WORKING PAPER SERIES - 66

Employer Preferences for Long-Term Union Contracts

by

Sanford M. Jacoby

and

Daniel J.B. Mitchell

Los Angeles January 1984

California. University.

Sanford M. Jacoby
Assistant Professor
Graduate School of Management
U.C.L.A.

and

Daniel J.B. Mitchell
Professor
Graduate School of Management
U.C.L.A.
and
Director, UCLA Institute of Industrial Relations (Los Angeles)

Employer Preferences for Long-Term Union Contracts

Sanford M. Jacoby
Assistant Professor
Graduate School of Management
U.C.L.A.

and

Daniel J.B. Mitchell
Professor
Graduate School of Management
U.C.L.A.
and
Director, UCLA Institute of Industrial Relations

January 1984

Address for both authors: Graduate School of Management
U.C.L.A.
Los Angeles, California 90024

Telephone: (213) 206-6550 or (213) 825-2505 (Jacoby)
(213) 825-4339 (Mitchell)

Outline

In recent years, the American industrial relations system has undergone considerable stress. One byproduct of a stressful period is that old ways of conducting industrial relations are being increasingly questioned. The fact that questions are raised, however, does not necessarily mean that the climate for change is receptive to all suggestions. In this paper we provide evidence that the management community would strongly oppose recent suggestions for the abandonment of long-term collective bargaining contracts.

I. Recent Views on Contracting

There has been a substantial interest among economists in modeling contractual arrangements. This interest stems from various causes but particularly from dissatisfaction about macro-economic models and macro-economic performance. Macro models, at least of the Keynesian variety, have typically included some assumption of wage "rigidity" in their labor-market sectors. Wage determination is not viewed as behaving in an auction-market fashion, i.e., wages are not seen as painlessly falling or rising in response to minor degrees of excess supply or demand. Econometric models incorporate empirical evidence of wage stickiness, but - because they are empirically based - they do not provide an explanation of why wage behavior is what it is.

The difficulty experienced in trying to reduce the rate of inflation in the 1970s and early 1980s has also provoked an interest in contracting. Demand restrictions have tended to have a major initial impact on real output rather than on wage and price inflation, thus attaching a considerable cost to anti-inflation exercises.[1] It has been argued that if wages, in particular, could be made more responsive to the degree of demand pressure (as they would be under an auction process) reducing inflation would be a much less painful experience.[2]

Two streams of literature have emerged from these interrelated concerns. Both streams assume that labor-market contracts inherently limit the level of wage responsiveness to demand and supply pressures. One stream essentially analyzes the behavior of wages in the nonunion sector in which explicit contracts between employer and employee are extremely rare. This literature attempts to explain why "implicit" (unwritten) contracts, which limit wage flexibility, might exist in such labor markets.[3] The other stream looks at characteristics of explicit contracts in the union sector and seeks to determine their effects.[4]

In this paper, we concentrate on the union sector with its explicit contracts. Various authors have suggested that the development of the multiyear union contract explains why wage responsiveness to demand and supply has decreased historically and why the American labor market is characterized by nominal wage rigidity in contrast to other industrialized countries.[5]

Some authors are content simply to make the association between long-term union contracts and contemporary U.S. wage behavior without overtly drawing policy implications. But others have argued that long-term contracts should be discouraged, perhaps by force of law.[6] As part of the wave of union contract concessions that occurred beginning in 1979, the phenomenon of unscheduled re-openings of contracts became more common. Examples occurred in automobile manufacturing, steel, meatpacking, construction, airlines, and other industries.[7] Thus, it might appear that the management community was anxious to abandon the long-standing system of multiyear agreements. In fact, evidence is presented below indicating that the management community prefers long-term contracting and would be decidedly opposed to any public policies designed to discourage the system.

II. The Association Between Contracting and Wage Rigidity.

It is not surprising that a linkage has been drawn between the development of multiyear union agreements and wage rigidity. First, contracts typically spell out wage increases over an extended period of time - two or three years - during which wages cannot deviate from the specified terms except by mutual agreement of the parties. To the extent that contingency clauses have been written into union agreements, they most always are cost-of-living escalator clauses which related wages to the Consumer Price Index, not to a measure of real economic conditions or to labor supply and demand. Thus, unless it is believed that the parties can accurately forecast the state of the economy over a two or three year period, it is difficult to argue that wages under multiyear contracts can be responsive to short-run economic fluctuations.

Second, there does appear to have been a lesser degree of wage responsiveness to demand in the period after World War II than before.[8] Multiyear agreements were known before World War II, especially in industries which had a long history of collective bargaining. But the maturing of the collective bargaining system in the new industries which became unionized in the 1930s and 1940s was accompanied by a considerable expansion in the proportion of workers covered by such arrangements.[9] Thus, there appears to be a rough association between the spread of multiyear agreements and the decline in wage responsiveness.

Third, the wage equation evidence of the postwar period suggests that the once-famous Phillips curve deteriorated in the 1960s and 1970s. Those who estimated Phillips curves using data up through the mid-1960s were rewarded with "good" results, i.e., wage change seemed responsive to the rate of unemployment. But the situation changed thereafter. Declarations that the Phillips curve was an illusion became common by the 1970s, as observers pointed to periods of simultaneous rises in unemployment <u>and</u> inflation.[10] Since the 1960s appeared to have been a period in which the long-term contract became "cemented into" U.S. collective bargaining, the association between long-term contracting and wage rigidity might seem all that more precise.[11]

Fourth, in other countries - even where unionization is strong - long-term contracts between unions and employers are rare. Annual bargaining rounds are more typically the norm. And as noted earlier, various authors have found marked contrasts between foreign and U.S. wage behavior. In particular, it has been noted that foreign wages tended to respond more quickly than U.S. wages to the sudden boosting of oil prices in 1973-74. Wage sluggishness in the U.S. appeared to be convincing evidence that long-term contracts were the explanatory factor.

III. Problems with the Linkage.

There are some difficulties with the attribution of wage rigidity in the U.S. to multiyear union agreements. First, much of the American workforce is nonunion. Almost three-fourths of U.S. wage and salary workers in 1980 were not represented by a labor organization.[12] And the fraction of the workforce unionized has been falling since the mid-1950s. To the extent that nonunion workers can be said to have any periodicity in wage determination, it appears to be annual. When combined with the (small) number of union workers who are under one-year agreements, it is evident that the bulk of the American workforce is not directly touched by multiyear agreements.[13] Only if one is prepared to buy an argument that multiyear contracts have very substantial ripple effects on nonunion wages is it possible to attribute U.S. wage inflexibility to them.

A second problem with the asserted linkage between long-term union contracts and aggregate inflexibility of wages is that even in the union sector, the actual pattern of contract expirations would permit a much more rapid reduction in inflation than the wage-equation evidence suggests. As Taylor has shown, the pattern of multiyear agreements would retard inflation reduction for a period of a little over one year. Thereafter, fairly rapid inflation reductions could occur as new negotiations took place.[14] Taylor's finding that contracts do not appear to have been the binding constraint in the union sector suggests that some other force would retard wage responsiveness even in the absence of multiyear accords.

Third, as the experience since 1979 has demonstrated, it is quite feasible for the parties to rip up existing contracts, if they feel it is in their mutual interest to do so. Since such actions are unusual, it might be concluded that wage rigidity is generally preferred; the rigidity need not be simply the results of "mistaken" economic forecasts.

IV. Need for a Survey of Management Viewpoints.

It is evident that alternative views are possible about the economic effects of multiyear union contracts. Even so, the fact that suggestions to abandon the multiyear contract have gained currency indicates the need to determine the reactions to such development within the collective bargaining sector itself. It seems most useful to establish the reactions of the management community because of its historical role in pressing for multiyear agreements.

The impetus for a lengthening of contract duration primarily came from management during the postwar period.[15] Although the usual explanation for this development is that employers sought to reduce their exposure to strike risk, there is no hard evidence that they actually obtained any reduction in strike duration or frequency between 1953 and 1980.[16] However, there are other explanations of management's preferences for multiyear agreements. First, long-term contracts reduce uncertainty and facilitate the planning and implementation of multiyear projects. Second, there are fixed costs that can be amortized over a longer period if contracts expire less frequently. These include strike preparation and start-up costs, which are unrelated to a strike's duration, as well as fixed costs attached to negotiations. Unions also may save organizational resources by having to negotiate less frequently. But union officials were reluctant to give up the appearance of an annual "delivery" of benefits and they demanded concessions such as union security clauses in return for signing longer contracts.[17]

V. Research Design

A national survey to determine management's current beliefs and attitudes concerning contract duration issues was conducted by the authors during the first half of 1983. Questionnaires were mailed to persons with U.S. addresses who listed their occupation as "business" in the Industrial Relations Research Association's <u>1979 Membership Directory</u>. Unfortunately, the IRRA sample contained no members from the construction industry, a sector of particular interest because of its contracting practices. A listing of local directors of the Associated General Contractors (a national employers' association in the construction industry) was obtained and a questionnaire was sent to each of them.[18] Persons who did not reply to initial questionnaires were then sent a second, identical questionnaire.[19] Data related to the sample are presented in Table 1.

Table 1

Responses to Questionnaire

	Non-construction (IRRA list) (1)	Construction (AGC list) (2)	Total (3)
(a) Number of Questionnaires mailed out	636	138	774
Questionnaires returned			
(b) First Wave	180	62	242
(c) Second Wave	66	18	84
(d) Total	246	80	326
(d)/(a)	38.7%	58.0%	42.1%
(e) Number who bargained	206	78	284
(f) Note: Returned as undeliverable	131	2	133
(g) Mean Age (years)	46.4	48.5	47.0
(h) Mean size of firm's workforce	20,827	n.a.	n.a.
(i) Percent with graduate education	60.1%	25.3%	50.8%

The questionnaires asked for background data on the respondent (age, education, title) and, for the IRRA sample, the respondent's organization (size, industry). Except for those in the construction sample, each person was asked if his or her organization engaged in collective bargaining. Only those individuals answering in the affirmative were requested to fill out the remainder of the questionnaire. The respondents then were asked to consider the impact on various aspects of their bargaining outcomes <u>over the next ten years</u> of a hypothetical law banning collective bargaining contracts greater than one year in duration. Finally, respondents were asked whether their organizations compiled strike cost estimates (IRRA sample only) and what they thought were the relative costs of various contractual arrangements.[20]

As shown on Table 2, the industrial distribution of the survey respondents was consistent with the distribution of major union contracts in the private sector. As compared to the industrial distribution of all unionized workers, the sample underrepresents non-manufacturing, and overrepresents the construction sector. However, as is true of the unionized sector generally, most of the respondents who engaged in collective bargaining indicated that their organizations signed multiyear contracts. (See Table 3.) The construction sector had a slightly higher proportion of short-duration agreements, although this too is consistent with national patterns.

VI. Survey Results

The chief finding of the survey was that managers were strongly opposed to a law that would ban multiyear contracts. Nearly all agreed that a ban would hurt management over a ten-year period in various aspects of labor relations. No statistically-significant differences of opinion were found on this issue: Respondents viewed the ban as harmful regardless of their firm's

Table 2

Distribution of Private Unionized Workers as Compared with Respondents

	All Unionized Workers[a] (1)	Major Contracts[b] (2)	Respondents to Survey (3)
Total Private Economy	100.0%	100.0%	100.0%
Non-construction	92.7	73.6	72.5
Manufacturing	32.5	45.1	46.5
Non-manufacturing	60.2	28.5	26.1
Construction	7.3	26.4	27.5

a/ Private-sector workers represented by labor organizations, May 1980.

b/ Agreements covering 1,000 or more workers, late 1982, private sector.

Source: Column (1) from U.S. Bureau of Labor Statistics, Earnings and Other Characteristics of Organized Workers, May 1980, bulletin 2105 (Washington: GPO, 1981), pp. 14-15; Column (2) from William M. Davis, "Collective Bargaining in 1983: A Crowded Agenda," Monthly Labor Review, vol. 106 (January 1983), p. 5.

Table 3

Use of Multiyear Contracts

	Proportion Negotiating Contracts of Duration Greater than 1 Year (1)	Number of Respondents (2)
Total Sample	96.8%	284
Non-construction	98.5	206
Manufacturing	99.2	132
Non-manufacturing	97.3	74
Construction	92.3	78
Larger firms[a]	100.0	118

a/ Firms with 5,000 or more employees (non-construction).

size and industry, or their own age and education. In fact, respondents seemed compelled to say that a ban would hurt management even in areas where such an effect was not intuitively obvious.

i. Negotiations and strikes: There was nearly unanimous agreement that having to negotiate on a yearly basis would increase the amount of time spent on negotiations (Table 4). As one respondent commented, "In bargaining a contract as complex as they are today, you just could not ever complete bargaining if you had only one year contracts." Another noted that "We typically take 4+ months to settle...I doubt that an annual contract would take 1/3 the triennial cycle. More likely it would take 50 percent of the time." Other comments suggested a similar view that bargaining entails a high fixed negotiating cost.

Fixed costs, in this case associated with strikes, may also explain why most respondents thought that annual bargaining would increase their strike costs over a ten-year period. In their written comments, managers pointed to various costs independent of strike duration, such as storing or moving struck inventory, product perishability (retail food industry), and disruptions of customer relations.[21] Note that about two-thirds of the non-construction firms reported that they compiled strike cost estimates; of these, 80 percent said that they made these estimates both before and after a strike.

A high proportion of respondents thought that annual bargaining would increase the number of strikes. To support this view, several respondents noted that there was a greater likelihood of a strike under annual bargaining because labor relations would be in constant turmoil: "All energy would be spent being an adversary," said one manager. Another felt it would be impossible to establish "a meaningful relationship with the union" because "both

Table 4

Expected Impact of Ban on Multiyear Contracts
On Strikes and Negotiating Time

	Proportion Expecting Increase (1)	Proportion Expecting Decrease (2)	Proportion Compiling Strike Cost Estimates
Negotiations Time			
Total Sample	94.4%	1.8%	-
Non-construction	95.1	1.0	-
Manufacturing	96.2	0	-
Non-manufacturing	93.2	.8	-
Construction	92.3	3.8	-
Larger firms[a]	95.3	1.4	-
Cost of Strikes			
Total Sample	71.1%	2.5%	n.a.
Non-construction	71.4	1.0	63.1
Manufacturing	78.8	0	74.2
Non-manufacturing	58.1	2.7	43.2
Construction	70.5	6.4	n.a.
Larger firms[a]	72.9	2.4	65.9
Number of Strikes			
Total Sample	73.2%	3.2%	-
Non-construction	73.3	1.5	-
Manufacturing	79.5	.8	-
Non-manufacturing	62.2	2.7	-
Construction	73.1	7.7	-
Larger firms[a]	72.9	2.4	-

[a] Firms with 5,000 or more employees (non-construction).

sides (are) constantly preparing for contract negotiations." It is nice to think that the "quiet" years of multiyear bargaining help to create trust between labor and management. But, as already noted, the record of actual strike incidence does not support the view that a shift to shorter-duration agreements would necessarily increase management's "downtime" due to strikes.

ii. Morale and Administration: Given the previous finding, it is not surprising that most respondents believed that the level of employee morale would decrease under annual bargaining (Table 5). One manager attributed this to the fact that during the period surrounding negotiations, employees "are always more unsettled and sensitive than at other times." Another thought that its effect on morale made the one-year contract "a productivity 'deflator'." The belief that employee morale is adversely affected may explain why most respondents thought that the amount of time spent on contract administration (e.g., handling grievances) would increase with one-year agreements.

Despite the assertions of the respondents, it is not obvious that this adverse morale effect would actually occur; there could be fewer grievances filed because bargaining might supplant the grievance procedure as an arena for resolving worker disputes. Some respondents were aware of this possibility - a relatively large minority (as compared with the responses to the morale question) said that contract administration time would decrease. Nevertheless, most thought that in this area as in others, mandatory annual bargaining would produce detrimental effects.

iii. Labor Costs: A majority of managers said that a ban on multiyear contracts would raise wage and benefit costs (Table 6), although none explained why they thought that this would happen. Perhaps they thought that management would offer less resistance to union demands under annual bargaining because it would wish to avoid incurring the high fixed costs of a

Table 5

Expected Effect of Ban on Multiyear Contracts
on Time Spent on Contract Administration
and Employee Morale

	Proportion Expecting Increase (1)	Proportion Expecting Decrease (2)
Employee Morale		
Total Sample	5.3%	68.3%
Non-construction	4.9	71.4
Manufacturing	6.8	72.0
Non-manufacturing	1.4	70.3
Construction	6.4	60.3
Larger firms[a]	1.2	77.6
Contract Administration Time		
Total Sample	54.9%	10.2%
Non-construction	54.9	11.2
Manufacturing	53.8	9.8
Non-manufacturing	56.8	13.5
Construction	55.1	7.7
Larger firms[a]	55.3	14.1

[a] Firms with 5,000 or more employees (non-construction).

Table 6

Expected Impact on Labor Costs of Ban on Multiyear Contracts

	Proportion Expecting Increase (1)	Proportion Expectng Decrease (2)
Wage and Benefit Costs		
Total Sample	70.8%	3.5%
Non-construction	73.3	2.4
Manufacturing	73.5	3.0
Non-manufacturing	73.0	1.4
Construction	64.1	6.4
Larger firms[a]	72.9	2.4
Predictability of Labor Costs		
Total Sample	23.6%	62.3
Non-construction	22.8	61.2
Manufacturing	19.7	65.9
Non-manufacturing	28.4	52.7
Construction	25.6	65.4
Larger firms[a]	21.2	67.1

[a] Firms with more than 5,000 employees (non-construction).

strike. There would be less time to amortize these costs than with multiyear contracts. Yet it is certainly not self-evident that wages and benefits would be higher over a ten-year period; strikes are costly to workers too.

Finally, a majority of respondents expected that labor costs would be less predictable under annual bargaining (Table 6). Several respondents noted that labor-cost predictability facilitated long-run planning and pricing: "The major problem with one-year contracts is that the company cannot accurately plan or budget product costs for product lines having a life expectancy exceeding one year. The tendency would be to build a contingency factor into the pricing of the product to insure against future negotiations." This comment provides a plausible reason to favor multiyear agreements. Thus, it is unclear why roughly one-fourth of managers expected their labor costs to be <u>more</u> predictable with one-year agreements. Perhaps they believed that the uncertainty associated with escalator clauses would be removed.

iv. <u>Overall Costs and Advantages</u>: When asked which alternative would be more costly - a three-month strike <u>once every three years</u> or a one-month strike <u>every year</u> - a majority of respondents chose the latter alternative (Table 7). Similarly, most managers said that unions would be the party to gain most from a ban on multiyear contracts (Table 7).[22] Both responses are consistent with previous findings: management opinion is strongly opposed to a ban on multiyear contracts. In written comments, this viewpoint came out as a repeated charge that the proposal would represent an unwarranted government intrusion into private affairs. As one industrial relations executive put it, "If the parties want to slit their throats, they should be free to do so."

Table 7

Management Perception of Relative Strike Costs and Party Likely to Gain Most From Multiyear Contract Ban

	Perceived Most Costly Alternative:		Perceived Party Gaining Most from Multiyear Contract Ban:	
	One-month strike every year (1)	3-month strike every 3 years (2)	Management (3)	Union (4)
Total Sample	56.3%	7.0%	4.2%	62.7%
Non-construction	59.2	7.3	1.5	64.6
Manufacturing	61.4	5.3	1.5	65.9
Non-manufacturing	55.4	10.8	1.4	62.2
Construction	48.7	6.4	11.5	57.7
Larger firms[a]	61.2	7.6	0	68.2

[a] Firms with 5,000 or more employees (non-construction).

VII. Lessons from the Survey

Despite recent suggestions to do away with long-term union contracts, and despite the rash of contract interruptions which erupted after 1979, the management community would strongly oppose any attempt to force a shortening of contract duration. The opposition is so vehement, if the survey results are any guide, that as a practical matter further debate over the issue - at least from a public policy viewpoint - would be futile. Except under the most extraordinary circumstances, say a wartime emergency, no bill proposing a ban on long-term contracts could be enacted.

It is interesting to note that the management respondents to the survey are, if anything, "oversold" on the merits of long-term contracts from the employer viewpoint. Many appear to believe that more frequent negotiations under contracts would produce more expensive wage and benefit packages; many also believe that there would be more strikes with short contracts. But it is certainly not evident that this would be the case. It may be, for example, that the probability of a strike at the end of a long contract is higher than after a short contract, precisely because a lengthy period has elapsed during which grievances could accumulate. Nevertheless, management does obtain a more lengthy period of industrial peace with long-term contracts and has the opportunity to "plan around" the potential strike that may occur upon expiration. Written comments on the questionnaires referred repeatedly to the "stability" provided by long-term contracts. Thus, long-term contracts appear to provide an important reduction in uncertainty to employers.

Given the strong opposition to their position, proponents of bans on long-term contracts would do well to reconsider the proposition that long-term contracts cause wage rigidity. It is certainly the case that those who negotiate long-term contracts exhibit less wage responsiveness to business cycle pressures than those who negotiate short contracts. And it is also the case that nonunion wages are more responsive to supply and demand pressures than union wages. But there is no sector of wage determination that even approaches the auction-style wage setting of the micro-economic textbooks.

Although this paper has focused on employers' attitudes, it is important to note that employees may well have preferences for stable wage-determination systems. Where unions exist, these preferences are especially reflected in wage outcomes. Within the union sector, those best able to negotiate unresponsive wage systems find it most useful to incorporate them into long-duration contracts. The preferences cause the outcomes; the contracts are merely the forms by which preferences are expressed.

None of this means that concerns about the macro-economic effects of wage inflexibility are unfounded. But the best way to address the wage inflexibility issue is by changing preferences themselves. Tax incentives for gain-sharing plans (such as profit sharing, bonus arrangements, etc.) are a more appropriate means of inducing wage responsiveness to economic conditions.[23] Such arrangements are not inherently incompatible with long-term contracts; they are basically contingency clauses, just as escalator clauses are, but they are linked to indicators other than the Consumer Price Index.

Footnotes

1. Arthur M. Okun, "Efficient Disinflationary Policies," American Economic Review, vol. 68 (May 1978), pp. 348-352.

2. Daniel J.B. Mitchell, "Gain-Sharing: An Anti-Inflation Reform," Challenge, vol. 25 (July-August 1982), pp. 18-25.

3. There are, in turn, two streams within the implicit contracting literature. Some writers emphasize turnover and transactions costs. See, for example, Arthur M. Okun, Prices and Quantities: A Macroeconomic Analysis (Washington: Brookings Institution, 1981), especially chapters 2 and 3; and Michael H. Riordan and Michael L. Wachter, "What Do Implicit Contracts Do?" in Barbara D. Dennis, ed., Proceedings of the Thirty-Fifth Annual Meeting, Industrial Relations Research Association, December 28-30, 1982 (Madison: IRRA, 1983), pp. 291-298. Others emphasize risk shifting from employees to employer. See Robert E. Hall and David M. Lilien, "Efficient Wage Bargains Under Uncertain Supply and Demand," American Economic Review, vol. 69 (December 1979), pp. 868-879.

4. Daniel J.B. Mitchell, "Union Wage Determination: Policy Implications and Outlook," Brookings Papers on Economic Activity (3:1978), pp. 537-591; Wayne Vroman, "Union Contracts and Money Wage Changes in U.S. Manufacturing Industries," Quarterly Journal of Economics, vol. XCVII (November 1982), pp. 571-594.

5. Robert J. Gordon, "Why U.S. Wage and Employment Behavior Differs from that in Britain and Japan," Economic Journal, vol. 92 (March 1982), pp. 13-44; Jeffrey D. Sachs, "Wages, Profits, and Macroeconomic Adjustment: A Comparative Study," Brookings Papers on Economic Activity (2:1979), pp. 269-319; Robert J. Gordon, "A Century of Evidence on Wage and Price Stickiness in the United States, the United Kingdom, and Japan" in James Tobin, ed., Macroeconomics, Prices, and Quantities (Washington: Brookings Institution, 1983), pp. 85-133. Some authors have simply noted signs that the U.S. is characterized by greater nominal wage rigidity than other countries without explicitly connecting this phenomenon to union contracts. See Dennis Grubb, Richard Jackman, and Richard Layard, "Wage Rigidity and Unemployment in OECD Countries," European Economic Review, vol. 21 (March/April 1983), pp. 11-39; William H. Branson and Julio J. Rotemberg, "International Adjustment with Wage Rigidity," European Economic Review, vol. 13 (May 1980), pp. 309-332.

6. Barry Bosworth, "Policy Choices for Controlling Inflation," Alternatives for the 1980s (1:1981), a publication of the Center for Democratic Policy (now the Center for National Policy), p. 21; Lester Thurow, "Thurow's Third Way" Economist, January 23-29, 1982, p. 32; Felix Rohatyn, "Time for a Change," New York Review of Books, vol. 30 (August 18, 1983), p. 48. See also the remarks of Joel Popkin reported in "Inflation Deceleration Seen Leaving CPI Rate at 8 Percent for 1982, 1983," Daily Labor Report (May 11, 1982), p. A-10. Some of the criticism has been aimed at cost-of-living escalator clauses which are linked to long-term contracts. See Amitai Etzioni, "One Way to Keep Inflation Down," Newsweek, May 2, 1983, p. 17. Indeed, Thurow appears to believe (incorrectly) that all long-term contracts have escalators. (See his remarks in the article cited above: "Without indexed contracts nobody would sign a three-year contract").

7. On concession bargaining, see Daniel J.B. Mitchell, "Recent Union Contract Concessions," Brookings Papers on Economic Activity (1:1982), pp. 165-201.

8. For a review of the literature and some independent evidence, see Daniel J.B. Mitchell, "Wage Flexibility: Then and Now," unpublished working paper number 65, UCLA Institute of Industrial Relations, December 1983.

9. Sanford M. Jacoby and Daniel J.B. Mitchell, "Development of Contractual Features of the Union-Management Relationship," Labor Law Journal, vol. 33 (August 1982), pp. 512-518.

10. As Herschel I. Grossman put it, "The optimism prevalent in the mid-sixties, associated most vividly with the idea of fine tuning the macroeconomy, has soured in the face of recession and inflation in the seventies." See his chapter on "Rational Expectations, Business Cycles and Government Behavior" in Stanley Fischer, ed., Rational Expectations and Economic Policy (Chicago: University of Chicago Press, 1980), p. 6.

11. Sanford M. Jacoby and Daniel J.B. Mitchell, "Does Implicit Contracting Explain Explicit Contracting?" in Barbara D. Dennis, ed., Proceedings of the Thirty-Fifty Annual Meeting, Industrial Relations Research Association, December 28-30, 1982 (Madison: IRRA, 1983), pp. 319-328.

12. U.S. Bureau of Labor Statistics, Earnings and Other Characteristics of Organized Workers, May 1980, bulletin 2105 (Washington: GPO, 1981), p.6.

13. Less than 1 percent of workers under "major" private union contracts were covered by contracts of 12 months or less in 1980. See U.S. Bureau of Labor Statistics, Characteristics of Major Collective Bargaining Agreements, January 1, 1980, bulletin 2095 (Washington: GPO, 1981), p. 14. However, the proportion would probably be somewhat larger were complete data available on smaller units and on the public sector.

14. John B. Taylor, "Union Wage Settlements During a Disinflation," American Economic Review, vol. 73 (December 1983), pp. 981-993.

15. W.S. Woytinsky, Labor and Management Look at Collective Bargaining (New York: Twentieth Century Fund, 1949), 37-52; Frederick H. Harbison, "The General Motors-United Auto Workers Agreement of 1950," Journal of Political Economy, vol. 58 (October 1950), 397-411; Joseph Garbarino, Wage-Policy and Long-Term Contracts (Washington, D.C.: Brookings Institution, 1962), 15-19.

16. Jacoby and Mitchell, "Does Implicit Contracting Explain Explicit Contracting?", op. cit., pp. 324-325.

17. Jacoby and Mitchell, "Development of Contractual Features of the Union-Management Relationship," op. cit., p. 515.

18. The construction industry questionnaire was similar to the IRRA questionnaire except for certain omissions noted below in the text.

19. There were no statistically-significant differences in the responses to the initial and follow-up questionnaires.

20. Since those in the construction sample did not bargain on behalf of their immediate employing organization (i.e., the AGCs), the two questions noted in the text were omitted.

21. For a full discussion of these issues, see Charles R. Perry, Andrew M. Kramer, and Thomas J. Schneider, Operating During Strikes (Philadelphia: University of Pennsylvania Industrial Research Unit, 1982), pp. 101-109.

22. Note that the construction responses were somewhat different than manufacturing on this question. A significant minority of construction-industry respondents thought that management would benefit from a ban on multiyear contracts. As one construction executive explained, "The main benefit I see to short-term labor agreements is that an employer could shed himself of his union agreements more quickly than waiting until the expiration of a long-term agreement. While this might incur the union's wrath, he would not be in violation of his agreement by going open shop." Thus, the well-publicized growth in nonunion activity in construction appears to have influenced the pattern of responses.

23. Mitchell, "Gain-Sharing: An Anti-Inflation Reform," op. cit., pp. 24-25.