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Does Implicit Contracting Explain Explicit Contracting?

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In recent years a diverse literature has developed which explains such phenomena as wage "stickiness" as the outcome of implicit employer-employee contracts. Some studies attribute implicit contracts to incentives for turnover-cost reduction. If labor turnover is costly, it is argued, there are gains to be shared by employers and employees through the establishment of long-duration relationships. Another school, however, attributes such relationships to worker risk aversion. Employers are seen as offering job and income stability through implicit contracts as a type of fringe benefit.

I. Explicit Union Contracts vs. Implicit Nonunion Contracts

Theorists have tended to consider explicit union contracts as codifications of implicit-contract practices. It is known that unions did incorporate many preunion practices into their agreements. But union contracts differ in content from nonunion implicit contracts.

First, there is an extensive literature finding significant, positive union/nonunion pay differentials. Second, recent studies suggest that while nonunion employers may offer employees certain "unionesque" policies relating to seniority, layoffs, and industrial jurisprudence, they typically reserve a high degree of managerial discretion in carrying out these policies. Third, as will be shown below, contract durations differ substantially between union and nonunion sectors. The act of codifying practices cannot account for such differences. Indeed, many larger nonunion firms *do* codify their practices in personnel handbooks.

II. Union Contract Duration

Table 1 provides data on recent practice in union contract duration. During 1974–1981, settlements averaged about two and one-half years in duration. Escalated contracts averaged about three years; nonescalated contracts typically were shorter. Because the 1971–1974 wage/price controls had a duration-shortening impact, contract duration tended to increase after controls were lifted (1975–1978).

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TABLE 1

Recent Data on Mean Contract Durations[a] (in months)

Year	All Contracts		Current Escalated Contracts		Current Nonescalated Contracts	
	Current Settlement	Previous Settlement	All	Escalator in Previous and Current Settlement	All	Escalator in Neither Previous nor Current Settlement
1974	30.1	—	35.0	—	23.1	—
1975	27.7	23.7	—	—	—	—
1976	31.9	30.3	—	—	—	—
1977	32.5	32.0	36.1	—	25.9	—
1978	31.3	29.3	—	35.7	—	27.8
1979	33.3	33.3	—	36.0	—	29.4
1980	32.9	33.4	—	35.5	—	28.5
1981–All	29.7	33.0	—	36.1	—	27.4
1981–Excluding unscheduled reopenings	31.9	32.0	—	36.0	—	30.2

Source: *Current Wage Developments*, various years.

Note: Dash indicates data unavailable.

[a] Private sector, settlements covering 1000 or more workers.

In 1980–1981, the tendency to lengthen contracts reversed; new contracts were shorter than their predecessor agreements. But the 1980–1981 period saw an increasing number of union wage concessions. During concession periods in the past, strikes have receded and interest in labor-management cooperation has increased. Contract duration may shorten as a result, as in the steel industry during the era of good feelings of the early 1960s. This casual evidence suggests a relationship between the strike threat and contract duration, a point developed below.

It is difficult to obtain an extended time-series on union contract duration. A proxy measure can be obtained from the annual surveys of the Bureau of National Affairs, Inc. (BNA), which since 1953 have provided information on the proportion of union settlements containing deferred wage adjustments (essentially adjustments after the first year). Although it is possible to negotiate a long-duration contract with no second- or third-year adjustments, such contracts are rare. They occur only during concession negotiations or when the wage component of the contract is to be reopened (in which case the contract is really of shorter duration than it appears). The top panel of Figure 1 shows the BNA series rising from 5 percent in 1953 to 90 percent in 1981 with an interruption due to the 1971–1974 wage-price controls.

Since the BNA index is a proxy, it is useful to look at other confirming data. During 1959–1978, the Bureau of Labor Statistics (BLS) maintained a series on manufacturing wage adjustments. In each year it is possible to calculate the proportion of union workers who received *any* wage increases accounted for by those receiving first-year adjustments. The inverse of this ratio—a kind of velocity or turnover measure—is related to duration. Over three-year intervals beginning in 1959—shown on the middle panel of Figure 1—the measure rose from 1.9 to 2.7, suggesting a shift from two- to three-year mean contract durations.

The Federal Mediation and Conciliation Service (FMCS) has kept track of contract durations of those union situations involving contract renewals in which it has intervened since fiscal year 1964.[1] As shown on the bottom panel of Figure 1, the FMCS series confirms the general upward trend in contract duration during the 1960s and the interruption of that trend by controls.

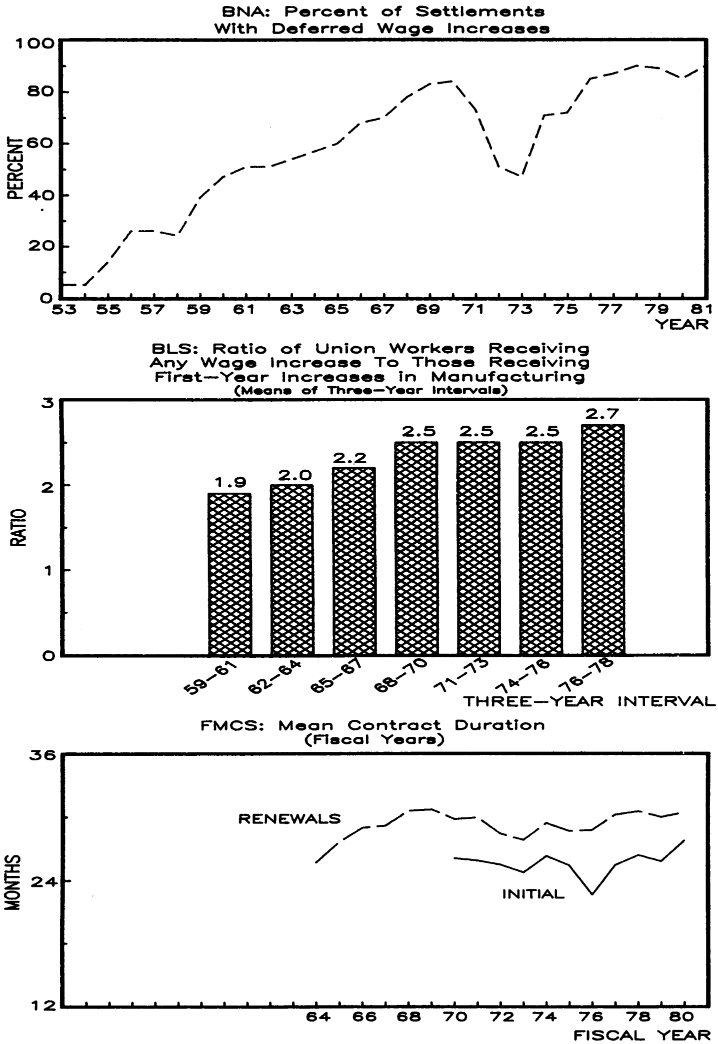
III. Nonunion Contract Duration

It is apparent from the data presented that union contracts by the late 1970s were typically two to three years in duration and that a notable

[1] Duration data are estimated from interval distributions appearing in the annual reports of the FMCS. Interval midpoints were used to estimate mean durations. It was assumed that contracts of duration greater than 42 months had mean durations of 48 months.

Figure 1

TRENDS IN CONTRACT DURATION



Sources: Top panel, Daily Labor Report, various issues; middle panel, Federal Mediation and Conciliation Service, Annual Report, various issues; bottom panel, Current Wage Developments, various issues.

increase in duration took place during the 1950s and 1960s. If union contracts were merely reflections of nonunion implicit agreements, similar tendencies ought to have been occurring in the nonunion sector. Unfortunately it is difficult to obtain hard data on the frequency of nonunion wage decisions. But available information suggests that one year is the nonunion norm.

For example, nonunion firms that had policies of general wage decisions were included in the BLS manufacturing survey referred to earlier. In years for which data are available, the proportion of nonunion workers in those firms providing *increases* who received them from *that* year's decision ranged from 95 to almost 100 percent.[2] The survey also permits a calculation of the proportion of nonunion manufacturing workers who were in firms that made individual, rather than general, decisions about wages. This proportion was erratic but averaged about 32 percent over the period 1959–1978. It tended to fall during periods of inflation (when pressures for across-the-board wage increases rise) and during controls (when rules reward formal personnel policies). However, the data suggest that a significant number of nonunion workers are in firms where management varies its decision-making process on wages from year to year. In such firms there are no meaningful durations of wage-setting decision cycles.

IV. Conflict Costs and Duration

The evidence indicates that wage contracts in the union sector are typically multiyear while the nonunion sector remains on a one-year-duration cycle or no fixed cycle at all. It is difficult to argue that long-term union contracts merely reflect the long-term nature of implicit contracts, given the union/nonunion duration discrepancy. An alternative explanation is that the cost of strikes in the union sector accounts for the difference. Ultimately, it is the ability of the union to impose strike costs that accounts for union wage premiums and other concessions from employers. Thus, it is reasonable to assume that strike costs influence the union contract's duration as well as its contents.

The usual explanation for the development of the multiyear union contract is that it reduces the negotiation frequency and, hence, exposure to strike risk.[3] However, available data on strikes do not suggest that

[2] The BLS assumed that nonunion workers in firms with general wage policies in a given year who received no increase nevertheless had a "decision" that year, i.e., in the absence of other information it was assumed that there was a one-year decision cycle. To avoid simply picking up the BLS assumptions, the data were calculated only for workers receiving wage increases.

[3] Joseph W. Garbarino, *Wage Policy and Long-Term Contracts* (Washington: Brookings, 1962), p. 89.

TABLE 2

Strike and Contract Duration Indicators, 1953–1980
(Means of Annual Figures)

Period	Strikes per 1000 Union Members		Strikers as Percent of Union Members		Strike Days per Union Member		Percent of Settlements with Deferred Wage Increases (BNA)
	Wages, Hours, Benefits	Other Issues	Wages, Hours, Benefits	Other Issues	Wages, Hours, Benefits	Other Issues	
1953–59	.12	.12	7.4%	4.1%	1.4	.4	20%
1960–69	.12	.11	5.7	4.5	1.0	.5	62%
1970–80[a]							
All years	.16(.14)	.10(.09)	7.2(6.3)	4.0(3.5)	1.5(1.3)	.5(.4)	76%
Excluding controls[b]	.16(.14)	.09(.08)	6.5(5.7)	3.8(3.4)	1.5(1.3)	.5(.5)	85%

Sources: *Analysis of Work Stoppages*, various issues; *Daily Labor Report*, various issues; U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics*, Bull. 2070 (Washington: U.S. Government Printing Office, 1980), pp. 412–14.

[a] Figures in parentheses adjusted to include association as well as union members in denominator.

[b] Omits 1971–74.

unionized employers reduced annual strike frequency or worktime lost to strikes by signing longer duration contracts. Table 2 summarizes the strike record as measured by three key indicators: annual number of strikes per union member, annual proportion of union members involved in strikes, and annual workdays lost to strikes per union member. Strikes are divided into those relating to wages, hours, benefits, and other contractual issues ("wage strikes") and those relating to other issues. The former typically stem from negotiations over contract renewal and should be most affected by contract duration.

In fact, there is a slight upward trend in wage strikes per member during the period when contract durations were increasing, somewhat counterbalanced by a decline in other-issue strikes per member. No trend is evident for the other measures pertaining to wage strikes: worker involvement in strikes and days lost per member fell in the 1960s but rose in the 1970s. Worker involvement and days lost per member rose for other-issue strikes in the 1960s, but declined or stabilized in the 1970s. These series are volatile on an annual basis and are affected by many factors. However, there is no evidence from the table that employers obtained a reduction in long-term "downtime" due to strikes by lengthening their union contract durations.

If the threat of strikes influenced contract duration, it must be through the avoidance of uncertainty and fixed costs (rather than variable) due to strikes. Contracts of long duration facilitate long-run investment and production planning by making labor costs more predictable. Also, firms can undertake multiyear projects with reasonable certainty that they will not be interrupted by work stoppages. For example, General Motors signed its first multiyear agreement with the UAW in 1948 during a crucial period when it was bringing into production its new models.[4]

There are also fixed strike costs which can be amortized over a longer period if contract expirations occur less frequently. A firm must put its customers on notice that a strike may occur each time it renegotiates a contract. There are shut-down and start-up costs unrelated to the duration of a strike. Few firms provide detailed estimates of strike costs. But data are available from a large manufacturer of metal products that show the expected costs of an impending strike to be "front-loaded." That is, the cost of a projected four-month strike was highest during the first month and declined over the course of the next three months. Clearly, the firm would prefer a three-month strike every three years to three one-month

[4] Frederick H. Harbison, "The General Motors–United Auto Workers Agreement of 1950," *Journal of Political Economy* 58 (October 1950), p. 402.

strikes during the same period.[5] Negotiations entail fixed costs as well since they absorb an organization's time and resources. In a 1949 survey, many industrial relations executives reported preferring two-year to shorter agreements because they reduced the amount of time spent in negotiations.[6]

In the postwar period, pressure to lengthen contract duration appeared to come mainly from the management side. Of course, reducing the frequency of negotiations may result in savings for unions, too. However, there was reluctance by union officials to give up the appearance of an annual "delivery" of benefits. Hence, unions demanded concessions such as union-security clauses in return for longer contracts.

The relationship between strike costs and agreement-duration is not new. Most pre-World War I lengthy contracts contained no-strike clauses. One five-year contract signed in 1910 provided that strikes would be renounced in favor of arbitration, ". . . to the end that fruitless controversy shall be avoided and good feeling and harmonious relations be maintained, and the regular and orderly prosecution of the business in which the parties have a community of interest be insured beyond the possibility of interruption."[7] But if this relationship is not new, why did mean contract durations increase after World War II?

As was argued in an earlier paper, long-duration contracts are a product of a mature relationship in which the parties have bargained for a number of years.[8] Employers are reluctant to sign a lengthy agreement until they have accepted the union as a permanent feature and are convinced of the union's integrity with regard to its no-strike promise. The bottom panel of Figure 1 permits comparison of contract duration in renewed agreements vs. initial agreements. Initial agreements show a clear tendency to be shorter, thus supporting the maturity argument.

As the data of Table 3 show, extended-duration contracts were not uncommon before World War II. They were most prevalent in industries with a long history of contracting with unions, such as mining, apparel, and printing. In apparel, for example, the proportion of agreements of two or more years' duration approached modern levels before World War II.

[5] John G. Hutchinson, *Management Under Strike Conditions* (New York: Holt, Rinehart & Winston, 1966), p. 59.

[6] W. S. Woytinsky, *Labor and Management Look at Collective Bargaining* (New York: Twentieth Century Fund, 1949), pp. 46–48.

[7] "Contract Between Chicago Local of the American Newspaper Publishers' Association and Chicago Typographical Union No. 16," Chicago, 1910.

[8] Sanford M. Jacoby and Daniel J.B. Mitchell, "Development of Contractual Features of the Union-Management Relationship," *Labor Law Journal* 33 (August 1982), pp. 513–16.

Between 1935 and 1945, collective bargaining on a wide scale was introduced to industries such as rubber and metals. Relatively few contracts in these industries were of extended duration during this period. But the table suggests that mean contract duration rose steadily after the war as these newer relationships matured. By 1961 there was little difference in the propensity of new- and old-relationship industries to sign long-duration contracts.

V. Linkages

Although explicit contracts are not simply codifications of implicit contracts, the two types of contracts are related. But causation may run from explicit to implicit rather than in the reverse direction. In a study of the historical development of the career labor markets which are linked in the literature to implicit contracts, Jacoby found that the characteristic features of these markets did not gradually take hold in an ever-growing number of firms.[9] Instead they were adopted during periods when union strength was rapidly increasing, notably 1915–1920 and 1933–1945.

TABLE 3

Percent of Contracts of Two or More Years' Duration[a]

	1870–1920	1921–34	1935–42	1948	1950	1952	1957	1961
All industries	37%	41%	26%	25%	55%	69%	81%	91%
Mining	47	50	47					86
Apparel	67	65	82					94
Printing & publ.	67	70	46					97
Rubber products	—	—	7					72
Primary metals	—	—	0					90
Trans. equip.	—	—	20					96

Sources: 1870–1942: figures compiled from the authors' file of nearly 800 pre-World War II contracts. 1948–57: *Basic Patterns in Union Contracts* (Washington: Bureau of National Affairs, 1954 and 1957). 1961: U.S. Bureau of Labor Statistics, *Major Union Contracts in the United States, 1961*, Bull. 1353 (Washington: U.S. Government Printing Office, 1962), pp. 8–9.

[a] Excludes indefinite contracts.

This correlation suggests that nonunion firms imitated personnel practices which had their origin in the unionized sector. There is considerable evidence in the personnel management literature to support this inference. But when these practices spilled over to nonunion firms, they were less uniformly and rigidly implemented. This trend may have enhanced the allocative efficiency of nonunion firms. But the evidence

[9] Sanford M. Jacoby, "The Development of Internal Labor Markets in American Manufacturing Firms," UCLA Institute of Industrial Relations Working Paper No. 42, May 1982.

does not suggest that such efficiency incentives *by themselves* were strong enough (or obvious enough) to produce the modern career labor market.

VI. Conclusions

The literature on implicit contracting in the labor market has already played a role in reconciling macroeconomic and microeconomic theory. However, there remain many loose ends. It would be a mistake for implicit-contract theorists to assume that union contracts were merely written versions of implicit understandings. Such a view ignores both conflict costs and the historical evidence on the development of the internal labor market.