Wachter, 2003: 348). Monopsony doesn’t foreclose such practices but it does suggest an insufficiency of them. To make the matter concrete, consider the difference between the ornate hotel lobby — where the hotel operator competes for guests — and the hotel employees’ entrance, where the hotel competes for workers. The lobby and the employees’ entrance both reflect “competition,” but the consequences are not similar. Competition does not lead hotel operators to cater to employee preferences to the same extent that they cater to those of hotel customers.

If it is important to look at the operation of the nonunion sector explicitly to evaluate the union impact at the micro level, the same can reasonably be expected to be true at the macro level. Below we provide some reasons for analyzing the nonunion sector in monopsonistic terms. We then focus on the implications, implications that were not described in the Freeman and Medoff volume.

*Monopsony in the Labor Market.* Traditionally, labor-market monopsony models were confined to special cases such as company towns or employer collusion in certain occupations. These cases were put forward as an exception to the notion that unions inevitably faced a wage-employment trade-off in bargaining, i.e., a negatively-sloped labor demand curve. In the monopsony case, a counteracting union monopoly effect could raise wages without necessarily decreasing employment. The union monopoly vs. employer monopsony idea, however, typically has been depicted as a curiosity. It was seen as pedagogically useful in helping students learn the microeconomics of the labor market and, perhaps, helpful in explaining unionization of certain odd groups such as nurses and professional athletes (Kaufman, 2003c).

Figure 1 depicts three alternative positions for wage setting. The labor demand curve of the firm is the marginal revenue product of labor ( $MRP_L$ ). For reasons we discuss later, the firm faces an upward-sloping supply curve of labor ( $S$ ). Such a firm, for profit-maximizing purposes, should set the wage at  $W_M$  because the marginal wage ( $MW$ ) intersects the marginal revenue product of labor curve at that point.

Figure 1  
Wage Setting Alternatives



If a powerful union entered the scene, it could raise the wage as high as  $W_U$  without a loss in employment ( $L_U = L_M$ ). An in-between position — which is analogous to textbook competition — is at a wage =  $W_C$  where labor supply = labor demand.<sup>4</sup> Note that at any wage below  $W_C$ , the firm faces a labor shortage since the act of adding an additional worker *willing to accept the going wage* provides marginal revenue in excess of that wage. It is, however, rational for the employer to allow the shortage to persist, rather than raise wages to eliminate it. Monopsony, therefore, creates a chronic labor shortage similar to the shortage envisioned by Weitzman for his share economy. We should expect, therefore, that the macro dynamics of a monopsonistic labor market would be similar to those of the Weitzman model.

Although originally seen as a curiosity, the monopsony model was applied more generally to low-wage labor markets by Card and Krueger (1997: 355–86) who used it to explain the seeming lack of disemployment effects when minimum wages were boosted. Their empirical findings with regard to the minimum wage led to considerable professional and policy debate. But labor-market monopsony more generally began receiving wider attention in microanalysis (Bhaskar et al., 2002; Boal and Ransom, 1997; Manning, 2003).



The rationale for depicting the labor supply curve facing a nonunion employer as upward sloping is based on reasonable assumptions about labor market flows. We note later some other rationales for assuming nonunion monopsony, apart from the flow model. However, the flow model is useful to sketch out, à la Card and Krueger.

*The Flow Model of Monopsony.* A firm which sets a relatively high wage compared to the general average in the relevant labor market will experience low turnover (a low quit rate) and a high absolute inflow of quality workers from the outside labor market. Similarly, a firm that sets a relatively low wage will experience a low absolute inflow of quality workers and a high turnover (quit) rate. These standard personnel assumptions are hardly controversial.

Imagine a firm that is in equilibrium at a low wage so that its high turnover rate is just balanced by new hires. By equilibrium we mean that it is achieving some target level of employment. At such a level, labor inflows and outflows must match, or employment will be changing. Thus, if ten workers arrive in a period, their number must be just balanced by ten quits to keep employment constant.

Now imagine that for some reason the firm raises its wage offer. More workers, say 20, initially are hired per period and a smaller percentage of its work force quits (the higher wage essentially acts as a minimum wage for the monopsonist firm, moving it to expand employment). The firm's work force therefore grows. Eventually, however, a new equilibrium is reached in which the 20 arrivals are just balanced by 20 quits. Although the quit *rate* is lower, the internal work force grows until the quit rate  $\times$  employment = 20 departures. In short, a high wage produces a big work force for the firm and a low wage rate produces a small one. That is the essence of an upward-sloping supply curve of labor, a necessary and sufficient condition for monopsony power unless a union with Freeman and Medoff's monopoly face is present to offset that power.

*Coordination and Monopsony.* We have shown that a nonunion employer will typically have monopsony power, once the dynamics of labor flows are considered. Monopsony does *not* depend on there being a single employer in the labor market, e.g., the old company town example. However, the inherent monopsony in nonunion wage setting could be reinforced by employer coordination of wage policies, a *de facto* buyers' cartel. The longstanding stories of monopsony in the nursing labor market have involved explicit coordination by health provider/employers in urban areas, for example.

Notions of wage imitation in the union sector (pattern bargaining) are a traditional fixture of the industrial relations literature (Ross, 1948; see also Erickson, 1996 for a discussion of change and continuity in patterns in the "post-concession" era). The idea that pay should be set in comparison with relevant groups has long been held by arbitrators called in to settle "interest" disputes (Bernstein, 1954: 51–71). But it has also been found that in the nonunion sector, setting wages through comparisons is widespread.

In fact, formally or informally, an almost universal element of wage setting involves finding out what someone else is paying for similar workers. The information might be gathered through trade associations, government surveys, or simply a phone call to the firm down the street (Bewley, 1999: 92–95). "Benchmarking" is a common management practice for evaluation of, and decision making concerning, all internal policies. How-to-do-it books for personnel managers emphasize such comparisons in setting pay (Parus, 2002).

The line between innocent information gathering and cartel-like collusion is a fine one. There are so-called "safe harbor" guidelines in U.S. antitrust law that attempt to prevent pay surveys from being used for collusive purposes. However, many employers are not aware of these guidelines, and the guidelines themselves seem arbitrary and unlikely to prevent collusive behavior<sup>5</sup> (Davis, 2003). In any event, the existence of tacit agreements not to compete for labor has long been noted in the research literature (Myers and Maclaurin, 1943: 40–43). It need not be the case that all firms pay the same wage — they clearly do not — or that all provide the same percentage wage increase. As long as pay at one firm "influences" pay at others, a certain level of *de facto* coordination is occurring.

In a labor market where unions represent a significant fraction of the work force and in which the threat of organization is real to nonunion employers, union wage setting will have a more general influence than just in the bargaining units where it occurs. Nonunion firms in the 1970s reportedly watched union settlements "very carefully" — and made pay decisions based on their observations — to avoid being unionized (Foulkes, 1980: 166). Under such conditions, firms — union or not — were likely to operate in the wage range at or above  $W_C$  on Figure 1, either because they were forced to do so through bargaining or because they thought it prudent to do so as a defensive measure.

However, such labor markets can be "tipped" into the below  $W_C$  monopsony range, if the union sector declines sufficiently and the threat of new organizing recedes. Such decline and threat reduction characterized the 1980s and 1990s.<sup>6</sup> Thus, it is credible that the U.S. labor market moved away from monopoly towards monopsony wage determination in that period. Wage imitation hasn't disappeared. Rather, the nonunion firms that once were influenced by the union sector now focus on other nonunion employers as reference points and do not pattern their pay policies on union settlements (Erickson and Mitchell, 1995).

*Risk and Monopsony.* In the European context in particular, it has been argued that legal mandates providing job security for incumbent workers actually reduce employment and hiring. The explanation for this outcome is said to be one of risk avoidance. Employers know that if they hire workers and later need to reduce their work forces, terminations may be difficult. As a result, they are said to avoid risk by hiring fewer workers than might be the case under *laissez-faire* conditions (OECD, 1999: 47–132). Employers can be said to "insure" themselves against the risk of expensive



layoffs by paying the costs of having too few workers (or using routes around the mandates such as temps or off-the-books hiring).

The United States does not have European-style mandates related to job security. However, there is a downward inflexibility with regard to nominal wage cuts that we explore below in the context of monopsony dynamics. As a legal matter, wage cuts can occur — no law prevents them so long as the minimum wage is paid. But empirically worker morale is hurt by such cuts, and employers seek to avoid them. Thus, American employers face a risk in offering a nominal wage increase that may be difficult to reverse in the event of subsequent falling demand.

Under such circumstances, nonunion employers might “insure” themselves against the downward wage rigidity risk by offering a lower wage than otherwise. They would, of course, pay a cost in the form of increased worker turnover and vacancies. But just as employers in the European model rationally hire too few, it is rational for U.S. employers to pay too little. A lower-wage “insurance” policy, particularly when adopted by many employers, would be sustainable and monopsonistic in its effect.

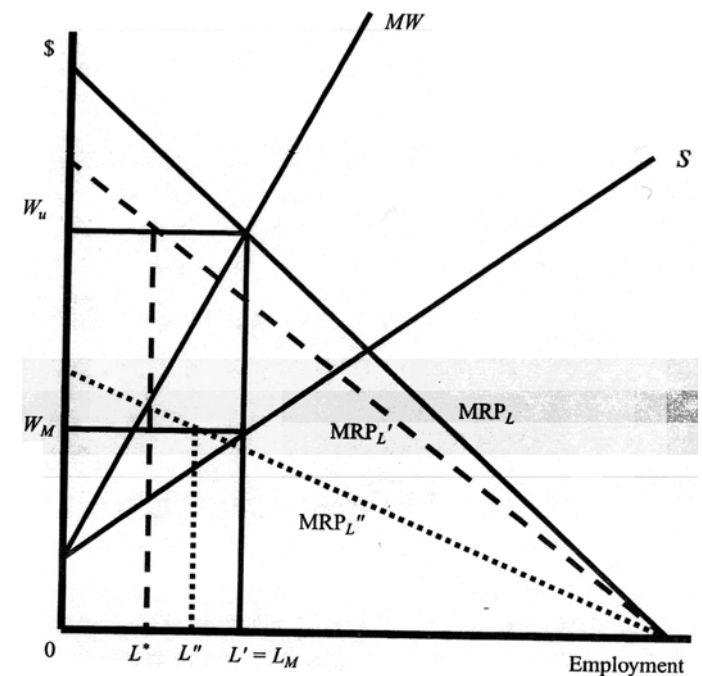
#### VII. Macro Dynamics of Monopsony in the Post-Freeman-and-Medoff Era

Thus, many plausible reasons indicate that monopsony prevails in nonunion labor markets, particularly in the context of a declining union threat effect. In our view, the monopsony model can be usefully extended to the macro arena to explain the puzzles that became evident as unions declined. These puzzles were not foreseen in Freeman and Medoff as a consequence of de-unionization, since they did not explore monopsony or macro. Later authors did sometimes cite the union decline as a possible factor in the drop of the NAIRU (Stiglitz, 1997: 7). But a formal explanation of why and how the union decline would have such an effect on the NAIRU was not fully explored.<sup>7</sup> Even where a connection was made to de-unionization and “a decline in labor rents” or to a fear of reduced job security, the monopsony implication was not explored<sup>8</sup> (Cohen et al., 2002; Stiglitz, 2003: 183).

Under monopsony, however, there is a chronic labor shortage. So, for example, if there is an increase in the labor supply, employers will tend to absorb it. During the 1990s, many observers were surprised by the apparent absorption of welfare recipients pushed into the labor market by welfare reform legislation. Note the parallel with the Weitzman model; the marginal additional worker is sucked into employment in both the Weitzman model and the monopsony model. As Weitzman (1984: 98–99) put it, “A share system looks very much like a labor-shortage economy. Share firms (are) ever hungry for labor — cruising around like vacuum cleaners on wheels, searching . . . for extra workers to pull in at existing compensation. . . .”

Weitzman’s model also tended to provide a cushion in the event of a demand decline. So does monopsony with one addition: downward nominal wage rigidity. During the 1990s and beyond, economists continued to document the phenomenon of such rigidity (Bewley, 1999; Lebow et al., 2003). In fact, this characteristic of the labor market has been well known for decades, although the precise rationale for it

Figure 2  
Monopsony with Demand Decline



has varied. When combined with monopsony as the nonunion default, such rigidity produces Weitzman-type effects.

Figure 2 provides an example. Under monopsony, the wage is set at  $W_M$ . A moderate drop in labor demand from  $MRP_L$  to  $MRP_L'$  produces *no* drop in employment. Even a sharp drop in demand to  $MRP_L''$  produces only a moderate decline in employment to  $L''$ . The pre-existing labor shortage cushions employment against negative demand shocks. The contrast with the higher union wage  $W_U$  is instructive here. Any drop in demand with initial wage =  $W_U$  shows up as reduced employment. Thus, the fall to  $MRP_L'$  cuts employment to  $L^*$ . The fall to  $MRP_L''$  would cut employment to zero. In short, monopsony produces chronic labor shortages. Unemployment is low but wages are not raised to eliminate the shortages. When negative demand shocks occur, monopsony tilts the results toward mild recession instead of major downturns.<sup>9</sup>

Given these macro dynamics, it should come as no surprise that early job creation after a recession often comes in the form of temp hiring. The flow monopsony model, with its easy entrance and exit, should be particularly linked to temp arrange-

ments. Employers “owe” least to temps and add or subtract them at the margin. In the 1990s, researchers noted the connection between low unemployment without wage pressures and the growth of temporary employment (Houseman et al., 2001). The chronic labor shortage associated with monopsony should especially show up in the temp sector. Rapid growth of temp agency employment was just beginning when Freeman and Medoff wrote, and such employment was not analyzed in their book.

#### VIII. *Monopsony, Macro Performance, and the Pros and Cons of Unions*

As noted, Freeman and Medoff did not devote much attention to the macro side of unions, perhaps because they believed that union erosion made the old concerns about wage-push irrelevant. Of course, wage-push does indeed seem unlikely under current circumstances with unions representing less than one in ten private sector workers. There were, we suggest, macro effects in terms of a lower NAIRU and milder recessions (along with micro losses) that Freeman and Medoff did not discuss.

But if Freeman and Medoff had discussed the macro side, and if they had come to the conclusions we do, what would have been their verdict on the pros and cons of unions? In the early 1990s, Freeman reported that he continued to think that on net the balance was positive. On the macro side, he noted that unions no longer had much spillover influence and so could not be charged with causing inflation or unemployment. But since he had no monopsony model of nonunion employers, his analysis did not factor in the macro implications of monopsony (Freeman, 1991: 153–55).

Clearly, a full cost/benefit analysis would have to include macro effects of monopsony as well as micro losses. Monopsony, as indicated earlier, undermines the notion of a competitive matching of employer and employee preferences and gives rise to a host of undesirable economic and social consequences. It suggests that employers, other things equal, will tend to underprovide voice, benefits, and good working conditions absent a union to offset their monopsony power.<sup>10</sup> It suggests downward pressure on wages and a shift of income distribution from labor to capital. The macro effects are thus achieved at the cost of workers’ bargaining power and wage outcomes. In a way, it harks back to the concerns about inequality of bargaining power cited by institutionalists in the late nineteenth and early twentieth centuries (Kaufman, 2003a). By the 1990s, analogous concerns about income inequality, decline in health insurance coverage, and unmet voice needs were again commonplace (Mishel et al., 2003: 113–216; Freeman and Rogers, 1999).

Moreover, while unions might produce macro consequences were they to regain the representation rates seen before the 1980s, there are remedies for such effects. One comes from European literature of the 1980s and beyond and has little direct relevance to the United States. But the other does represent an alternative role for unions in the American context.

During the 1980s, there developed a body of literature — especially in Europe — focusing on different industrial relations systems and their macro consequence. Calmfors and Driffil (1988) argued that the NAIRU would have a humped shaped

relationship to the degree of wage setting centralization in the labor market. And Freeman (1988), in the same symposium, came to similar conclusions. In a highly corporatist or centralized situation, unions, government, and business could coordinate wage policy to account for adverse macro effects. At the other extreme, atomized competition would keep wage pressures down. So it was in the middle — presumably as in the U.S. case before the 1980s — that the NAIRU would be higher than at either extreme. However, from the U.S. perspective, the notion that unions could somehow ever become significant enough to make strict corporatism a realistic alternative seems far-fetched.<sup>11</sup> Is there a possibility that if unions could make it back to their pre-1980s level of influence, adverse macro consequences could be avoided?

Most researchers are doubtful that even that more modest comeback is likely (Bennett and Kaufman, 2002). However, suppose that such a comeback did occur. As we have stressed, monopsony produces Weitzman effects but without the Weitzman share. Unions could redirect their bargaining objectives toward share systems rather than the traditional wage system. Indeed, unions could play a vital part in a Weitzman-style economy. Adoption of programs such as profit sharing could be aided by an entity that could verify that profits were being appropriately accounted, and perhaps by a limited European-style corporatism, or at least greater union and worker voice in company strategy and profit formation. That being said, unions in the private sector are a long way from regaining their pre-1980s position. So concerns about the possible macro consequences were that to occur would now have very low weight in a weighing of unions’ pros and cons.

#### IX. *The Persistence of Wage-Push Thinking*

Up to this point, we have conjectured that Freeman and Medoff did not focus on the macro side because they assumed that the topic had become irrelevant due to union decline. But while that might have seemed a reasonable judgment in the mid-1980s, with hindsight we know now that wage-push thinking by macro policy makers proved resilient. This persistence is remarkable since in academia the kind of “institutional” analysis associated with unions and with the field of industrial relations was in marked decline (Kaufman, 1993).

In the executive branch, monetarist thinking in the Reagan-Bush administrations may have led to a disinterest in union developments.<sup>12</sup> But even within those administrations, some policy makers — after the fact — put great stress on the breaking of the air controllers’ strike as an event leading to a low-inflation economy.<sup>13</sup> At the Federal Reserve, however, wage-push thinking seemed to continue into the 1980s and 1990s. Thanks to the posting of transcripts of the Federal Open Market Committee (FOMC) meetings and related staff documents, we now have inside information on monetary policy.<sup>14</sup>

Consider, for example, discussion of the 1997 United Parcel Service-Teamsters strike. When a settlement was reached, Dallas Fed Bank President Robert McTeer said at the FOMC that the new contract had done “a good deal of damage in the past

couple of weeks. The settlement may go a long way toward undermining the wage flexibility that we started to get in labor markets with the air traffic controllers' strike back in the early 1980s." Fed Chairman Alan Greenspan voiced a similar opinion: "The air traffic controllers' confrontation with President Reagan set in motion a fundamental change in policy for this country more than 15 years ago. It is conceivable that we will look back at the UPS strike and say that it, too, signaled a significant change." In effect, both statements suggest that a union wage deal involving 185,000 workers at a single package delivery firm could somehow undermine Fed policy. That idea is the old key-settlement/wage-push approach.

Apart from the focus on particular settlements, more general discussion of the NAIRU in policy circles and academia is still permeated with notions of bargained wages. Workers are said to "demand" certain conditions or to be unwilling to accept others. These rhetorical descriptions do not sit comfortably with a perfect competition model of the labor market and certainly not with a monopsony approach.

The *Annual Reports* of the Council of Economic Advisors (CEA) in the 1990s provide ongoing examples of this tendency. In its February 1994 *Report*, the CEA gave some credibility to the notion that corporate restructuring of the early 1990s might be raising the NAIRU (pp. 109–13). But the CEA was sure the actual unemployment rate was above the NAIRU so that "wage-push inflation is unlikely to be a factor constraining economic growth in the near future." The implication, however, was that "wage-push" was latent, but poised to arise again, as the labor market tightened.

In its February 1997 *Report*, the Clinton CEA provided an extended discussion of the NAIRU concept. It continued the union-like language: the NAIRU would depend on "workers' real wage expectations," "workers' demands," etc. (pp. 45–50). Presumably, if wages didn't meet those expectations, workers would not accept them. De-unionization was cited as a possible factor in the NAIRU's decline, although it was not clear exactly what the CEA saw as the connection. The CEA also cited job insecurity as a factor, so that "workers may be relatively unwilling to press for the wage gains they could normally command. . . ." (pp. 57–63). Again, the implication was that wage-push (wage-press?) was latent but could reassert itself once the insecurity worries subsided. (And one might expect that low unemployment would lead to reduced anxiety about job loss.)

The final Clinton CEA *Report*, issued in January 2001, had the NAIRU down to 5.1 percent. The lack of inflation in the 1990s at unemployment rates below that level was attributed to a "productivity surprise" that would eventually wear off (pp. 71–74). That is, workers would eventually press (somehow) to capture the gains in productivity once they realized those gains existed.

While insider-outsider/implicit contract models, efficiency wage, and reservation wage models might be used to rationalize such demand/accept terminology, those models are not really compatible with wage-push thinking (Kaufman and Hotchkiss, 1999: 665–68). Rather, they serve to explain downward nominal wage rigidity. Work-

ers experience (possibly costly) morale problems when there are take-aways. Employers may wish to avoid such adverse reactions among their insider employees. Similarly, displaced workers seeking new jobs may initially base their pay expectations on their prior wage level and be reluctant to accept offers for less at new jobs. But such reasoning is a far cry from saying that nonunion workers will take the initiative to push up pay because the labor market tightens.

Perhaps if Freeman and Medoff had had access to Federal Reserve transcripts (not available when they wrote) or if they had foreseen the persistence of bargaining/wage-push thinking among macro policy makers, they would have devoted more attention to the macro side of unions. All we can say, however, is that the macro consequences of de-unionization were not explicitly considered in their book.

### X. Conclusions

In evaluating unions circa 1984, Freeman and Medoff already knew that union-representation as a proportion of the work force had been declining for some time and had taken a sharp drop recently. They appear to have concluded that the pre-1980 concerns about unions and macroeconomic performance no longer merited much analysis. Certainly, the post-1984 evidence reveals further union erosion and ongoing pessimism among researchers about a union comeback. However, the Freeman and Medoff analysis of the macro impact of unions — with the benefit of hindsight — could usefully have been extended to a more focused appraisal of how a largely nonunion economy would function for three main reasons.

First, the older wage-push approach seems to have persisted in macro policy circles long after Freeman and Medoff might have reasonably supposed it would disappear. Discussion of the determination of the NAIRU — even absent explicit consideration of unions — still often seems to be posed in bargaining terms. Workers "demand" certain wages and conditions. They eventually accept particular terms but won't accept others that don't meet their expectations.

Second, the removal of Freeman and Medoff's union monopoly face from employers does not lead to textbook competition in the labor market as the default. Monopsony seems a more useful construct of the nonunion workplace. And monopsony has consequences that help explain the stylized facts of the U.S. macro economy since Freeman and Medoff wrote. Monopsony also has normative implications for employer provision of working conditions ranging from safety to health insurance and other benefits. Those implications do not follow from modeling the nonunion labor market as perfect competition.

Third, explanations after-the-fact of the macro performance of the U.S. economy — especially low unemployment with low inflation in the 1990s — tend to focus on a variety of *ad hoc* explanations ranging from "good luck" to globalism to various "new economy"/surge of productivity stories. Workers nervous about job security are also invoked, although the low unemployment was accompanied by declining probabilities of job loss (Mankiw, 2002; Krueger and Solow, 2001). As one review article

noted, "there is no shortage of hypotheses to explain . . . why (the NAIRU) fell during the 1990s" (Ball and Mankiw, 2002: 134). Put less kindly, there is a surplus of hypotheses, most of which are not closely linked to the most dramatic institutional change in the U.S. labor market: de-unionization. This dramatic institutional change has resulted in a de facto monopsonistic labor market, with low unemployment rates (but perhaps more discouraged workers) and low wages, opposite conditions from what might be expected if the economy were to experience a substantial increase in union density. Perhaps a more systematic, monopsony-based approach to what nonunion employers do would have made subsequent macro developments less surprising.

## NOTES

<sup>1</sup>The director of the Council of Wage and Price Stability stated that if the administration "could get the Teamsters to agree to 20 percent for three years, the United Auto Workers would sign a contract for the same thing. So would steel. Each of these unions wants what the other one has got." Cited in Mitchell (1980: 191).

<sup>2</sup>"Best Idea since Keynes," *New York Times*, editorial, March 28, 1985.

<sup>3</sup>It is important to note that not every alternative to simple time-based wages constitutes a Weitzman share system. In particular, grants of stock — as through an Employee Stock Ownership Plan (ESOP) or through stock options — do not necessarily lower the marginal cost of labor. Much depends on the plan's detailed provisions through which such assets are allocated. Moreover, many "pay for performance" arrangements, such as piece rates or merit bonuses, do not have Weitzman-type properties (and have been part of standard pay practices for many decades). Generally, journalistic reports have tended to exaggerate the incidence of "new" pay practices. Contrary to the media hype concerning stock options, for example, a 1999 U.S. Bureau of Labor Statistics survey (Crimmel and Schildkraut, 2001) found that very few workers were covered by such plans. Those employees who were covered tended to be highly paid managers and professionals. Similarly, BLS surveys suggest that ESOP coverage was very limited as well. Union negotiators began reluctantly accepting lump-sum bonuses in lieu of base pay increases in the 1980s and there was some potential for these bonuses to evolve into *de facto* profit-sharing plans. The evidence on whether such evolution actually occurred is mixed (Bell and Neumark, 1993; Erickson and Ichino, 1994). Thus, while the American pay system will undoubtedly change over time, it is hard to tell a share economy story sufficient to explain the macro performance surprises of the 1990s and beyond.

<sup>4</sup>In the textbook model, the demand curve faces a plethora of employers, each one perceiving the supply curve as a horizontal line at  $W_C$ .

<sup>5</sup>Monopsonistic behavior by employers is subject to antitrust laws but there has been comparatively little litigation in this area. Some cases have been settled out of court. The main exemption is for multiemployer bargaining in union situations (Blair and Harrison, 1993: 110–11).

<sup>6</sup>Farber (2003) finds little empirical evidence of a union threat effect during 1977–2002, a period largely corresponding to substantial de-unionization.

<sup>7</sup>By the mid-1980s, the suggestion was being made that de-unionization could produce a lower NAIRU than was incorporated into the forecasting models of that period (Mitchell, 1986). In more formal terms, a model was proposed in which the labor market produced a real wage, conditional on the unemployment rate allowed by the monetary authority, and product markets produced a cost markup, also conditional on the unemployment rate as a proxy for general economic conditions. Since at the macro level the real wage  $W/P$  is essentially the inverse of the cost markup  $P/W$ , the NAIRU is the unemployment rate that harmonizes the product and labor markets (Mitchell and Zaidi, 1992). This approach appears to have been picked up by the Federal Reserve staff (Brayton et al., 1997). Weakened unions under this approach would lead to

a lower real wage and hence a lower NAIRU. However, the approach does not pick up the monopsony effects with its macro dynamics as demand declines. That is, it does not predict mild recessions.

<sup>8</sup>The "nervous worker" explanation was often made as an explanation of low upward wage pressure. Note, however, that low unemployment in the 1990s brought with it low probabilities of falling from employment into unemployment, (Stewart, 2002). Unemployment insurance new claims — a proxy for layoffs — were also low.

<sup>9</sup>Although we focus in this paper on the United States, the Asian financial crisis illustrates this tendency. Unions in a number of the countries adversely affected by the Asian financial crisis — which bottomed out in 1998 — are either almost non-existent, weak, or government controlled (Kuruvilla and Erickson, 2002). Thus, we might expect that there would be chronic labor shortages and a relatively quick rebound from the negative shock the crisis represented. In fact, that seems to be what occurred. A Nexis/Lexis article count for "labor shortage" and each of the "four-tiger" countries (Singapore, Hong Kong, South Korea, Taiwan) produced the following results for 1995–2000: 1995–538; 1996–563; 1997–608; 1998–376; 1999–526; 2000–730.

<sup>10</sup>For evidence that monopsony extends to conditions of work, see Currie et al. (2002).

<sup>11</sup>In a cross-country study for the World Bank, Aidt and Tzannatos (2002: 79–120) review the empirical literature and find on weak evidence that the Calmfors-Driffil (1988) finding persisted into the 1990s. However, they do find evidence of poorer macro performance in countries with high rates of "bargaining coverage." In the U.S. there is no substantial difference between membership coverage and bargaining coverage so that we would expect macro performance to improve as coverage fell.

<sup>12</sup>A working paper is available from the authors concerning union settlement interpretations at the FOMC and within the Reagan administration (Mitchell and Erickson, 2003).

<sup>13</sup>There is no evidence that the breaking of the strike was viewed as a macro policy before the decision was made to fire the striking air controllers.

<sup>14</sup>The Federal Open Market Committee consists of the Federal Reserve Board of Governors plus a rotating group of presidents of the regional Federal Reserve Banks. For details and transcripts, see <http://www.federalreserve.gov/fomc/>.

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