NBER WORKING PAPER SERIES

THE EFFECT OF THE UNION WAGE DIFFERENTIAL ON MANAGEMENT OPPOSITION AND UNION ORGANIZING SUCCESS

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Working Paper No. 1748

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October 1985

The research reported here is part of the NBER's research program in Labor Studies. Any opinions expressed are those of the author and not those of the National Bureau of Economic Research.

NBER Working Paper #1748
November 1985

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ABSTRACT

This paper argues that under current U.S. institutional arrangements, in which management's opposition to unions is as important as workers and unions, the magnitude of the union wage premium actually reduces organization rather than increasing it. It reduces organizing success by lowering profits, thus giving management a greater incentive to oppose unions. It shows that in the traditional monopoly model, any given premium can cause management to donate more resources to opposing a union than workers will donate to organizing. Empirical evidence from NLRB elections supports the model in which larger premiums induce greater opposition and thus reduce union organizing success.

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What is the effect of the union wage differental on union organizational success?

It is common in economic models of unionization to assume that greater differentials enhance the probability that unions will organize a group of workers. After all, won't workers want to join a union the greater are the potential economic benefits from joining? Following this line of argument some studies of union wage differentials make unionization an endogenous, presumably positive function of the potential differential.

In this paper I argue that the conventional view that large union wage differentials increase organization is incorrect for the U.S. today. It is incorrect because organization is the joint decision of workers and management, not a workers decision. While potential wage increases are a plus to workers, they reduce profits and thus are a minus to management. In an institutional setting in which management allocates significant resources to convince workers to vote against unions, it is erroneous to analyze the effect of the union wage differential on organizing solely from the workers side, just as it is erroneous to analyze any economic outcome solely in terms of one blade of the market scissors. My claim is threefold.

(1) Current institutional facts indicate that, despite the secret ballot election procedure in which only workers vote on whether to organize, the decision to unionize in the U.S. is dependent on management as well as workers.

(2) While in the most general model of organization, the dependence of organizing success on management as well as labor makes the impact of potential

wage differentials indeterminate, more structured models suggest that the magnitude of the potential differential will increase management opposition more than it will increase worker desires for organization, causing an inverse relation between the differential and union success.

(3) Extant empirical evidence for the recent decline in union organization suggests that as much as one-quarter of the decline in the proportion organized through NLRB elections may be attributed to the increased union wage premium of the 1970s and its adverse effects on firm profitability, which raised management opposition.

If the argument in the paper is correct, reduction in the union wage impact in the 1980's and the observed willingness of unions to give concessions to companies facing different economic circumstances, ought to reduce opposition and improve organizational success, at least up to some point.

1. Institutional Facts

Organization of workers through the NLRB procedure currently involves a lengthy confrontation between two organized parties, the workers and their proposed union representative, and managment, often abetted by outside union-management consultants. The process is typically long (2 months between the filing of a petition and an election),[1] with numerous possibility for delays and pitfalls.

In most cases management takes an active role opposing organizing, hiring consultants in upwards of 70% of campaigns and often breaking the law by firing union activists.[2] (There are 1½ illegal firings per NLRB election, according to NLRB data).[3] Management campaign tactics range from personal letters, in-plant meetings, supervisor's discussions, and a wide variety of propaganda in the form of leaflets, posters, and so on. As a crude indication of the potential effectiveness of such tactics caused the following evidence from the AFL-CIO 1983 survey or organizers:[4]

Role of supervisors in the campaign (%of cases)	Union success rate
none (6%)	100%
some (8%)	70%
moderate (18%)	57%
sizeable (16%)	20%
extreme (51%)	33%

While there are no good figures on the magnitude of the total resources devoted by management to deter unionization a reasonable estimate might be on the order of 100 million dollars annually.[5]

2. The Wage Differential, Labor and Management Organizing Effort, and Organizing Success

Consider first the most broad (and least informative) model of union organization in which both managment and labor affect the outcome. The vote for unionization (V) is taken to be a function of "objective" circumstances (x) and of the resources spent by labor (R_L) and managment (R_M) on the organizing campaign:

$$(1) \qquad V = V(R_L, R_M, X)$$

The resources allocated to the organization drive will depend on exogenous factors specific to management X_M and to labor X_L and the logarithm (or percentage) wage differential (W_μ).

(2) $R_M = g(W_\mu, X_M)$

$R_L = h(W_\mu, X_L)$

From (1) and (2) the effect of the wage differential (here taken as exogenous, though in a more complete model it will depend on elasticities of labor demand and other factors) on organization is ambiguous. It depends on the amount of resources it induces both parties to invest in the campaign and the effectiveness of those resources.

(3) $[dV/dW_\mu = V_1\ dR_M/dW_\mu + V_2\ dR_L/dW_\mu]$

where $V_1 < 0$ and $V_2 > 0$

At this level of generality all that one can say is that to make unionization a positive function of potential wage gains is erroneous because it ignores the effect of those gains on profitability and thus on management resources devoted to defeating unions in an organizing campaign.

Under seemingly plausible assumptions one can go further and show that the wage differential is more likely to deter than to increase organization. Assume that management and labor resources have the same effect on outcomes (when $R_M = R_L$, $V_1 = V_2$.) Then the standard monopoly analysis of union wage gains suggests that management will increase its organizing resources more than will a union as the wage differential rises. Figure 1 depicts the essential argument in terms of a standard labor demand analysis of the welfare effects of union monopoly wage gains. Here W,L are wages and employment in the absence of unionism; W' and L', wage and employment due to the union wage premium $W\mu$: The wage differential W'-W transfers (W'-W)L' dollars to labor but costs management

$(W'-W)L' + \frac{1}{2}(W'-W)(L'-L)$, where the latter term is the welfare triangle loss. With a given union wage premium $W_\mu \approx (W'-W)/W$ and an elasticity of demand for labor of η, the welfare loss is $\frac{1}{2}\eta[W\mu]^2$ WL.

Labor will be willing to spend the rectangle to organize. Management will be willing to spend the rectangle plus the triangle. Assume that management and labor do, indeed, spend the maximum amounts possible. Then:

$$(4) \qquad R_M - R_L = \tfrac{1}{2}(W_\mu)^2 \eta (WL)$$

Differentiating we see that $\frac{d(R_M - R_L)}{dW_\mu} = \eta \; W_\mu(WL) > 0$

Management will devote greater resources than labor in an organizing campaign and will increase those resources more as the wage differential increases.

The model given in the (1) - (3) and the figure is simplistic. It can be developed in various ways (more complex reaction functions; consideration of unions and workers as separate groups; different expectations of W_μ; and so forth). The point is simply that unless one believes that unions efficiently extract "rent" from firms along the lines of efficient contract models, it is theoretically reasonable to expect the union wage differential to generate more management opposition than worker and union support in organizing drives.

3. Empirical Evidence

I present two types of evidence on the actual impact of the union wage differential on unionization: a time series analysis of 1950-1980 changes in the union wage premium, management unfair labor practices and the number of workers organized through NLRB elections; and a 1965-1980 pooled cross-industry time series analysis of the effect of unfair labor practices on workers organized across industries.

Figure 1: The Effect of the Union Wage Premium
on Money Gains to Workers and Loss of
Profits to Employers

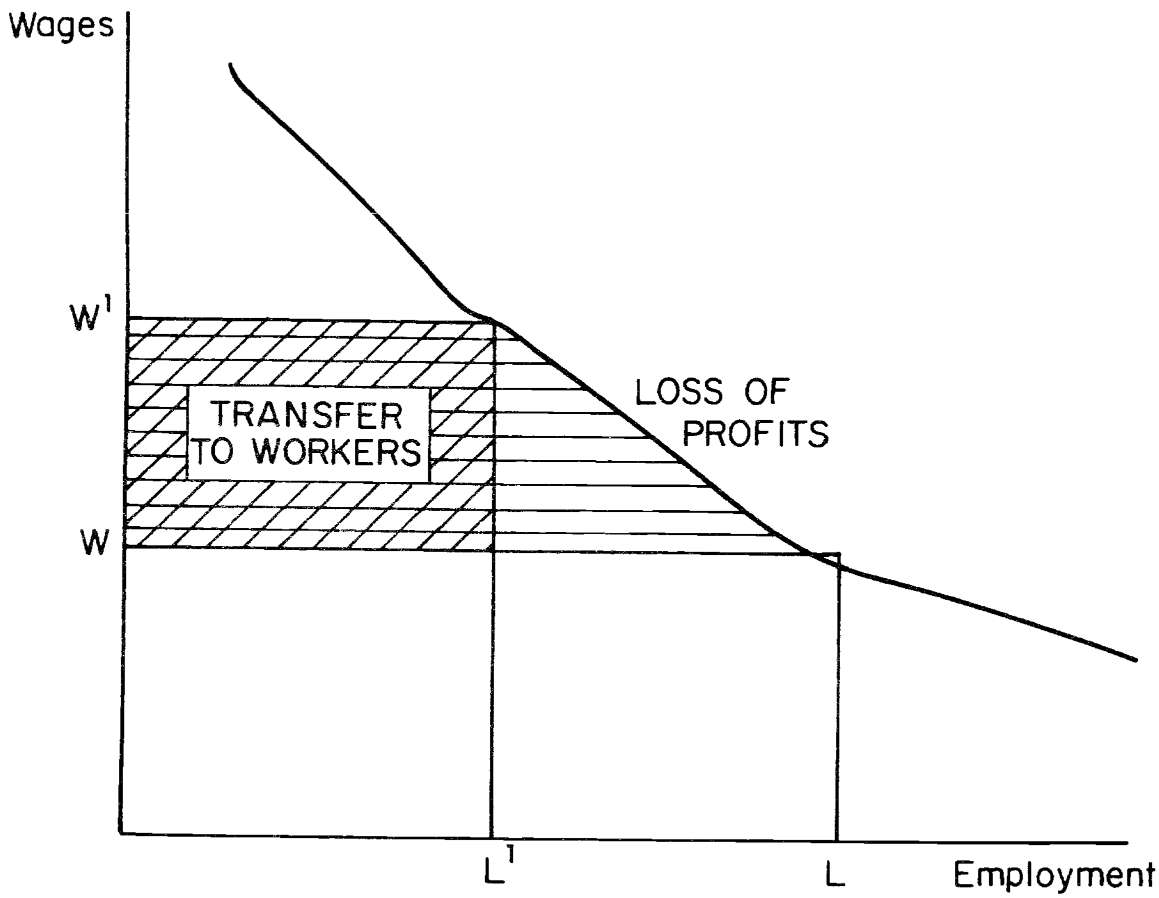

Table 1 records the results of the time series analysis. Equation (1) gives the regression coefficients for the determination of my indication of management opposition -- unfair labor practices (8A3 violations) per worker. Equation (2) gives the regression results of the effect of those practices on numbers of workers won in elections per employee while equation (3) shows the "reduced form" effect of the wage differential on workers won per election. The control variables include time and three indicators of the general state of the economy.

There are three findings. First, consistent with our argument that the union wage differential increases managerial opposition the coefficient on log W_{μ} in the unfair labor practice equation is positive and significant. Second, the unfair labor practices variable has a marked negative effect on workers won in equation (2) while the wage premium has a negative effect in equation (3), supporting our argument that the union wage advantage adversely affected organization. Third, however, as the significant coefficients on the time trend variable indicate, our analysis falls short of a complete explanation of the pattern of organization in the period. To see how much of a change the key variables explain I have multiplied the regression coefficients by the change in the relevant explanatory factor and divided this by the observed change in the explanatory variable. For 1970-1980, 47% of the increase in unfair management practices are attributed to the rising wage premium; one-half of the decline in workers won per employee is attributed to the rise in unfair practices; and two-thirds to the rise in the wage premium, taken by itself. Over the longer

Table 1: Estimated Effect of Union Wage Premium on Unfair Labor Practices on Organizing Success 1950-1980

	Dependent Variable		
Independent Variable	log(Unfair labor practices [8A3] per worker in NLRB election	log(Number of workers organized/employment)	
	(1)	(2)	(3)
constant	-4.3	-6.62	-5.80
time	.15(.04)	-.08(.04)	-.14(.04)
Real GNP	-.002(.001)	-.000(.001)	.003(.001)
rate of inflation	-1.35(1.43)	01.83(1.52)	-2.07(1.71)
unemployment rate	.02(.04)	-.05(.04)	.02(.04)
$W\mu'$(percentage wage differential)	2.45(1.04)		-2.98(1.16)
log (unfair labor practices per worker)		-.46(.20)	
R^2	.96	.92	.91

Source: Calculated from time series data. Unfair practices, workers organized in NLRB elections; NLRB Annual Report; wage differential, from George Johnson "Changes Over Time in the Union/Non Union Wage Differential in the U.S. (Michigan, Mimeo February, 1981.)

haul, however, the significance of the wage differential is, it should be noted, smaller. All told, while the story is far from complete, the data suggest that in the 1970s the sizeable increase in the union wage differential augmented management opposition and contributed to the decline in union organizational success.

Economists are, rightly, suspicious of the results of time series analysis, which often vary depending on model specification and years covered. Accordingly, I have also estimated the effect of unfair labor practices on members won by unions using a pooled cross-section industry file for the period 1965-1980 over which industry data was available. The advantage of this data file is that it permits two separate types of analyses: first, a comparison of patterns of unfair practices and members won across industries; second, an extremely strong test of the effect of the factors within industry-year cells. The disadvantage is that we lack information on union wage differentials by industry and thus can only examine effect of management opposition on union success or failure in elections, and cannot estimate the effect of wage differentials on management unfair labor practices.

Table 2 shows the results of least squares estimates of the effect of unfair labor practice on number of workers won by unions. Consistent with the results in table 1, these figures show a sizeable and significant impact of management opposition -- as measured by unfair practices -- on organizing success. The greater the number of illegal acts by management the less likely are unions to win members in one industry compared to another (column 1) or to an industry compared to itself over time (column 2).

Table 2: Estimated Effect of Unfair Labor Practices on Organizing Success in a Pooled Industry-Time Series Model 1965-1980

	Dependent Variable: Log (Number of Workers) Won/Employment)	
	(1)	(2)
Independent Variable		
Log (Unfair Practices Per Election)	-.36(.07)	-.62(.06)
Control Variables		
Year Dummies	X	X
Industry Dummies		X
Producer Prices	X	X
Profits	X	X
Wages	X	X
R^2	.15	.70

Number of observations: 684 with some industry-year cells missing in early years.

Conclusion

While theory does not tell us whether union wage premiums raise or lower organizing success, it does tell us that with current U.S. institutions the effect of the premium depends on what it does to both labor and management behavior and gives some reason for thinking that the higher premium may raise managerial opposition more than it raises worker desires for unionization. The empirical analysis attributes part of the union problem in organizing in the 1970s to managerial opposition resulting from high union wage premium. Hopefully, the analysis and finding will stimulate further work on organization as the result of the behavior of both management and labor, in contrast to existing focus on workers alone.

Footnotes

1. See National Labor Relations Board, Annual Statistics. Also Myron Roomkin and Richard Block, "Case Processing Time and the Outcome of Representative Election: Some Empirical Evidence," University of Illinois Law Review, Vol. 81, pp. 75-97.
2. AFL-CIO Survey of Organizing Campaigns, April 1984.
3. Calculated from NLRB data for 1980. See Paul Weiler, "Promises to Keep: Securing Workers' Rights to Self-Organization Under the NLRA," Harvard Law Review, June 1983, pp. 1769-1827.
4. AFL-CIO Survey of Organizing Campaigns, April 1984.
5. Charles McDonald AFL-CIO Department of Organization and Field Services.