
A Decade of Concession Bargaining

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That there were dramatic events in union wage determination during the 1980s is not a controversial assertion. Nor is the premise open to much debate that events in the 1980s generally were adverse to the interests of unions and their members. It is easy enough to point to unscheduled contract reopenings (General Motors and Ford, 1982), wage cuts (USX, 1983 and 1987), contracts annulled under bankruptcy proceedings (Continental Airlines, 1983), the introduction of unusual contract features such as two-tier plans (American Airlines, 1983), and strikes that led to replacement of union workers (Phelps-Dodge, 1983). Controversy sets in, however, once further interpretation of these developments is attempted.

Often the big-picture question that is posed is whether the developments of the 1980s were normal and expected reactions to changes in the economic climate. Unfortunately that question is vague, since it fails to specify what "normal" characteristics should be expected. Different observers have different perspectives on just which characteristics of union wage behavior are important. Some observers, for example, emphasize copycat pattern bargaining as the key feature of union behavior. Others, including myself, see long-term contracts with relative insensitivity of wages to short-term business cycle pressures as being much more important (Ready 1990; Mitchell 1990; Freedman 1982).

Another approach is to focus on trying to explain the diversity of reactions in the myriad wage negotiations during the 1980s. For example, one can ask whether the economic condition of particular employers or industries determined their bargaining outcomes (Bell 1989). However, such microeconomic perspectives may allow the big picture to escape. It would hardly be surprising if it were found, for

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example, that unions made concessions to assist floundering enterprises in some instances. They clearly did, as with the wage cuts at the money-losing United Press International news service.

In this chapter, therefore, an intermediate course is charted. I argue that there was indeed a structural break during the 1980s. The break is defined by wage settlements that were lower than might have been expected based on historical relationships. However, the break was not entirely without precedent nor was it without explanation. As I have elsewhere discussed, the early 1960s was a period with some parallels to the 1980s (Mitchell 1982).

The buildup of wage pressure and the later release of that pressure ought not be viewed as a regular, pendulum-type oscillation. The process of rising pressure in the 1970s and the release in the 1980s set in motion forces that changed the environment of bargaining and made a simple return to past conditions unlikely. In short, the 1990s are unlikely to feature a simple return to union bargaining as it existed in the 1970s. Nonetheless, two aspects of union bargaining remain largely as they were in the 1970s (and before). These are the features of union bargaining already identified as most important in my opinion: long-term contracts and a relative insensitivity of union wages to short-term business-cycle influences.

Past Approaches to Modeling Union Bargaining

Union bargaining has long proved puzzling to economists. Early approaches took unions to be monopolists who set an optimum price (wage) while operating along the employer's demand curve for labor. The difficulty with this simple approach was fourfold. First, while monopolists maximize profits in the basic model of price theory, it was hard to specify exactly what unions would maximize. The demand-curve-as-menu idea imposed a wage-employment trade-off on the union, and there was no obvious optimum point in that trade-off. In the internal political context in which unions operate, which could be said to be better, increments of wages or employment? How is that judgment made? A neat answer was not possible.

Second, even if an optimum trade-off point could be specified, it was not clear from the model how downward wage rigidity could be explained. Monopolistic prices (wages) may be higher than competitive prices. But in the simple economic model they are not downwardly inflexible. While ad hoc utility functions for unions could

always be rigged to explain wage rigidity, such explanations were often strained (Carter and Marshall 1972). Even modern explanations exhibit strained assumptions. A recent model, for example, assumes that unions can organize nonunion firms at will and, hence, make up for any membership losses due to demand declines by freely adding more workers from nonunion firms (MacDonald and Robinson 1992).

Third, as more recent theorists have noted, it was unclear why unions would want to operate inefficiently by simply taking the demand curve as given, setting a wage, and then letting the employer set the employment level. Efficient bargains should involve both wage and employment combinations. Yet, aside from reactive work-rule responses to automation, it appears that unions do leave employment decisions mainly to the determination of employers.

Fourth, and probably the most critical difficulty, the historical emphasis on union bargaining objectives often led to a neglect of the employer side of the bargaining relationship. The interaction of union and employer in the context of an adversarial negotiation — one in which each side can potentially inflict great harm on the other — was therefore given insufficient attention. Paradoxically, institutional industrial relations scholars tended to reinforce the de-emphasis on the combat aspect of negotiations. These scholars emphasized the infrequency of strikes and their small impact on the overall economy. Their motive in doing so was largely to suggest a *laissez-faire* public policy toward "emergency disputes." However, the potential costs of a dispute that may be of little concern macro-economically could well be of great moment to the parties immediately concerned.

I do not attempt here a complete solution to all of these problems in the modeling of union wage setting. However, a general approach to interpreting the developments of the 1980s will be sketched, one that avoids the fourth problem — neglect of the employer-union interaction. It will be seen that taking due account of that interaction and marrying it to other views of the union wage process that developed in the 1970s and 1980s provides an adequate explanation of the wave of concession bargaining that characterized the 1980s. At the same time, the experience of the 1980s, because it did put the collective bargaining process under stress, helps illuminate fundamental aspects of that process.

Incidence of Concession Bargaining

Defining a concession bargain poses a conceptual problem, since all bargains in principle involve a give-and-take element. For empirical purposes, however, it has been useful to define concession bargains as a nominal wage freeze or cut. By such a definition, these bargains have the advantage of being relatively easy to identify from available data. Moreover, if one accepts the notion that a nominal zero in wage change determination is something of a "magic number" — a floor below which movement is difficult — then using zero as a basis for defining concessions makes sense. Some theorists will object to a nominal definition of concessions and insist that any approach should be defined in real terms. However, there is sufficient evidence of nominalism in wage setting to justify the proposed definition (Mitchell, 1993).

Table 17.1 applies the nominal definition, and alternatives, to two data sets. The first is the U.S. Bureau of Labor Statistics (BLS) series on major union settlements in the private sector (those involving 1,000 or more workers). The second is based on the Bureau of National Affairs, Inc. (BNA) series on business-sector settlements involving 50 or more employees. While the former is presented in terms of the proportion of workers affected, the latter is measured in terms of the proportion of settlements. Use of workers gives a sense of the general economic importance of the concession movement; use of settlements gives insight into the decisions of individual bargainiers.

The broad definition of concessions in the BLS series (defining concessions as first-year freezes or cuts in the basic wage) suggests that concession bargaining peaked in the period 1982 to 1985 and then began to fall off. Thus, there is a suggestion of a cyclical element in the concession movement. Economic expansion in the second half of the decade reduced concession frequency. If it is assumed that a union contract lasts an average of two to three years, then in the early years of concession bargaining, a very conservative estimate would be that at least one-third of workers under major contracts directly experienced a concession under the broad definition.¹ Although some repeat concessions occurred in later years, enough new contracts involved concessions to suggest that the true proportion by the end of the 1980s was much higher.

At the peak of the business cycle in 1990, in contrast, relatively

Table 17.1. Concession bargaining trends

Year	Major private settlements: workers covered by concessions — BLS		All business sector settlements involving concessions — BNA		
	Broad ^a	Narrow ^b	Broad ^a	Intermediate ^c	Narrow ^b
1981	8%	5%	3%	2%	1%
1982	44	2	12	7	1
1983	37	15	29	21	6
1984	23	5	27	21	7
1985	37	3	25	14	4
1986	30	9	37	15	5
1987	27	4	34	16	4
1988	22	2	27	12	2
1989	8	1	18	5	*
1990	4	*	10	3	*
1991	11	*	10	5	1

Source: Bureau of Labor Statistics (BLS) data from *Current Wage Developments*, Bureau of National Affairs (BNA) data drawn from *Daily Labor Report*.

Note: Major private settlements refers to those covering 1,000 or more workers. All business-sector settlements refers to those covering 50 or more workers and covers certain quasi-commercial public enterprises such as transit systems.

a. First-year settlements involving basic wage freeze or decrease.

b. First-year settlements involving basic wage decrease. For all-business-sector sample, figures for 1981–82 based on estimates from author's concession data file.

c. Broad definition excluding settlements involving lump-sum bonuses and cost-of-living-adjustment payments. Estimates based on author's concession data file.

* Less than 0.5%.

few workers were subject to newly negotiated concessions. Defining concessions narrowly as only first-year wage cuts produces a much lower incidence rate throughout the decade, but also suggests that by the 1990 business cycle peak, concession bargains had largely disappeared. The low frequency of wage cuts compared with the high frequency of wage freezes reinforces the notion that nominal zero is indeed a magic number, a point of strong resistance, in union wage settlements.

BNA data using the broad and narrow definitions produce much the same impression, although they suggest more lingering of concessions in the late 1980s and early 1990s under the broad definition. However, it is possible — using information from the BNA biweekly tabulations — to adjust the broad definition to exclude two potential sources of de facto first-year wage increases, cost of living adjustment (COLA) clauses and lump-sum bonuses. Making

such an exclusion produces the intermediate definition shown on Table 17.1.2

The intermediate series suggests a greater concentration of concession bargaining in the years 1983 and 1984 and, therefore, a lessened significance of concessions in the late 1980s. Unions may have officially agreed to basic wage freezes, but often they obtained pay increases through indirect means in later years. Using the intermediate definition for the second half of the 1980s, the more rapid decline of concessions reinforces the idea that economic expansion reduced concession bargaining.

Accompanying Background Features of the Concession Movement

One of the most notable developments during the 1980s was the decline in union representation of the private work force. Although relative unionization in the private sector had been eroding gradually since the 1950s, the 1980s featured a large absolute loss. Overall, union representation (private and public) fell absolutely from 22.5 million to 19.1 million workers during 1980 through 1990.³ The drop in absolute unionization was more than fully accounted for by losses in the private sector, that is, union representation in public employment rose absolutely (but not proportionately) while private representation dropped substantially in relative and absolute terms. More than 80 percent of the drop in private representation came from the large (major) contracts covering 1,000 or more workers. That is, the large-contract sector suffered disproportionate losses.⁴

Sectoral explanations

Because the 1980s is widely perceived as a period of American deindustrialization, it is often assumed that the decline in unionization mainly reflected changes in the industrial composition of the work force. Union representation was concentrated in heavy industry traditionally, and it might have been supposed that shifts away from manufacturing would explain the representation drop. In fact, however, changing industrial composition — while a negative for unions — explains only one-sixth to one-fourth of the drop in the number of workers represented. The remaining decline, therefore, must be attributed to other influences, including heightened management resistance, changes in worker attitudes, and reduced union organizing efforts.

Management resistance

Management resistance can take several forms. In the case of new union organizing, management might take a hard line by firing union sympathizers and threatening other workers. Such tactics are illegal under existing labor law, but as many observers have noted, the penalties are comparatively low and slow in coming. The degree to which such tactics intensified in the 1980s and the effect this might have had on union representation rates has been the subject of some controversy (Weiler 1983; LaLonde and Meltzer 1991). Nonetheless, it would be difficult to point to a host of significant changes on the legal side that made union organizing any easier during this period.⁵ The search by union representatives, ranging from top officials to dissident activists, for alternatives to traditional National Labor Relations Board (NLRB) organizing suggests that the road was harder (AFL-CIO Committee on the Evolution of Work 1985; Bureau of National Affairs 1991a; La Botz 1991).

Management might also resist new unionization by the soft approach of providing desirable working conditions that nonunion workers would feel were preferable to what a union could provide. There is in fact a long history of such managerial approaches, including the provision of unionesque personnel practices such as grievance arbitration (Foulkes 1980). Such approaches appeared to become more prominent in the 1980s, although there is no handy time series available. It is important to stress that what nonunion workers might expect from unionization is not a constant; the perception by such workers of events in the union sector could alter their views. And, indeed, there is some evidence suggesting that adverse developments affecting union workers led to skepticism of potential nonunion recruits about what unionization could achieve (Farber 1990).

Finally, as a managerial strategy, previously unionized firms might seek to expand their nonunion operations and to shrink their older, unionized plants. Such tendencies were documented by researchers in the 1980s and reported in the popular press (Verma 1985). For example, General Electric's internal rate of unionization declined from 50 percent in 1981 to 35 percent in 1988, and it was typically the newer plants that were nonunion (Bernstein 1988). In some cases in the 1980s, there were dramatic conversions of unionized companies to de facto nonunion status through replacement of union workers during labor disputes. The histories of Continental Airlines and Eastern Airlines fall squarely into this category.

It is important to note, however, that there was a sharp division of

results between the public and private sectors during the 1980s. In the government sector, unions just about held their own in terms of representation and, in fact, represented over 40 percent of employees throughout the period. Almost none of the unexplained loss of union representation was located in the government sector. Also noteworthy is the fact that concession bargaining in the public sector was relatively minor until the recession of 1990-91. Thus, there seems to be some correlation between representation characteristics and bargaining strength.

In contrast to circumstances in public employment is the *pervasiveness* of the loss in private employment. Pervasiveness in the private sector is a more important aspect of the concession story than the details of its precise industrial location. The pervasiveness is closely related to the notion of a structural shift in both representation and wage determination rather than a limited phenomenon concentrated in a few depressed industries.

Union organizing

Although evidence on managerial resistance and nonunion employee attitudes must be based on casual and spotty evidence, there are some direct data on union organizing efforts. For instance, the frequency of NLRB representation election (which is largely a reflection of union organizing) was cut roughly in half from fiscal year 1980 to fiscal year 1983, and it remained low thereafter. The result of such elections was 73,106 potentially new unionized workers in fiscal year 1990. This number represents a relatively trivial sum, given the declines in unionization that occurred in the 1980s and the ongoing losses of union-represented workers from plant closings and other turnover in the labor force.⁶ Even those workers "won" under NLRB elections did not necessarily remain in the union sector unless a first contract was successfully negotiated, and such first contracts were not always achieved (Cooke 1985).

Union "win rates" in NLRB elections showed a modest cyclical influence (falling in the recession trough of 1982) but remained below 50 percent throughout the period. If unions only pushed for elections when the perceived odds were close to fifty-fifty, then the drop in election frequency could be a sign of increased worker resistance to organizing. Alternatively, the drop could be due to declining organizing effort on the union side (Flanagan 1984).⁷ It seems likely that both occurred during the 1980s. In any case, these trends led to projections during the 1980s of unionization rates at the 5 percent level by the turn of the century (Bronars and Deere 1989).

Work stoppage data

Union aggressiveness seemed to fall in existing bargaining situations. There was a general decline in the yearly number of major strikes between 1980 and 1991.⁸ In theory, strikes are the mutual outcome of the bargaining process, that is, they can be attributed to management as much as to the union. However, it has appeared to be both useful and realistic to assume asymmetric information — less information — on the workers' side than on management's, and therefore to view strike incidence as more of a reflection of union policy than of management (Ashenfelter and Johnson 1969). Seen in this way, the decline in strike frequency fits well with the decline in union-initiated representation elections.

For those workers who did strike during this period, however, the strikes in which they participated had a significant duration, that is, they remained costly. With the exception of low figures in 1982 and 1991 (recession years), a typical striker experienced a stoppage lasting roughly three weeks, until the late 1980s when the strike duration rose to more than four weeks.⁹ Strikes were infrequent, but when they were initiated, the result was often a dispute of considerable intensity. Confrontations increased in intensity in the late 1980s as business conditions improved.

Great disputes, lesser disputes, and worker attitudes

Sometimes conflicts in industrial relations become sufficiently dramatic that they receive widespread public attention. Disputes of this type do not necessarily involve large numbers of workers nor need they be in "economically important" situations. Rather, they need only have sufficient human interest features to capture media coverage.¹⁰ Although the effect of the outcomes of such "great disputes" on attitudes of both union and nonunion workers was intangible, they certainly had an influence on perceptions of what a union could accomplish. If nonunion workers perceive that unions lead to "trouble" (especially job loss), they are less likely to be organizable. And if union workers develop similar perceptions, they are more likely to be willing to make concessions.

Probably the most significant dispute of the concession era was that of the federal air traffic controllers. This dispute is often cited in popular discussions as the cause of concession bargaining, presumably because of the president's involvement and the early timing of the event (1981).¹¹ However, the reality was more complicated. The controllers were federal employees who were forbidden by law from striking. Past history — including endorsement of Ronald Reagan in

the 1980 presidential election — distanced the controllers' union from the rest of organized labor, especially potential allies among airline unions (Northrup 1984).

If the controllers' strike had been the falling domino that began concession bargaining, one might have expected the initial spillover to be in the government sector. State and local governments suffered revenue losses during the recession of the early 1980s and could have used labor-cost reductions. But in fact, as already noted, concession bargaining was relatively rare thereafter in the public sector (Mitchell 1986, 1988).

It is more likely that the combination of later great disputes, particularly those in private employment, helped foster the spread of concession bargaining. The lesson that could be drawn by workers (union and nonunion) was that bitter disputes could lead to job loss, even — as in the Hormel case — if the union itself were not replaced.¹² Companies and individuals, notably Frank Lorenzo, mastermind of the Continental Airlines bankruptcy, developed reputations for successfully taking on unions.¹³ For senior union workers — those most likely to influence union decision making (Freeman and Medoff 1984) — strike losses of the Continental variety could produce a devastating cut in income.

Still more intangible in its effect, but hardly helpful to unions, was the spread of concessions and confrontations to labor relations in the news media. Although, for example, the saga of United Press International's restructurings under bankruptcy and its accompanying wage cuts were not at the level of a great dispute, journalists were certainly aware of it. They might also have been aware of concessions at the *Boston Herald-American*, the *Oakland Tribune*, the *New York Post*, the *St. Louis Globe-Democrat*, and others. Even *Consumer Reports*, the product-testing magazine with origins in the left-wing politics of the 1930s, was on the AFL-CIO boycott list in 1984. It ultimately reached agreement on a contract with no first-year wage increase and unlimited rights to contract out work from the bargaining unit.

Among the great disputes of the period, only one is directly tied to journalism. That one — the *New York Daily News* case — seemed at first to have a happy ending. But the mysterious death of financier and white knight Robert Maxwell, and the dissolution of his worldwide holdings, left the newspaper's outlook clouded.

Of course, not all of the disputes in the 1980s resulted in union disasters. One might cite, for example, the successful organizing campaign of Harvard University clerical employees after a long campaign for union avoidance by the university, or the recognition of farm workers as contractors supplying Campbell Soup. The Service

Employees' "Justice for Janitors" campaign — based heavily on external publicity — scored some notable successes. After a bitter struggle, the United Mine Workers achieved gains at Pittston Coal.

Obviously, dispute outcomes varied during the 1980s. Lesser disputes in which labor lost can also be cited here, for example, the Catholic Archdiocese of Los Angeles — a traditional ally of organized labor — successfully avoided unionization of its cemetery workers after a lengthy and acrimonious conflict. An attempt by unions to influence corporate policy at the conglomerate Pacific Enterprises by mobilizing employee shareholder votes in a corporate employee stock ownership plan ultimately failed.¹⁴ In both of these cases, union officials probably thought they had a good chance of succeeding initially.

And even some happy endings had mixed connotations. A long dispute at Colt Industries in which strikers were replaced was ultimately settled when the strikers and their union bought the company and discharged the replacements. But the strikers were out of work for more than four years (Paltrow 1991). After a lengthy strike in 1986–87, workers at USX (formerly US Steel) accepted wage decreases (as had workers at other steel companies) but won some limits on subcontracting.¹⁵ Still, the most noteworthy element of the USX dispute was that it was clouded in media obscurity. In the 1980s, a major strike at USX went largely unnoticed while in the 1950s, say, such a strike would have invited presidential attention. A leverage that once could use the economic importance of its industry to prevent public intervention now found itself on its own.

Generally, employers felt free in the 1980s and early 1990s to test limits and previous understandings. In Las Vegas, some hotel owners sought to deviate from the trade association patterns, even multi-employer hotel settlements were sometimes achieved after bitter impasses.¹⁶ Steel companies dropped out of their multiemployer bargaining association, as did many intercity trucking companies. Westinghouse pushed for variations in its settlements from those of parent company General Electric. The 1986 East Coast longshore negotiations produced port-by-port deviations in response to competition from nonunion ports. Railroads sought to create subsidiaries to avoid existing union agreements and to "contract out" for electricity generation within their diesel locomotives (which were to be owned by third parties).¹⁷

Union pressure for legislation amending federal labor law to prohibit the use of permanent replacements during strikes is an indication of a change in employers' self-imposed constraints in labor disputes. The argument that union lobbyists had to face was that the

court decision permitting such replacements dated back to the late 1930s. Why, critics asked, overrule it now? From the union perspective, although there had always been an undercurrent of the use of such replacements, employers generally behaved as if they thought such tactics would not be wise. Employers, they argued, had once been more self-restrained.¹⁸

One factor explaining the shift away from self-restraint in management bargaining tactics was the increased uncertainty of product markets.¹⁹ Factors such as deregulation, exchange-rate changes and trade competition, pressures from financial markets and the product market for corporate control, and seeming changes in the optimum scale of the enterprise all seemed to push the labor market in an atomistic direction [Mitchell 1989]. The notion that product-market stability and insulation contributes to industrial peace is an old one [Kerr 1964]. Insecurity in the 1980s contributed to a break in managerial habits. The result was a more confrontational approach that sometimes led to bitter strikes (even as the frequency of strike activity fell).

Public sympathy for strikers seemed to wane in the 1980s. Polls suggested that the average person agreed with President Reagan's termination of the striking air traffic controllers.²⁰ While it might not have been surprising that business travelers continued to fly on Continental and Eastern Airlines, it was more surprising that the blue-collar clientele of Greyhound Bus continued its patronage during strikes. Public support of a grape boycott was instrumental in organizing California farm workers in the 1960s and 1970s, but resumption of the boycott in the 1980s produced no such effect.²¹

Toward the end of the decade, public opinion polls began to show some elevation in status for unions and union officials [Bureau of National Affairs 1991b]. It is possible that, if they continue, these shifts could be translated by unions into bargaining and organizing gains. But the shifts could simply be the result of a growing sense that unions are the underdog — a perception of union weakness. At any rate, slippage in union membership means that fewer people are in regular contact with unions and, therefore, that mobilization through boycotts or political action is more difficult.

In short, the atmosphere surrounding industrial relations in the 1980s was influenced by ongoing events and evident trends. Given the difficulties experienced by unions in earlier years, it is not surprising that an undercurrent of concession bargaining continued even in the late 1980s, as unemployment rates fell and the economy reached a business-cycle peak. These contract characteristics are discussed in the next section.

Changing Contractual Features

Apart from the direct wage settlements, important changes occurred in the way pay was delivered under union contracts during the 1980s. On the other hand, not all aspects of union contracts were heavily modified. Those features most widely discussed have been contract duration, use of COLA clauses, use of bonus payments under lump-sum provisions and profit sharing, and two-tier wage plans.

Contract duration

While other contractual features were modified in the 1980s, the principle of using a long-term contract to embody the union-management relationship continued intact. It might have been thought that uncertainty would produce shorter contracts during a period of transition. But Table 17.2 shows no evidence of such a trend. It is important to recall that the use of long-term contracts was historically a *management* demand. Such contracts were designed to stabilize industrial relations and avoid frequent strikes and negotiations [Jacoby and Mitchell 1984]. Thus, if the 1980s represented a period in which bargaining strength shifted to the management side, the tendency would be for contracts to lengthen. As an example, the petroleum industry, which had long featured two-year contracts (with no COLA), switched to a three-year contract in early 1990, when oil prices were low.

Apart from nominal contract duration, *de facto* duration can be shortened through the inclusion of reopener clauses in union agreements. These may simply allow the reopening of negotiations on some provision, such as wages, at a defined date within the agreement's duration, as in the 1988 bituminous coal contract.²² Or such reopenings may be triggered by some event, such as the reaching of a certain level of inflation. There was some increase in the proportion of reopeners in union agreements in the early 1980s. However, the proportion with reopeners was never high, and therefore the scope for shortening *de facto* duration was small. Overall contract duration was not shortened during the concession era, either explicitly or through reopeners.

COLA coverage

Cost of living adjustment coverage had become widespread during the 1970s, especially within the major contract sector. A combination of high inflation and (as theoretical purists would prefer) inflation

uncertainty led to increased COLA coverage. Still another influence was the wage controls program under the Nixon administration, whose rules favored COLA increases over regular wage increases.

COLA clauses, or escalator clauses, posed particular problems for management in the late 1970s and early 1980s, leading to a strong managerial desire to "do something" about COLA payments. Especially in a nominalist world, a commitment to adjust wages according to movements in the Consumer Price Index (CPI) entails a risk. Employer "ability to pay" need not move with the CPI. This problem will be particularly acute if there are elements in the CPI — such as food and energy prices — that are volatile and subject to influences outside the core economy.²³ Also, apart from volatile prices, the CPI contained a misleading mortgage interest component until it was modified in the early 1980s. This component exaggerated the measured inflation rate (and boosted COLA-linked wages artificially) (Mitchell 1982b).

Management resistance to COLAs first took the form of reducing the "quality" of COLA payouts rather than the quantity of COLA coverage. COLAs were increasingly qualified with caps, "corridors," and other limits as the era of concession bargaining began. These features effectively reduced COLA risk for employers by reducing the amount of wage increase associated with a 1 percent increase in the CPI. In some cases, the COLA was rendered virtually meaningless by contract limitations. For example, the 1984 contract between the Newspaper Guild and the Consumers Union provided for COLA increases if inflation exceeded 9 percent. Yet actual CPI inflation in 1984 was only 4 percent. A 9 percent inflation rate seemed very unlikely at the time, and the provision might best be seen as a face-saving retention of the COLA principle rather than as a genuine COLA clause.

Later in the concession era COLA clauses were actually dropped. While COLA coverage of workers in the major union sector averaged 56 to 60 percent during the first half of the 1980s, it fell to about one-third by 1991. BNA data (which include smaller agreements) reflect the same trend: COLAs were found in only 26 percent of agreements in 1989, down from 48 percent in 1983. Reduced inflation rates in the middle of the decade undoubtedly helped foster this declining trend.

Within concession bargains (Table 17.2), COLA eliminations continued throughout the years 1981 to 1991. However, eliminations were more common in the later years of the period than the earlier. COLA limits (such as caps) were more prevalent in the earlier years. Thus, in concession bargaining, employers sought to limit COLAs if they could not remove them outright. Removals became easier in the later years, when inflation was low (and seemed unlikely to burst

Table 17.2. Characteristics of concession settlements

Year	Average contract duration (months)	COLA elimination limits as % of COLA	COLA as % of COLA	contracts (NC)	COLA settlements (NC)	Lump-sum bonuses (NC)	Profit sharing (NC)	Two-tier wages (NC)
1981	24	24%	25%	31	37	0%	10%	0%
1982	30	25	37	31	57	0	8	5
1983	29	33	62	33	63	4	8	13
1984	29	32	13	32	63	14	5	15
1985	31	34	14	34	52	49	8	17
1986	33	34	41	34	68	58	8	13
1987	33	35	33	35	62	6	6	16
1988	35	37	20	37	69	10	10	7
1989	39	39	18	39	69	74	2	2
1990	40	40	20	40	66	1	1	3
1991	36	39	23	39	49	6	3	0
Total (1980-91)	32	32	22%	34	44%	7%	11%	

Source: Data file maintained by author, based on biweekly surveys published in the *Daily Labor Report*. Note: NC = nonconcession.

out) and when memory of past inflation of the 1970s and early 1980s had dimmed.

The evolution of the Teamsters' Master Freight Agreement illustrates the shifting ground under COLAs. In 1982, the contract was reopened early. The new agreement had no basic wage increase (a concession), and the COLA — while continued — carried a provision diverting most of the money generated to supporting benefits. During 1985 to 1988, the contract featured a "guaranteed" COLA, really just a deferred set of specified wage increases unrelated to the CPI. A genuine CPI-linked COLA was restored in the 1988 agreement, as the economy recovered and inflation acceleration seemed more likely. However, the 1991 contract — negotiated during a recession — went back to the so-called guaranteed COLA, that is, to no genuine COLA.

Generally, concession contracts that retain active COLA clauses can be viewed as less severe from the union perspective than those without COLAs. Table 17.3 shows that COLA concessions were less likely to involve wage decreases than others. COLA concessions were also less likely to contain lump sums, a feature suggesting that lump sums were viewed as substitutes for COLA (and other) wage increases.

Lump-sum bonuses and profit sharing

The use of bonus payments became prominent during the late 1980s. By 1988, 44 percent of workers under major contracts received lump sums, a peak value. Thereafter, lump-sum coverage declined. Within the concession settlement sample, it is apparent that lump sums were a 1980s innovation (although minor bonus payments existed before). Three-fourths of new concession settlements contained lump sums by 1989, a proportion that fell off thereafter.

There are two competing explanations for management's efforts to push lump sums. One is that it was simply a way to reduce labor costs by substituting, for example, annual 3 percent bonuses for 3 percent wage increases in the context of a three-year contract. The former leaves the basic wage unchanged at the end of the contract; the latter raises the base wage by 9 percent. This was the view generally found in press accounts [Uchitelle 1986].

An alternative explanation is that the lump sums were intended to be a variable component of pay, a kind of ersatz profit sharing, as is often said of bonus payments in Japan (Freeman and Weitzman 1987).²⁴ Under this interpretation, lump sums were designed to shift product-market risks to workers and to create greater flexibility in labor costs. One study suggests a linkage between use of lump sums and economic uncertainty in the industry (Erickson and Ichino

Table 17.3. Associated features of nonconcession concession settlements

All Nonconcession settlements		COLA		COLA		Nonconcession settlements without wage decreases		COLA	
Characteristic	No	Lump sum	COLA	Lump sum	No	Wage decrease	Proportion with characteristic	Lump sum	Profit sharing
Profit sharing	28	4	11	11	9	12	22	38	51
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11
Proportion with characteristic	21%	—	14%	21%	14%	21%	27%	17%	22%
Lump sum	49%	—	29%	28	9	28	13%	30%	17%
Profit sharing	7	—	11	12	12	12	7	—	—
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11
Proportion with characteristic	21%	—	14%	21%	14%	21%	27%	17%	22%
Lump sum	49%	—	29%	28	9	28	13%	30%	17%
Profit sharing	7	—	11	12	12	12	7	—	—
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11
Proportion with characteristic	21%	—	14%	21%	14%	21%	27%	17%	22%
Lump sum	49%	—	29%	28	9	28	13%	30%	17%
Profit sharing	7	—	11	12	12	12	7	—	—
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11
Proportion with characteristic	21%	—	14%	21%	14%	21%	27%	17%	22%
Lump sum	49%	—	29%	28	9	28	13%	30%	17%
Profit sharing	7	—	11	12	12	12	7	—	—
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11
Proportion with characteristic	21%	—	14%	21%	14%	21%	27%	17%	22%
Lump sum	49%	—	29%	28	9	28	13%	30%	17%
Profit sharing	7	—	11	12	12	12	7	—	—
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11
Proportion with characteristic	21%	—	14%	21%	14%	21%	27%	17%	22%
Lump sum	49%	—	29%	28	9	28	13%	30%	17%
Profit sharing	7	—	11	12	12	12	7	—	—
Two-tier wages	7	7	11	12	12	12	34	17	—
No	43	—	17	17	13	17	79	6	11
Wage decrease	14	—	14	11	11	11	44	4	—
No	89	—	13	17	13	17	56	—	11

Source: Data file maintained by author based on biweekly surveys published in the Daily Labor Report.

1990). But another finds no evidence of added wage flexibility due to lump sums (Bell and Neumark 1991).

It is possible to find anecdotal evidence of employer usage of lump sums that fits both interpretations. Lump sums in the automobile industry seem to have been used as substitutes for basic wage increases. Since the auto industry also has used profit sharing since the 1982 concessions, it may be that management did not see a need for yet another form of flexible pay.²⁵ But in the aerospace industry, and at Boeing in particular during the 1989 negotiations, a case can be made for the flexibility argument.

Boeing's management took a prolonged strike to preserve the lump sum principle in the face of a "dump the lump" campaign by the Machinists' union. Large profits at Boeing were reflected in large lump sum payments in the final settlement, a strategy that seemed aimed at reinforcing the notion of lump sums as flexible pay. Still, reports of pressure from the U.S. Department of Defense behind the scenes in aerospace bargaining suggest that holding down labor costs — rather than just making them variable — was part of the motive for lump sums in the industry as a whole, even if not at Boeing.²⁶

The recession period of 1990 to 1992 provides mixed evidence on employer intentions for lump sums. Thirteen of 20 major contracts negotiated between July 1990 and June 1991 simply eliminated the lump sum. Such elimination could be in keeping with using lump sums as flexible pay (and reducing them during recessions). However, total elimination of the lump sum clause seems extreme if the intent was to use them in the future. Only 7 new contracts retained the lump sum, 5 with a reduced amount.

Lump sum concessions were less likely than others to include profit sharing (and profit sharing concessions were less likely to contain lump sums). This negative correlation might be interpreted as a substitution of one for the other, from the managerial perspective. But the association is partly confounded by the tendency for wage decreases to be negatively linked to lump sums and positively linked to profit sharing.

It would seem to make little sense to cut wages and then give back the cut in the form of a lump sum bonus. On the other hand, tying a wage decrease to profit sharing *does* make sense if the idea is to trade a present concession for the possibility of a future recoupment, dependent on eventual profitability. Still, when wage decrease concessions are removed, the negative association of profit sharing and lump sums is weakened but not removed. On balance, however, the case for viewing lump sums in aggregate as *de facto* profit sharing (a pay flexibility interpretation) remains weak.

As for profit sharing itself, there was a notable sixfold increase in the number of union workers covered under profit sharing from 1980 to 1988. Yet of the 462,000 workers reported as covered by profit sharing in 1988, more than 70 percent were in transportation equipment jobs and may be assumed to be largely concentrated among the major automobile companies. About 7 percent of all contracts surveyed in 1988 had profit sharing, a figure comparable in magnitude to the proportion of concession contracts containing them throughout the period 1981 to 1991.

During the mid-1980s, a flurry of academic and public policy interest in profit sharing developed, in part due to the Weitzman proposal to stimulate such plans for reasons of macroeconomic stabilization (Weitzman 1984). However, it appears that profit sharing made only a limited foray into union contracts outside automobile manufacturing. There was some penetration, however, in the deregulated airline industry.

Two-tier wage plans

Union contracts have always had features whereby new entrants earn less for some period than longer-service incumbents. In addition, pay progression by seniority is not unusual in union agreements. Even though they existed in small numbers before, however, the advent of concession bargaining in the 1980s saw a notable surge in negotiation of two-tier wage plans (Martin 1990; Belous 1985). Under the two-tier plans of the 1980s, new entrants hired after the contract's inception were paid according to a lower wage schedule. In some cases, the more common "temporary" variety of plan was used, under which the lower-tier scale merged with the upper tier after sufficient seniority was attained, generally a period of several years. Less frequently the two-tier plan was "permanent," that is, the scales never merged.

Two-tier plans were sometimes "sold" by management to a reluctant union as an alternative to a general wage cut (that would include incumbents). Given unions' political process, in which the yet-to-be-hired do not vote, it is not surprising that the two-tier plan was often the preferred alternative. However, as Table 17.3 shows, general wage cuts were slightly more likely to accompany two-tier plans in concession contracts. In some cases, two-tier arrangements were sold to union members not as devices to fend off wage cuts but rather as a way to permit employment expansion (and increased union membership) by lowering incremental labor costs to competitive levels.

Two-tier plans could offer labor-cost savings only in situations in which there was rapid turnover of the work force (so that new hires were frequently added to the payroll) or when the firm expected to

expand its employment level. Supermarkets fit the former case. Airlines, which saw new market opportunities in deregulation, fit the latter. Not surprisingly, therefore, two-tier wage systems were especially common in these two industries. Indeed in the airline industry, having two tiers came to be de rigueur so far as Wall Street analysts were concerned; even airlines that were not expanding came under pressure to negotiate them.²⁷ As Table 17.2 shows, two-tier wage plans in new concession settlements peaked in the mid 1980s and then declined. Two-tier features were found in 28 percent of all contracts (concession and nonconcession) in 1989.²⁸

Because of their wage-lowering component, two-tier wage plans tend to reduce average labor costs as the proportion of workers in the lower tier increases. Apparently, there have been sufficient savings due to lower-tier hires to improve shareholder wealth perceptibly in firms adopting two-tier plans (Thomas 1990). While it might be thought that workers in the lower tier would resent their lower pay status, research on employee attitudes has not always found this result (Cappelli and Sherer 1990). In some cases, employees in the lower tier may feel that the existence of that tier allowed them to find work.

Nonetheless, complicated political forces are unleashed within the union between the tiers. And not all research suggests contentment with two-tier pay systems on the part of bottom-tier workers (McFarlin and Frone 1990). Moreover, two-tier proposals have been known to lead to contract rejections (as in the case of Teamster car haulers in 1985) and strikes (as in the United Airlines-pilot negotiations of 1985).

It appears that management in the 1980s often did not believe that two-tier systems would be stable in the long term (Jacoby and Mitchell 1986). And indeed there began to be a steady flow of narrowings and eliminations of two-tier plans, especially as labor markets tightened in the late 1980s. However, in some cases — even those viewed by unions as victories — the solution was to hold back wage increases in the upper tier to allow the lower tier to catch up.²⁹

The Sectoral Pattern of Concession Bargaining

Apart from the general recession of the early 1980s, deregulation and foreign trade competition are often cited as factors contributing to concession bargaining (Lipsky and Donn 1987). As Table 17.4 illustrates, these influences certainly played a role. Industries falling in

the deregulated sector showed a peak in concession activity in 1984 and 1985.³⁰ Moreover, when account is taken of the contractual features of the concessions, those in the deregulated sector seem most severe. For example, the proportion of first-year basic wage decreases is highest in this group. Deregulated firms — particularly airlines — were also especially prone to adopting two-tier wage plans as part of their concession packages.

Table 17.4. Rates of concession bargaining

	1 All industries	2 Deregulated industries	3 Trade sector	4 Other	5 Construction industry
1981	3%	13%	1%	2%	0%
1982	12	19	10	11	13
1983	29	17	24	36	62
1984	27	46	20	37	65
1985	25	47	32	20	27
1986	37	21	50	24	30
1987	34	20	51	22	30
1988	27	23	29	22	40
1989	18	0	26	9	15
1990	10	3	10	5	6
1991	10	0	9	8	11
Severity index ^a	+22	-33	+42	-24 (-0.06)	-43
Percent wage decreases	16%	32%	10%	21% (20%)	22%
Percent two-tier wages	9	20	7	10 (19)	2
Percent lump sums	33	17	52	14 (31)	*
Percent profit sharing	5	20	6	3 (20)	*

Source: Data file maintained by author based on biweekly surveys published in the *Daily Labor Report*.

Note: Column 1 based on published BNA tabulations. Columns 2-4 based on estimates of the author. Column 5 based on published BNA tabulations, 1981-1986, and estimates of the author thereafter. Data in parentheses refer to nonconstruction component of "other" sector.

a. Severity index is defined as a weighted average of contracts with unlimited COLAs (+2), limited COLAs (+1), lump sums (+1), profit sharing (+1), two-tier plans (-1), and decreases (-2), where the weights are the proportion of contracts with each characteristic.

* Less than 0.5%.

Industries subject to foreign trade competition showed a peak in concession activity in 1986 and 1987 — in the aftermath of the substantial appreciation of the U.S. dollar (1980 to 1985).³¹ However, concession activity in the trade sector exhibited the least severe contractual features relative to other sectors. Indeed, the most severely impacted sector in Table 17.4 is construction, a component of the "other" sector. Construction settlements were influenced by the significant expansion of nonunion competition. Union wage pressures in construction in earlier periods seem, in turn, to be important factors in this expansion (Mitchell 1981). There were some relaxations of the Davis-Bacon Act protection of union contractors on federally funded projects; however, these were delayed by litigation and do not seem to be central explanations of the concession trend.³²

It is more important to stress the sectoral diversity and (as previously noted) the pervasiveness of union wage concessions than to determine precise sectoral determinants of concession intensity.³³ Table 17.5 lists industries by the year in which they first appeared in the concession data base I have maintained. Almost all industries are represented, and most appear in the 1981 to 1984 period. This pervasiveness suggests a shift in wage norms during the concession era (Mitchell 1985; Perry 1986; Wachter and Carter 1989).³⁴

It has already been suggested that the high level of publicity given to labor disputes that had unhappy outcomes for unions was part of the mechanism by which such a norm shift could spread. Cross-industry linkages through unions themselves is another explanation. While some unions — such as the Laborers Union and the Communications Workers Union — were involved in concessions in only one or two industries, other unions made concessions in many industries. That is, industries in which concessions were made are linked to other industries through one or more union connections. For example, the Teamsters negotiated concessions for truck drivers in construction and in retail foodstores. The Teamsters also represent many non-truck driver occupations in other industries.

Causes of the Structural Shift

As I noted at the outset, there are difficulties in defining a structural shift in union bargaining and, therefore, there has been controversy surrounding the concept. It has already been shown that if "structural shift" means, say, an end to long-term contracts, then no such shift has occurred. Nor is there a strong case to be made for viewing

Table 17.5. Industry composition of concession settlements by year of first appearance

1981
Metals
Motor vehicles
Retail foodstores
Machinery
Meatpacking
Airlines
Printing and publishing
Health care
Lumber and paper
1982
Construction
Public transit and intercity buses
Rubber and plastics
Trucking
Aerospace
Textiles
Food manufacturing (except meatpacking)
Instruments
Chemicals
Railroads
Hotels and restaurants
Shipping
Other transport equipment (n.e.c.)
Brick, clay, stone
Finance, insurance, real estate
Communications
Apparel
1983
Business services
Furniture
Unions (as employers)
Cement
Entertainment
Mining
Warehousing
Glass
Education
1984
Retail (except foodstores)
Leather
Petroleum
Tobacco
Utilities
1985-1991
Agriculture, forestry, fishing
Miscellaneous services (n.e.c.)

Source: Data file maintained by author, based on biweekly surveys published in the *Daily Labor Report*.

union wage bargaining as having developed a substantial sensitivity to real economic conditions. But there does seem to have been a shift to settlements that were lower than could have been expected based on past historical relationships, particularly with regard to aggregate data. Various researchers have previously identified that type of shift in the 1980s (Erickson 1990; Bell 1989, 1991; Neumark and Leonard 1991; Mitchell 1987). Finding such a shift, of course, does not mean that wage determination must be viewed as an intractable mystery. It simply means that explanations need to be sought, and that these may not be found through simple economic modeling.

Union/nonunion wage differentials

One candidate for a cause of the shift is the change in union/nonunion wage differentials. In the private sector, this differential peaked at about one-third in the early 1980s on a wage-only basis, according to data from the Employment Cost Index (ECI).³⁵ Including benefits and payroll taxes, the differential peaked at almost one-half and then fell steadily until it bottomed out in the 1990-91 recession. Such bottoming out, it might be noted, is in keeping with the long-standing finding that nonunion wage setting is more sensitive than union wage setting to short-term business cycle pressures, in part due to the absence of long-term contracts in nonunion jobs.

Unfortunately, the ECI series does not go back beyond the mid-1970s. A longer series can be developed from somewhat less satisfactory data. The BLS has maintained data on effective median wage changes under major private union contracts since the late 1950s. These data can be converted into an absolute index and compared with general private wage data (union plus nonunion combined) for that period. Figure 17.1 shows the results.³⁶

The resulting series suggests that the union/nonunion wage differential declined in the early 1960s as part of an earlier concession period. There was subsequent erosion as inflation accelerated during the early Great Society and Vietnam era. A catch-up phase began in the late 1960s, interrupted briefly by wage controls. Thereafter, a dramatic widening of the differential occurred, in part linked to the use of COLAs (Mitchell 1980). By this measure, a peak was reached at the end of 1981 and concession bargaining eroded the differential through 1990.

In analyzing Figure 17.1, however, it is important to keep this caveat in mind: as the proportion of payroll going to the (major) union sector has declined over the period shown, the weight of (major)

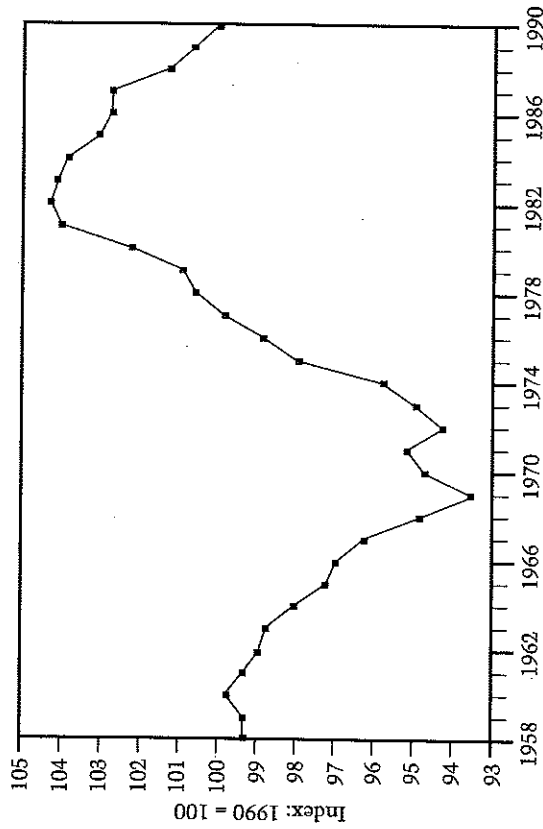


Figure 17.1. The ratio of major union pay to general pay. See text for method of calculation [1990 = 100]. Source of data: U.S. Bureau of Labor Statistics.

union wages has decreased in aggregate wage measures. Hence, ratios such as that in Figure 17.1 will tend to show higher values toward the end of the period due to the smaller (major) union weight in the denominator. In short, if the ratio in Figure 17.1 is used as a proxy for the major-union/nonunion wage ratio, or the general union/nonunion ratio, it must be corrected in the early years for its downward bias.

There is no precise way to estimate this correction, if complete data were available, the union/nonunion wage ratio could be estimated directly and no proxy would be needed. However, reasonable correction values would push up the starting values on the order of 3 to 5 percent. That is, the peak values for the ratio in the early years would be close to the values attained at the peak in the early 1980s.³⁷ Similarly, the low values at the end of the 1980s would not be far above the lows of the late 1960s.³⁸

Certainly, the notion of union/nonunion wage differentials cycling around a "normal" level is an appealing explanation for the wave of concessions in the 1980s. However, the notion by itself provides no clear indication of what "normal" is. Nor does it explain why there should be a cycle in the first place. Why should not the differential just stay at its normal level?

Evidence from selected major contracts

Table 17.6 presents regressions explaining annualized life-of-contract wage change for 47 bargaining pairs over the period 1970 to 1991. The data are taken from seven employer-union situations as reported by BNA's *Collective Bargaining Contracts and Negotiations* service.³⁹ Explanatory variables are the inverse of the monthly unemployment rate ($1/U$) at the inception of each contract,⁴⁰ the change in the Consumer Price Index for urban wage earners and clerical workers in the year before the contract began (CPI-1), and the annualized CPI over the life of the contract for those contracts with COLA clauses — or zero for those without them (COLA-L).⁴¹

Also included is the ratio of the bargaining unit's base wage (including COLA) just prior to the contract's effective date, divided by nonfarm average hourly earnings in that month (REL). To account for differences in occupation mix, and other factors that might affect the long-term wage level, the REL variable is standardized to be equal to 1 for the first contract of each bargaining pair.⁴² The REL variable can be viewed as a proxy for the union/nonunion wage differential for each unit. Finally, a dummy variable equal to 1 for all settlements adopted in 1982 or later is included to represent the concession era (DUMCON).

Some general characteristics stand out. First, the inverse unemployment rate enters with the wrong sign. This aberration is due to

Table 17.6. Wage-change regressions regarding selected major settlements

	All settlements		Concession-period settlements		Non-COLA settlements		COLA settlements	
Constant	16.03***	17.13**	3.59	22.16***	13.78***			
1/U	-21.76**	-37.15***	16.76	-32.87**	-24.59*			
CPI-1	.38***	.29***	.81**	.54***	.13			
COLA-L	.33***	.38***	.01	—	.67***			
REL	-6.56***	-4.77	-4.97**	-11.40***	-5.10**			
DUMCON	-3.56***	—	—	-1.59*	-3.61***			
Adjusted R ²	.82	.58	.63	.91	.85			
Standard error	1.75	1.78	1.27	1.07	1.70			
Observations	47	26	21	17	30			

Source: Data for regressions are from Bureau of National Affairs, Inc., and U.S. Bureau of Labor Statistics, various publications.

* Significant at 10% level.

** Significant at 5% level.

*** Significant at 1% level.

the history of the 1974-75 recession in which very high unemployment rates and high wage inflation existed simultaneously. If the regressions are confined to the concession era (1982 and after), the sign reverses. This reversal is not surprising, since in the concession era, when the unemployment rate was high, wage changes were low (or negative) in the sample. However, the concession-era coefficient is not significant. In summary, a simple, real-business-conditions explanation of union wage behavior does not suffice. Union wage setting does not seem particularly responsive to real economic activity in the short term.

Second, price inflation seems to be calling the tune in combination with the relative wage variable. Non-COLA contracts are sensitive to precontract CPI inflation, perhaps using the past as a forecast of inflation during the contract's life. COLA contracts have less need of a forecast, so it is life-of-contract CPI inflation that drives them.

Third, the REL variable has the "correct" negative sign, that is, it indicates that as the unit's wage rate drifts above the general wage level, a regression-to-the-mean phenomenon enters, reducing the unit's relative wage inflation rate. However, in the preconcession period, the coefficient is not significant, indicating that the widening union differential was not a major force in retarding wage growth.

Finally, the dummy for the concession era is negative even in the presence of the REL variable. The dummy, therefore, is suggesting that "something" in that period was retarding wage change, beyond the wage differential effect. There was, in other words, a (downward) structural shift during the concession era. What caused it?

The bargaining process as a cause of the shift

As I noted earlier, economic modeling of the union wage determination process has often neglected the management side. Unions are often modeled as if they set wages unilaterally. Neglecting management means neglecting the fundamental fact that setting union wages involves adversarial bargaining. The neglect cannot be remedied with offhand references to Nash bargaining solutions; there is a genuine clash of interests and an uncertain range of outcomes.

Adversarial wage bargaining is much like international confrontation. The parties have an imperfectly known potential to do great harm to one another. They normally, therefore, have an incentive to reduce the risk of unlimited conflict to tolerable levels, to play by known rules, to communicate through understood rituals, and to avoid pushing each other "too far." As during the Cold War in the international setting, under adversarial wage bargaining there is periodic probing, testing, and even controlled conflict. That is, every

once in awhile, limits are breached as an experiment by one of the parties.

As various writers have stressed (Ross 1948; Kerr 1977; Mitchell 1980), the union side's behavior can be viewed as the outcome of an internal political process reflecting member preferences and perceptions. And the union members who participate in that process have less information than the direct bargainers about the implications of their demands. Union members saw the erosion of the union/nonunion wage differential reversed in the late 1960s, accompanied by a burst of strike activity. No adverse consequences seemed to ensue in the short-term horizon they observed and so the process repeated.

CPI inflation often had foreign rather than domestic causes in the 1970s. But keeping up with the cost of living was a traditional goal not easily abandoned by union members. Similarly, although productivity growth slowed markedly in the 1970s, abandoning the post-World War II principle of steady real wage improvements — the famous annual improvement factor — was not something readily accepted.

Industrial relations scholars have characterized the union-management "deal" struck after World War II as one in which the union's role was to push for improvements and management's role was to run the business and resist union demands (Kochan, Katz, and McKersie 1986). Such a system, by its nature, does not encourage long-term thinking. Union officials and certainly their members are not supposed to be involved in the economics of operating the business. It is not surprising that to outside observers union wage behavior in the 1970s seemed to be a matter of taking the money and running (Lawrence and Lawrence 1985). But the behavior was not a matter of carefully trading off short-run gains against long-run losses. It was rather that the long-run consequences could not be clearly seen. And since the emphasis in bargaining is on the short-run damage to both sides that could result from a strike, management was also shortsighted.

Although a widening union/nonunion wage differential creates a growing incentive for nonunion management to avoid unionization, it does not immediately lead already-unionized managements to try to reverse the trend. Hence, unions did not receive early warning signals from management that devastating results would eventually follow. Already-unionized managements sought to expand nonunion operations or to contract out; to confront the union adversary directly would have meant pushing into an unknown territory of conflict for which a heavy price might be paid. Only with evidence that

the cost of conflict would not be large would there be an incentive to experiment. That evidence came along in the 1980s.

The best evidence of union vulnerability would be confrontations by other managements in which the management side did succeed, at acceptable cost, in reversing the widening wage differential. From the management perspective, information on union vulnerability is something of a public good. A firm obtaining the information — through conflict with a union — pays the cost but does not capture most of the benefit. But severe recession, growing trade competition, deregulation, and a change in the legal and political climate induced some distressed managements to take a chance and push for concessions based on their own internal situations.

Once the initial management probes succeeded, union vulnerability was exposed and the concession movement spread. The cost of conflict was seen to be tolerable from the management viewpoint, even for nondistressed companies. Concessions turned out to be good business, noticeably improving shareholder value (Becker 1987). It is for that reason that, while one can relate specific concessions to particular causes such as deregulation, the concession movement became so pervasive and spread throughout the unionized sector.

An adversarial wage bargaining system, in short, is likely to be characterized by explosions and implosions rather than smooth and quick adjustments. Norms will appear to shift, and will be reflected as significant dummy coefficients for periods after such shifts. Just as with wars, earthquakes, and other phenomena, in which pressures build up for long periods, while we can understand the causes, it is difficult to model the precise timing of the event or even to predict what the precise results will be, once the pressure is suddenly released.

Where does this overview of the union wage concession movement leave collective bargaining? The model and interpretation sketched here suggest it is dangerous to assume that there are clockwork regularities underlying any social phenomenon, including union wage explosions and implosions. In the collective bargaining case, the wage concession era was also a period in which substantial union membership losses occurred. With a substantially increased nonunion wage differential now seems unlikely, although short-term cyclical movements are quite possible.

Union officials, especially at the higher levels of the union hierarchy, have learned something about the consequences of adversarial bargaining. As a consequence moves were made in some cases in the 1980s to adopt a more cooperationist stance. In the automobile

industry, for example, various employee involvement initiatives were developed. Probably the most well-known example in the industry occurred at New United Motors, a General Motors-Toyota joint venture. But there were experiments in other industries, too. The U.S. Department of Labor began to publicize these developments in the 1980s through bulletins of its Bureau of Labor-Management Relations and Cooperative Programs. Along with such actions in firms with widely recognized names, such as Xerox and Harley-Davidson, the bulletins reported on smaller firms in such industries as wood products, printing, trucking, machinery manufacturing, and others.

How deeply the engagement in cooperative programs has penetrated in union circles is still an open question; certainly examples of anticorporationist dissident movements within unions are not hard to find. And not all of the situations described in the Labor Department's bulletins had happy endings. Eastern Airlines, for example, was one of the cases reported as an example of labor-management cooperation — before its takeover and its to-the-death struggle with its unions (U.S. Bureau of Labor-Management Relations and Cooperative Programs 1988). Cooperationist programs can pose difficult dilemmas for union officials, since there is an inherently adversarial aspect to employment, just as there is in any buyer-seller relationship. Union officials who advocate nonadversarial approaches are open to charges that they are the tools of management.

On the employer side, union-management cooperation is valued, but only when unionization is a fait accompli and the alternative to cooperation is continued conflict. Management's general preference is still to be nonunion if possible. Thus, in the automobile industry, the new Japanese "transplant" operations set up in the United States that were not joint ventures have remained nonunion and have resisted union organizing efforts.

Although understanding union wage determination in the 1980s does not produce clear-cut predictions about the 1990s or beyond, there are two primary lessons to be drawn. First, macroeconomic determinants of real wage trends, such as productivity growth, trade competition from abroad, and immigration, cannot be resisted indefinitely through microeconomic-level collective bargaining. They can be resisted only for a time; eventually pressure will build and force a painful "acceptance" of the external trends.

Second, since collective bargaining has an inherently adversarial element, it would be best to provide safety valves that prevent excessive wage pressure from building (as it did in the 1970s). The move toward profit sharing in the union sector, which seemed to have stalled by the late 1980s, could have provided such a safety valve.

With a significant profit-sharing element of pay, the economic conditions of the employer and (reflected through the employer) of the economy as a whole are built into payment automatically, rather than through a difficult adversarial bargaining process.

In short, there is a need to think creatively in the area of wage determination under collective bargaining. Most of the creativity in the 1980s went into such workplace practices as quality circles, autonomous work teams, and other related arrangements. It is sometimes noted that in a typical union contract, wages take up only a few pages and the bulk of the contract involves work rules and policies. But this is misleading. It may take only a few pages to describe wages, but determining them is central to collective bargaining. It was within those few pages that the pressures developed behind concession bargaining in the 1980s.

Notes

1. On a three-year cycle, the period 1982 through 1984 featured annual concession rates averaging about one-third $((44+37+23)/3 = 35)$. On a two-year cycle, the average for 1982 and 1983 is 41 percent. There will, of course, be some double counting of concessions under either approach if there are shorter-than-average contracts with repeated concessions.
2. Some contracts containing lump sums and bonuses may not have acted these features in the first year. Hence, there is a slight overexclusion under the intermediate definition.
3. Consideration is given to union representation rather than membership. Some workers are represented by unions that they do not choose to join. A case can be made for viewing unionization from both perspectives. However, major union data are available only on a representation basis. It might be noted that the number of contracts reported in the BNA's bi-weekly survey steadily declined over the concession era. A three-year average of these numbers is appropriate, due to the typical length of union contracts. During 1980 through 1988 through 1990, the average annual number of union settlements reported fell by 29 percent. The number of contracts in the BLS major private contract file fell by 38 percent from 1980 to 1990.
4. If the average union-represented unit falls in size, some contracts will fall below the 1,000-worker defining line for inclusion as "major," and their workers will disappear from the series. The BLS does not immediately drop such contracts from its series, however, and the overall effect of such slippage out of the series is probably quite small. Average major bargaining unit size in 1990 (slightly under 4,800 workers) was a bit larger than in 1980 (slightly over 4,700 workers).

5. There were, of course, some favorable developments from the union viewpoint. For example, the National Labor Relations Board's decision to exercise rule-making authority and to pre-designate bargaining units by occupation in health care might help unions in that industry in some cases.
6. Some union representation is lost each year due to decertification elections. In fiscal year 1990, the decertification loss was 16,341 workers, bringing the potential net gain for unions down to 56,765.
7. By the early 1990s, there were calls within organized labor for devoting more resources to organizing drives (see Bureau of National Affairs 1991).
8. Budget cuts at the BLS led to the discontinuance of strike data collection after 1981 for units with fewer than 1,000 workers. However, major strikes generally involve negotiations disputes, whereas small strikes often entail minor grievances under existing contracts. The word *strike* in the text refers to any work stoppage including a lockout.
9. Because some strikes run across calendar years, reported figures underestimate strike days per striking worker.
10. As union membership fell, newspapers ceased to maintain labor reporters on their staffs. Thus, a human interest angle, rather than mere importance to the labor relations scene, was needed to attract media attention.
11. Example: "Since the controllers' strike, employers have been emboldened to take more and more militant stands." Statement of Theodore W. Kheel, noted labor attorney, quoted in Barron 1990.
12. The Hormel case arose out of a larger reconfiguration of collective bargaining in the meatpacking industry. For background, see Perry and Kegley 1989.
13. Lorenzo's reputation following the Continental dispute indirectly led to the later Eastern Airlines dispute. Organized labor thought that if a strike were won at Eastern, it would signal to the management community that the days of labor weakness were ended. On Lorenzo and the Eastern dispute, see Bernstein 1990.
14. The union did not obtain the necessary majority of votes. Subsequently, voting rules were changed to prevent a repeat union campaign.
15. Details concerning the 1986-87 dispute and its outcome can be found in Hoerr 1988, chapter 20.
16. A major strike occurred in 1984. Attempts to deviate from industry contracts were made at Binion's Horseshoe Casino in 1990 and at the Frontier Hotel in 1991-92.
17. Guilford Industries (operator of two major railroads in New England) transferred some operations to a subsidiary, Springfield Terminal Co., after a 1986 strike. It eventually signed a contract with the United Transportation Union (UTU), having effectively displaced other craft unions. Various work-rule relaxations and pay cuts resulted. The UTU had dropped out of the AFL-CIO during this period and was not bound by

- no-raid rules. A similar dispute occurred when Burlington Northern switched some operations to a subsidiary, Winona Bridge. A subsequent court decision found that unless Winona Bridge was sold to an outside interest, the parent railroad's obligation to existing unions continued. The plan to contract out electricity generation surfaced during the 1986 shop-craft negotiations.
18. See Perry, Kramer, and Schneider 1982 on the law regarding the use of replacements.
19. There is only limited evidence available on the frequency with which employers have used the replacement tactic over time. A survey of employers and union officials suggests the use of replacements during strikes had increased in the 1980s relative to the 1970s (U.S. General Accounting Office 1991). A BNA survey found that employers became more willing to "consider" using replacements between 1986 and 1990 (Bureau of National Affairs 1991c).
20. See *New York Times* 1981a, 1981b. Not surprisingly, the replacement controllers many years later remained opposed to rehiring any of the strikers. See U.S. General Accounting Office (1986).
21. The United Farm Workers (UFW) particularly targeted Vons, a supermarket chain in southern California that was attempting to penetrate the Hispanic market with specialty stores. At one point, Vons agreed not to advertise grapes, although it continued to sell them. However, litigation from grape growers induced Vons to reverse the decision. The UFW also attempted to develop an environmental and health issue: the use of pesticides on grapes. While this approach did draw some public attention, the grape boycott never penetrated deeply into national public awareness.
22. In 1991, the United Mine Workers waived its option to reopen on wages under this contract, although it did negotiate a pension improvement.
23. Indeed, energy prices are production costs for most firms. Except for energy producers, energy price increases reduce ability to pay for most employers.
24. Japanese bonus payments are typically a much larger fraction of total compensation than are lump sums in the United States.
25. Profit sharing was more traditionally viewed as an incentive system, as opposed to a labor-cost flexibility system. Although the automobile industry probably viewed the decision to adopt profit sharing mainly from the latter perspective, there was interest in boosting labor productivity (witness the various experiments with quality of working life practices). At the time of the 1982 concessions, Japan was said to have as much as a \$1,500 per vehicle cost advantage compared with the United States, due not only to wages but also to the labor productivity margin (see Crandall et al. 1986, pp. 22-26).
26. Having negotiated lump sums, aerospace contractors found themselves embroiled in a dispute with the BLS concerning the treatment of the bonuses in its average hourly earnings series. Bonus payments were

traditionally excluded from the calculation. However, the industry had some product contracts indexed to average hourly earnings and wanted the full labor cost reflected. Eventually the industry agreed to fund a supplemental report including the bonuses.

27. Wayne Horvitz, who was involved in concession negotiations with Western Airlines, described this pressure from the financial sector at a seminar held at the UCLA Institute of Industrial Relations on March 8, 1985. Western adopted a two-tier plan, although it was not expanding and was, indeed, struggling to stay alive. Eventually Western was swallowed by Delta Airlines.
28. In the airline industry, two factors might lead to a drop in two-tier plan usage (or a narrowing of the gap between the tiers). First, as Cappelli (1988) points out, a move toward greater oligopoly in the industry could strengthen union bargaining power. Deregulation at first produced upstart, low-cost carriers, such as People Express, that undercut the prices of established carriers. But by the early 1990s, the fallout of the deregulation movement saw the removal of such upstarts and the end of some established carriers as well, such as Eastern and Pan Am. Second, in some cases the lower-tier rate, especially for pilots, was so low that a labor shortage eventually developed by the mid-1980s. In such cases, it is in the interest of management to raise the lower tier wage or eliminate the two-tier plan. On the market for pilots in the mid-1980s, see Belous and Fischer (1986). Of course, cuts in the defense budget in the 1990s could put more former military pilots into the commercial job market.
29. At the Kenosha Leatherette and Display Company, employees in the upper tier were explicitly "red circled" (their base wages were frozen, although they received lump sums) so that lower-tier workers could catch up. Even in cases where the two-tier plan was not completely eliminated, narrowing the tier gap by freezing workers at the upper level seems to have been commonplace (International Association of Machinists 1992).
30. Deregulated industries were defined as airlines, trucking and warehousing, railroads, and communications.
31. Trade-affected industries were defined as metals, motor vehicles, rubber, machinery, aerospace, miscellaneous manufacturing, paper and lumber, textiles, food manufacturing (except meatpacking), instruments, chemicals, furniture, shipping (maritime), mining, other transportation equipment (apart from motor vehicles and aerospace), brick-clay-stone, glass, leather, petroleum, ordnance, tobacco, apparel, agriculture-forestry-fishing.
32. Although the Reagan administration tried from the beginning to make administrative changes to relax Davis-Bacon, litigation delayed implementation of significant changes until 1985. The heaviest wave of construction concession bargaining came before that.
33. Vroman and Abowd (1988) confirm that union wage moderation in the

1980s was spread across sectors and was not well explained by foreign trade and deregulation.

34. The inability to capture changes as a smoothly continuous function of measurable variables carries into nonwage aspects of industrial relations. For example, Abowd and Farber (1990) find that the upswing in management resistance and downswing in union organizing in the 1980s cannot be explained by a model relating such activities to worker quasi-rents.
35. The Employment Cost Index is normally presented as an index rather than as an absolute dollar value. To calculate a percentage union/nonunion differential, I benchmarked the union and nonunion indexes to the dollar figures reported for March 1991 from the same survey. However, data shown in Figure 17.1 are as of December of each year.
36. The December ECI for wages and salaries is used from 1975 onward as the measure of general pay. It is spliced to December average hourly earnings for earlier years. Before 1964, December earnings data are not available. To approximate December earnings, the average for the two years surrounding each December is used.
37. The major union sector accounts for about 60 percent of union representation and probably a larger percent of the union payroll. A plausible estimate of the weight of the union sector in total private payrolls in the late 1950s is on the order of 40 percent, so the major-sector weight was probably about 25 percent. By the early 1980s, the union weight was about 25 percent, so the major union weight would have been perhaps 15 percent. If the major union sector had a constant wage premium relative to all other private workers of, say, 30 percent at both peaks, the shifting weights would reduce the ratio bias by about 3 percent at the earlier peak relative to the later peak. If it is assumed that major union wages were equal to minor union wages and that the union/nonunion wage premium was, for example, 40 percent at the later peak, then the earlier peak would need to be boosted by about 5 percent to make the two peaks comparable.
38. An actual correction is not attempted because of the rough nature of the estimates. Among other problems, the Employment Cost Index that is used as the denominator beginning in the mid-1970s roughly fixes the union share of employment over subperiods, since a constant sample of establishments is used. The average hourly earnings index, used in the early part of the period (and spliced to the ECI) is confined to production and nonsupervisory workers and gives the union sector a still larger (but unknown) weight. For more on the weight of the union sector, see Jacoby and Mitchell 1988.
39. The pairs are General Motors and the Autoworkers; Trucking Management (a multiemployer group) and the Teamsters; USX and the Steelworkers; Atlantic Richfield and the Oil, Chemical, and Atomic Workers; General Electric and the Electronic Workers; and B. F. Goodrich and the Rubber Workers. (In some cases, the parties changed their names during

the period of regression.) Wage data for each unit was drawn from information in the looseleaf service and the *Daily Labor Report*. If a wage rate in a particular bargaining period could not be determined, it was extrapolated based on wage change data from other periods in which the wage was reported. Data on private nonagricultural hourly earnings and the CPI are from BLS sources.

40. Regressions were also run using the change in unemployment over the life of the contract. In no case did the change variable appear significant.
41. The index for urban wage and clerical workers is utilized because unions use it — rather than the more general index for urban consumers — in their COLA clauses.
42. The first contract in the sample for each pair occurs either in 1970 or (for Atlantic Richfield and USX) 1971.

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