Articles

The Recent Decline of Unionization in the United States

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The dramatic decline in unionization during the last decade is investigated with the use of survey data from 1977 and 1984. First, it is found that only a small fraction of the decline in unionization can be accounted for by shifts in labor force structure. Second, there has been a substantial drop in demand for union representation among nonunion workers that can be accounted for by an increase in the job satisfaction of nonunion workers and a decrease in nonunion workers' reports that unions improve wages and working conditions. Finally, there has been a substantial increase in employer resistance to unionization that is likely to have made it more difficult for unions to organize even those workers who desire union representation. Increased foreign and increased nonunion domestic competition (particularly in deregulated industries) may be key underlying causes of these changes.

IT IS WELL KNOWN THAT LABOR UNIONS IN THE UNITED States have suffered a substantial decline in membership over the past three decades. What is not so well known is that the rate of decline has accelerated dramatically since the mid-1970's. Observers sympathetic to the union movement argue that the precipitous decline is due to increased employer hostility toward unions and union organizing activity. Observers less sympathetic to the union movement argue that unions have less to offer workers today than they did in the past, in part because of the past behavior of the unions themselves. These positions are neither independent nor mutually exclusive.

The historical record on the decline of unionization has been examined for at least the past 30 years, but limited data for that length of time have seriously restricted the range of explanations that could be considered. Chief among the explanations considered are shifts in the demographic, industrial, and occupational composition of the labor force. In the first part of this article, after outlining briefly the time-series dimensions of the decline in unionization, the evidence on how well shifts in the composition of the labor force can explain the decline in unionization between the mid-1950's and the late 1970's is reviewed, and an analysis of more recent labor force data from the Current Population Survey (CPS) for 1977 and 1984 is presented (*1*). Then, information from two surveys of workers, the Quality of Employment Survey (QES) conducted in 1977 (*2*) and a survey conducted by Lewis Harris and Associates for the AFL-CIO (AFL) in 1984 (*3*) are analyzed along with data on union organizing activity from the National Labor Relations Board (NLRB) (*4*) to provide some new perspectives on the decline of unionization.

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The Dimensions of the Decline in Unionization

One difficulty in measuring the decline in unionization in the United States is that consistent data on the extent of the unionization do not exist before 1973. Table 1 presents data from two sources that represent the most complete time-series information on union membership as a fraction of nonagricultural employment (*1*, *5*). The beginning of the time series in 1933 corresponds to the period immediately before passage of the National Labor Relations Act (NLRA) in 1935. After passage of the NLRA, a period of rapid expansion of unionization occurred, including successful organization of the large mass production industries such as automobile and rubber manufacturing. This organization resulted in a steady state with approximately 30% of the nonagricultural labor force belonging to labor unions. The aggregate membership levels for the 1960's and early 1970's mask an underlying decline in unionization among

Table 1. Union membership as a fraction of nonagricultural employment for selected years (1933–1984). Membership-based data from union records include both public and private sector unions (*5*). Survey data are based on tabulations of May CPS data for relevant years and represent private sector workers only (*1*). There is no information in the May 1982 CPS on union membership.

Year	Union records	Survey-based
1933	0.147	
1939	0.212	
1945	0.304	
1953	0.325	
1960	0.286	
1962	0.304	
1970	0.296	
1971	0.291	
1972	0.288	
1973	0.285	0.256
1974	0.283	0.249
1975	0.289	0.230
1976	0.279	0.226
1977	0.262	0.218
1978	0.251	0.209
1979	0.245	0.220
1980	0.232	0.208
1981	0.226	0.197
1982	0.219	
1983	0.207	0.159
1984	0.194	0.150
1985		0.141

private sector workers that was offset by a rapid increase in unionization among public sector workers from 11.6% in 1953 to 39.5% in 1975.

A striking feature of the union record data in Table 1 is the dramatic decline between the mid-1970's and 1984 in the fraction of the nonagricultural labor force that are members of unions, from 28.3% in 1974 to 19.4% in 1984. This is verified by a superior time series on unionization that is available since 1973 from CPS data (Table 1). These survey-based data rely on self-reports of a large representative sample of the American labor force regarding whether or not they are members of labor unions. Although the CPS data show a consistently lower extent of unionization over the entire period, both series show the dramatic decline in unionization since the mid-1970's (*6*). It is this decline that is the focus of my analysis.

Shifts in the Structure of Employment and Decline in Unionization

Much work on the decline of unionization has considered the changing structure of the U.S. labor force (*7*). It is well known that the distribution of employment in a number of dimensions has changed in ways that could plausibly account for the lack of growth of unionization since the mid-1950's and the decline since the mid-1970's. First, the fraction of civilian employment made up of females, who have historically been less unionized, increased dramatically during this period from 29.4% in 1950 to 40.5% in 1977 to 43.7% in 1984. Second, the regional composition of employment has shifted away from the historically heavily unionized Northeast and North Central regions and toward the historically less unionized South. In 1950, 24.7% of the nonagricultural labor force was in the South, and this increased to 33.0% by 1982. Next, the occupational composition of the labor force shifted away from traditionally heavily unionized blue-collar employment toward less heavily unionized white-collar employment. In 1958 the fraction of the labor force that was in blue-collar employment was 40.5%, and this fell to 34.4% by 1977. Finally, the industrial composition of employment shifted away from the traditionally heavily unionized manufacturing and other goods-producing industries and toward the less heavily unionized service industries. In 1950 the fraction of the nonagricultural labor force that was in service-producing industries was 59.1%, and this rose to 70.5% by 1977 and to 74.0% by 1983.

These shifts in the composition of employment are likely to be affected by union behavior. To the extent that labor unions increase the wages of workers without compensating increases in productivity, unionized firms are at a competitive disadvantage relative to foreign and nonunion domestic firms. The result is a shift in domestic production away from the heavily unionized manufacturing sector with its largely blue-collar labor force toward nonmanufacturing with its relatively more white-collar labor force. In addition, firms may attempt to avoid the costs of unionization by moving production to less unionized regions of the country such as the South.

Thus, it is not appropriate to consider shifts in the structure of employment to be necessarily causal factors in the decline in unionization. When investigating the role of these and other factors in the decline of unionization, the term "account for" will be used rather than the term "caused by." What is meant by the statement that some factor accounts for the decline in unionization is simply that there is covariation between that factor and the decline of unionization.

On this basis, the evidence shows that the shifts in labor force structure cannot account for the entire decline in unionization. The extent of unionization has fallen within each of the key industrial and occupational sectors. Thus, even if the distribution of employment had remained unchanged, the extent of unionization would have fallen. The evidence suggests that less than half of the decline in unionization from the mid-1950's through 1978 can be accounted for by shifts in the demographic, regional, occupational, and industrial composition of employment.

To investigate how much of the decline since the mid-1970's is related to shifts in the structure of employment, data from the May 1977 and May 1984 CPS's were analyzed, years that correspond to the QES and AFL survey years. Samples of workers were derived from the two CPS's in a similar fashion. The May 1984 CPS has data on union status for only 25% of the overall sample, whereas the May 1977 CPS has data on union status for the entire sample. A 25% random subsample of the May 1977 CPS was used along with all of the May 1984 CPS with data on union status. The final samples (9,912 workers in 1977 and 10,676 workers in 1984) consist of all nonmanagerial workers who were not self-employed and for whom complete information was available on the workers' demographic characteristics, industry, occupation, and union status.

Simple tabulation of the data confirms the dramatic decline in unionization between 1977 and 1984. Fully 26.8% of the workers in the May 1977 CPS sample and only 21.4% of the May 1984 CPS sample reported that they were union members. Table 2 contains mean sample values for each year for a set of variables representing various dimensions of labor force structure along with the fraction of workers in each group who report themselves to be union members.

Three clear patterns emerge from the data in Table 2. First, the results confirm the conventional wisdom regarding which types of workers and jobs are relatively heavily unionized: (i) males, nonwhites, and workers living outside the South; (ii) jobs in manufacturing, construction, and the transportation, communication, and

Table 2. Sample proportions and fraction unionized by labor force structure CPS data (*1*).

Characteristic	1977		1984	
	Sample fraction	Fraction unionized	Sample fraction	Fraction unionized
Total	1.0	0.268	1.0	0.214
Sex				
Female	0.432	0.182	0.474	0.202
Male	0.568	0.334	0.526	0.262
Race				
Nonwhite	0.106	0.337	0.126	0.259
White	0.894	0.260	0.874	0.208
Region				
South	0.287	0.165	0.309	0.139
Nonsouth	0.713	0.309	0.691	0.245
Industry				
Manufacturing	0.300	0.382	0.259	0.291
Construction	0.068	0.384	0.066	0.290
Transport, communications, utilities	0.076	0.497	0.078	0.426
Trade	0.202	0.129	0.199	0.081
Finance, insurance, real estate	0.058	0.045	0.067	0.021
Services	0.296	0.205	0.331	0.209
Occupation				
Blue collar	0.423	0.420	0.368	0.331
Clerical	0.202	0.131	0.213	0.113
Service	0.131	0.181	0.142	0.155
Professional	0.173	0.217	0.202	0.220
Sales	0.071	0.040	0.075	0.026

public utility industries; and (iii) workers in blue-collar jobs. The second pattern that is evident is that there have indeed been shifts in employment (i) away from relatively heavily unionized jobs in manufacturing industries and (ii) away from relatively heavily unionized blue-collar jobs. The final pattern that is apparent is that the fraction unionized fell between 1977 and 1984 in virtually all categories and the decline was generally greatest in the most heavily unionized sectors. The conclusion is that shifts in labor force structure cannot fully account for the decline in unionization.

To examine how much of the decline in unionization can be accounted for by shifts in labor force structure, a multivariate analysis is required. Because of the discrete nature of the outcome variable (whether the worker is a union member or not), a probit model was used for this estimation. More formally, the probability that a worker i is a union member is

$$\Pr(U_i = 1) = \Phi(\mathbf{X}_i \beta) \quad (1)$$

where $U_i = 1$ if the worker is a union member and $U_i = 0$ if the worker is not a union member. The vector $\mathbf{X}_i$ measures observable characteristics (a constant plus 19 dichotomous variables representing main effects for four educational categories, five age categories, and the characteristics in Table 2), β is a vector of parameters, and Φ is the standard normal cumulative distribution function. Maximum likelihood estimates of the parameters of this model (β) can be derived straightforwardly with numerical optimization techniques.

The probit model of union membership was estimated separately for 1977 and 1984. The parameter estimates are not presented here, but their characters are consistent with the breakdowns presented in Table 2. These estimates were used to calculate a measure of the share of the decline in the average probability of unionization that can be accounted for by shifts in labor force structure. The measure is the difference between the average predicted probability of unionization for the 1984 sample using the predicted 1977 weights ($\hat{\beta}$ from the probit on the 1977 data) and the average predicted probability of unionization for the 1977 sample, again using the 1977 weights. Conceptually, this measure represents the extent to which the probability of unionization would have changed had the labor force structure changed as it actually did while the within-sector probabilities of unionization remained fixed at their 1977 levels. On this basis, only 1.1 percentage points (asymptotic standard error, 0.11) of the overall 5.4-point decline in unionization between 1977 and 1984 can be accounted for by changes in labor force structure (*8*). The rest is accounted for by declines in the within-sector probability of union membership.

Table 3. Union representation election activity for selected years (1960–1984).*

Year	Number of elections	Workers in elections ($\times 10^3$)	Nonunion workers in elections (%)	Elections won by union (%)
1960	6380	484.0	1.12	58.6
1970	8074	608.6	1.15	55.2
1975	8577	568.9	0.97	48.3
1977	9484	570.7	0.87	46.0
1978	8240	471.8	0.67	46.0
1979	8043	577.9	0.80	45.1
1980	8198	521.6	0.71	45.7
1981	7512	449.2	0.60	43.1
1982	5116	297.8	0.40	40.3
1983	4405	209.9	0.27	43.0

*Election and unfair labor practice data from (*4*). Nonunion employment derived from U.S. Bureau of Labor Statistics data (*16*). Membership-based data from (*5*).

Table 4. Sample proportions and fraction demanding union representation broken down by labor force structure; nonunion QES (n = 663) and AFL (n = 865) data (*2*, *3*).

Characteristic	1977 QES		1984 AFL	
	Sample fraction	Fraction *VFU*	Sample fraction	Fraction *VFU*
Total	1.0	0.386	1.0	0.324
Sex				
Female	0.427	0.431	0.499	0.361
Male	0.573	0.353	0.501	0.286
Race				
Nonwhite	0.109	0.722	0.097	0.655
White	0.891	0.345	0.903	0.288
Region				
South	0.406	0.394	0.345	0.332
Nonsouth	0.594	0.381	0.655	0.319
Industry				
Manufacturing	0.249	0.382	0.217	0.251
Construction	0.042	0.322	0.150	0.284
Transport, communications, utilities	0.057	0.316	0.067	0.242
Trade	0.199	0.349	0.157	0.411
Finance, insurance, real estate	0.059	0.334	0.075	0.277
Services	0.394	0.433	0.334	0.373
Occupation				
Blue collar	0.351	0.371	0.396	0.352
Clerical	0.213	0.397	0.244	0.261
Service	0.161	0.514	0.108	0.516
Professional	0.224	0.329	0.216	0.251
Sales	0.051	0.294	0.084	0.329

The Decline in Demand for Unionization Among Nonunion Workers

One potentially important factor in the decline of unionization is that nonunion workers may be less interested in union representation than they were in the past. Evidence that has been cited for this comes from data on NLRB-supervised representation elections (Table 3). The number of representation elections and the number of workers eligible to vote in these elections (workers in potential bargaining units where unions had successfully petitioned for an election) have fallen sharply only since 1980. However, a more appropriate measure of union election activity, computed as the fraction of the nonunion work force that was eligible to vote in representation elections, shows a decline since 1970 and an even sharper decline since 1980. In addition, the union win rate, defined as the fraction of elections held where a union won bargaining rights for workers, has declined substantially since 1970. Part of these declines are undoubtedly due to increased employer resistance to unionization, so that the declines in election activity and success are not strictly the result of a decrease in demand.

Another type of evidence regarding the demand for union representation comes from two surveys already mentioned that contain information on worker demand for unionization that is separate from their actual union status: the QES (*2*) and the Lewis Harris survey for the AFL (*3*).

Samples of workers were derived from the two surveys in an identical fashion to that used for the CPS's. These samples consist of all nonmanagerial workers who were not self-employed and for whom complete information was available on the workers' demographic characteristics, industry, occupation, union status, preference for union representation, attitudes about the general usefulness

Table 5. Fraction of workers' reporting job satisfaction and union instrumentality (*2, 3*).

Item	Nonunion workers		Union workers	
	1977	1984	1977	1984
Job satisfaction				
Overall job	0.867	0.894	0.879	0.853
Pay	0.587	0.745	0.748	0.770
Job security	0.729	0.850	0.762	0.783
Union instrumentality				
Wages and working conditions	0.852	0.757	0.903	0.917
Sample size	663	865	298	217

of unions, and job satisfaction. Both surveys were designed to yield representative samples of the American work force, but the AFL survey, whose goal was to learn about the attitudes of nonunion workers toward unions in order to aid organizing efforts, purposely undersampled union members by about 8%. This does not affect my analysis since I focus on nonunion workers. The resulting QES sample has 663 observations on nonunion workers, whereas the AFL sample has 865 observations on nonunion workers.

The key measure of demand for union representation contained in the QES and the AFL surveys is the response to a question, called *VFU* (vote-for-union) here and asked only of nonunion workers, that asked whether they would vote for union representation on their current job if a secret ballot election were held. The response to this question (no = 0 and yes = 1) is interpreted as an indicator of the worker's demand for unionization. Tabulation of the responses to the *VFU* question yields the result that 38.6% of the 1977 QES sample and 32.4% of the 1984 AFL sample would vote for union representation. Thus, the demand for union representation among nonunion workers fell by 6.2 percentage points between 1977 and 1984 ($P = 0.011$).

Table 4 shows mean sample values for each year for a set of variables representing various dimensions of labor force structure along with the fraction of workers in each group who report that they would vote for union representation. The key aspect of these tabulations is that the propensity to demand union representation fell within most demographic and labor force categories between 1977 and 1984. As was found with the fraction unionized, this suggests that the decline in the demand for union representation among nonunion workers cannot be fully accounted for by shifts in the structure of the labor force.

In order to investigate this issue further, a multivariate probit model was used. The probability that a worker demands union representation is

$$\Pr(VFU_i = 1) = \Phi(\mathbf{X}_i \beta) \quad (2)$$

where $VFU_i = 1$ if worker i demands union representation and $VFU_i = 0$ if not. Once again, Φ is the standard normal cumulative distribution function, β is a vector of parameters, and $\mathbf{X}_i$ is a vector of observable variables (a constant plus 19 dichotomous variables representing main effects for four educational categories, five age categories, and the characteristics in Table 4).

The probit model was estimated separately for the QES and AFL samples by maximum likelihood. Although the parameter estimates are not presented, they are similar in character to the breakdowns in Table 4. In particular, with the exception of race, there are few sharp distinctions to be made. The share of the decline in the average probability that a nonunion worker demands upon representation accounted for by shifts in labor force structure was computed as the difference between (i) the average predicted probability of demand for union representation for the 1984 sample with the predicted 1977 weights ($\hat{\beta}$ from the probit on the QES data) and (ii) the average predicted probability of demand for union representation for the 1977 sample, again with the 1977 weights. On this basis, only 0.05 percentage points (asymptotic standard error, 0.015) of the overall 6.2-percentage-point decline in unionization between 1977 and 1984 can be accounted for by changes in labor force structure. Clearly, other factors need to be considered.

By working with a sample strictly of nonunion workers it is appropriate to investigate the role of subjective variables, specifically measures of job satisfaction and worker perceptions of how unions change jobs, that may be important in determining the demand for union representation. It is fortunate that the QES and the AFL survey have comparable measures of job satisfaction in key dimensions and worker perceptions of the ability of unions in the abstract to improve a key dimension of jobs (union instrumentality). In both surveys, the questions referred to are similar, and the allowed responses are scaled alike. Although there may be problems due to the fact that the two surveys are different in overall structure, the properties of the samples are similar enough and the particular questions are similar enough to proceed with a comparison with some confidence.

The measures of satisfaction were developed with a four-value response scale. These were recoded to two values (1, satisfied; 0, not satisfied) (*9*). The dimensions along which comparable measures were available in both the QES and the AFL survey are overall satisfaction, satisfaction with pay, and satisfaction with job security. The only dimensions of the job for which a comparable measure of union instrumentality was available in both the QES and the AFL survey are wages and working conditions. This was also recoded from a four-value response scale to two values (1, unions improve wages and working conditions; 0, unions do not) (*10*).

From both the QES and AFL samples, it is clear that nonunion workers reported high levels of overall satisfaction with their jobs in 1977 and 1984 and that the fraction satisfied rose between those years (*P* value of change, 0.097) (Table 5). The most striking result for nonunion workers is that reported levels of satisfaction with pay and job security rose dramatically between 1977 and 1984 ($P < 0.001$).

Comparison with the analogous statistics for union members (Table 5) shed some light on the question of whether the increase in satisfaction among nonunion workers is likely to be an artifact of differences in survey design between the QES and the AFL survey. In fact, the patterns for union workers are quite different than for nonunion workers. Union workers' overall satisfaction fell slightly between 1977 and 1984 whereas their satisfaction with the specific aspects of their jobs rose slightly. These findings suggest that the results for the nonunion workers are unlikely to be an artifact of differences in survey design. If the higher levels of satisfaction were

Table 6. Fraction of nonunion workers who would demand for union representation broken down by job satisfaction and union instrumentality (*2, 3*).

Item	1977 QES ($n = 663$)		1984 AFL ($n = 865$)	
	No	Yes	No	Yes
Job satisfaction				
Overall job	0.671	0.342	0.615	0.289
Pay	0.522	0.291	0.511	0.259
Job security	0.533	0.331	0.485	0.295
Union instrumentality				
Wages	0.204	0.418	0.181	0.370

due to some difference in the organization of the surveys or the precise wording of the questions, this sort of bias would surely show up among union workers as well.

The reasons for the increase in perceived job satisfaction among nonunion workers are not clear. Satisfaction with pay may reflect how workers evaluate their pay relative to either their best alternatives or some norm that they consider equitable. Given the stagnation in real earnings since the mid-1970's, the general increase in worker satisfaction with pay suggests that the standards against which workers judge their wages dropped (*11*). In other words, the period from 1977 through 1984 may be marked by declining expectations, and this may be a cause of the decrease in demand for union representation.

With regard to union instrumentality, while most nonunion workers in the surveys appear to agree that unions improve the wages and working conditions of workers, the fraction of nonunion workers who report that unions are effective in this dimension fell significantly from 1977 to 1984 ($P < 0.001$) (Table 5). Thus, nonunion workers are less likely to report that unions can help with a central area of concern on the job.

It remains to demonstrate that there are links between worker preferences for union representation and these subjective measures of job satisfaction and union instrumentality. Table 6 shows for each year the fraction of nonunion workers who would vote for union representation broken down by satisfaction and perceptions of union instrumentality. It is clear that worker preferences for unionization are strongly related to satisfaction and union instrumentality and that these relations hold between 1977 and 1984. Each of the differences by satisfaction or instrumentality level in the fraction who would vote for union representation is statistically significant ($P < 0.001$).

The centrality of job satisfaction and perceptions of union instrumentality to nonunion workers' preferences for union representation is highlighted by some tabulations of a simple index of satisfaction and union instrumentality. This index is computed for each individual as the number of dimensions that the individual is satisfied in and is augmented by one if the individual does not report that unions improve wages. The minimum value of this index is 0, for a worker who is not satisfied in any dimension and who says that unions improve wages. The maximum value of this index is 4, for a worker who is satisfied in all three dimensions and who does not say that unions improve wages. Tabulations of the fraction of workers who would vote for union representation broken down by the values of this index are continued in Table 7. The results are striking. Each increment to the index is associated with a substantial reduction in the probability that workers demand union representation. The extreme comparison, between an index value of 0 and an index value of 4, shows a difference in the probability that workers demand union representation of over 50 percentage points in each year.

The critical test is to determine how much of the 6.2-percentage-point decline in the demand for union representation among nonunion workers can be accounted for by the increase in satisfaction and the decline in perceptions of unions' ability to improve wages. A probit model of the demand for unionization (Eq. 2) was estimated over the sample of nonunion workers, but this time including only a constant and main effects for the four satisfaction and union instrumentality variables as controls. Use of these estimates to compute the share of the decline in unionization accounted for by these variables yields the result that these factors account for a decline of fully 6.4 percentage points (asymptotic standard error, 0.753). Thus, all of the decline in demand among nonunion workers can be accounted for by the increase in nonunion workers' satisfaction and decrease in perceptions of union instrumentality (*12*).

Increased Employer Resistance to Union Organizing

One type of evidence for an increase in employer resistance to union organizing is that the number of unfair labor practice claims filed by unions regarding employer activities during organization campaigns has increased greatly during the past 25 years. These unfair labor practices are a set of activities of employers that are proscribed under the NLRA because they are felt to interfere with employee's rights to make a free decision regarding collective organization. Examples are unduly pessimistic claims of what will result from unionization, threats, harassment, and firing. In 1960 there was an average of 1.78 unfair labor practice claims of this type per election. This average had increased to 3.99 by 1977 and to 7.45 by 1982. The apparent willingness of employers to engage in unfair labor practices makes it more difficult for unions to organize for any given level of demand, and unions and workers will be less willing to undertake organization efforts. This accounts for at least part of the decline in the quantity of election activity shown in Table 3.

The sources of the increased employer resistance are not clear, but some investigators suggest the following scenario (*13*). Employers have never accepted unions as an integral part of their firms, but until the 1970's overt antiunion behavior was not socially or politically acceptable. The compact forged in the 1930's and codified as public policy in the NLRA protected the union movement. In the 1960's employers began to implement effective strategies to remain nonunion when opening new plants. With the economic recessions of the 1970's and 1980's, more overt antiunion behavior became socially and politically acceptable, turning what had been a stagnation of the union movement into a virtual rout. Explicit antiunion strategies, including such tactics as development of innovative nonunion personnel systems, active resistance to organizing efforts, and sitting of plants in locations unsympathetic to unions, have become the standard mode of operation in U.S. industry.

Although the change in the strategy of employers could be thought to be the result of changes in social and political attitudes that arose independently of economic factors, it is reasonable to conclude that both employers' strategies and general attitudes toward unions have been affected by the dramatic changes in the U.S. economy during the past two decades. These changes, toward an increasingly competitive economy, have made the costs of unionization to firms much higher than they were 30 or even 20 years ago.

The most obvious relevant change in the U.S. economy during the past three decades is the increased level of foreign competition, particularly in the manufacturing sector that has formed the heart of the union movement. Some new data on import penetration illustrate this dramatically (*14*). In 1958 only 2.5% of manufac-

Table 7. Fraction of nonunion workers who would demand union representation broken down by the index of job satisfaction and union instrumentality (*2, 3*). The index is the sum of dimensions of job that individual is satisfied with plus one if the individual does not feel that unions improve wages.

Value of index	1977 QES		1984 AFL	
	n	Fraction *VFU*	*n*	Fraction *VFU*
0	29	0.724	19	0.684
1	107	0.579	67	0.597
2	196	0.475	187	0.497
3	278	0.281	446	0.260
4	53	0.038	146	0.123
All	663	0.386	865	0.324

turing sales in the United States were imports. This rose to 7.2% by 1977 and to 11.0% by 1984.

To the extent that unions raise costs of production, some of this increase in imports is likely to be due to the unions themselves. However, it is also likely that other countries have rapidly developed industrial capacity that rivals (and in some cases even surpasses) our own for reasons unrelated to unionization in the United States. In any case, in the past, with no significant foreign competition, American firms could afford to accommodate higher costs associated with labor unions by sharing some of the gains of a relatively closed economy with their workers. However, the increased openness of the American economy has reduced the gains to be shared and has made it prohibitively expensive to bear these higher costs. Higher product prices will not be accepted by consumers who have attractive foreign alternatives.

Another recent structural change in the U.S. economy is the deregulation of some key heavily unionized industries such as trucking, airlines, and communications. These industries have become much more competitive since the government removed entry barriers and rate regulation. The problems of both the firms and the unions in these industries are common knowledge. In this more competitive environment firms are likely to resist unionization more strenuously than in the past because their market position is no longer protected by the government.

Concluding Remarks

In light of the evidence presented, what can the union movement do to recoup its losses? The results on the relation between worker demand for union representation on the one hand and job satisfaction and union instrumentality on the other suggest that the task is to convince workers that unions can play an effective role in the workplace. The union movement has begun to define new organizing strategies for this purpose, but the task ahead is difficult at best until workers understand that unions can help with aspects of their jobs in which they are not satisfied (*15*).

The results on the increase in employer resistance to union organizing and on the decline of union success in representation elections has prompted the union movement's call for reform of the National Labor Relations Act to provide an environment where current employer practices to discourage union organizing will be less effective. However, until our society as a whole is more favorably disposed toward unions, such reform will be difficult to achieve.

The recurring theme is that the competitiveness of the economy has increased dramatically. Unions need to convince workers that they offer real value in such an economic environment.

REFERENCES AND NOTES

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3. Lewis Harris and Associates, *A Study on the Outlook for Trade Union Organizing* (November 1984).
4. National Labor Relations Board, *Annual Report* (Government Printing Office, Washington, DC, various years).
5. L. Troy and N. Sheflin, *Union Sourcebook* (Industrial Relations Data Information Services, West Orange, NJ, 1985).
6. The consistent difference between the two series is largely due to the omission of government employees from the CPS tabulations. Tabulations of the CPS data for 1977 and 1984 that include government employees yield estimates of unionization of 26.8% and 21.4%, respectively.
7. H. S. Farber, in *Challenges and Choices Facing American Labor*, T. A. Kochan, Ed. (MIT Press, Cambridge, MA, 1985), pp. 15–43; W. T. Dickens and J. S. Leonard, *Indust. Labor Relations Rev.* **38**, 323 (1985); R. B. Freeman and J. L. Medoff, *What Do Unions Do?* (Basic Books, New York, 1984).
8. The asymptotic standard errors are computed with first-order approximations to the asymptotic variances of the estimated average difference in probabilities.
9. Workers who responded "don't know" were deleted from the samples.
10. This question was, "Tell me if you 1) agree strongly, 2) agree somewhat, 3) disagree somewhat, or 4) disagree strongly that unions improve the wages and working conditions of workers." Worker responses of "don't know" were coded zero.
11. See G. Loveman and C. Tilly, "Good jobs or bad jobs: What does the evidence say?" (Massachusetts Institute of Technology, Cambridge, September 1987), mimeographed for a survey of the evidence on the stagnation in real earnings since the 1970's. See also M. H. Kosters and M. N. Ross, *Contemporary American Problems* (American Enterprise Institute, Washington, DC, 1987).
12. The same conclusion is drawn from a probit model that includes the 19 labor force structure variables along with the satisfaction and instrumentality variables as controls.
13. T. A. Kochan, H. C. Katz, R. B. McKersie, *The Transformation of American Industrial Relations* (Basic Books, New York, 1986).
14. J. M. Abowd, "The effects of international competition on collective bargaining settlements in the United States" (Princeton University, Industrial Relations Section, Princeton, NJ, February 1987), mimeographed.
15. *The Changing Situation of Workers and Their Unions*, Report of AFL-CIO Evolution of Work Committee (AFL-CIO, Washington, DC, February 1985).
16. U.S. Bureau of Labor Statistics, *Handbook of Labor Economics* (Bulletin 2070, Government Printing Office, Washington, DC, December 1980).