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ACCOUNTING FOR THE DECLINE
IN UNION MEMBERSHIP

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Accounting For The Decline
in Union Membership

ABSTRACT

Since the early 50s, the percent of the workforce organized by unions has declined considerably. In the most recent decade that rate of decline has accelerated sharply. In an attempt to discover what factors can account for the overall decline and the further deterioration during the 70s, we decompose the sources of growth and decline to determine the relative importance of changes in organizing activity, success in certification elections, decertifications, and net growth due to economic causes.

We find that all factors except decertifications account for a substantial part of the change. In addition, interactions between the factors are very important. A significant finding is that while organizing activity and success rates have been declining over time, the net growth (or loss) of membership due to economic causes has remained stable controlling for the aggregate level of economic activity. We argue that this finding is inconsistent with the prevailing view that the decline in the percent of the workforce organized is primarily due to the decline of the heavily unionized core industries.

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1. Introduction

Between 1950 and 1954 the percent of private non-agricultural wage or salary workers who were members of national labor unions or local affiliates of national labor organizations increased nearly one percent a year to a high of 39.2%. Since then that percentage has continued to fall reaching a low of 23.6% in 1980.[1] For most of this period the total number of union members was increasing, but in recent years even that number has been falling. Previous studies of union growth and decline have considered why changes in union membership have taken place.[2] This paper considers a different, though related question -- how changes in the percent of the work force organized have taken place.

A union's membership may grow if it organizes new bargaining units, if already organized plants increase their employment, or if a contract is extended to cover workers in a new plant. Unions may lose members through a decertification election, layoffs, plant closures, and by voluntarily leaving a plant where they have failed to negotiate a contract after winning a union representation election. This paper begins the job of determining how much change is accounted for by each of these causes. It also considers how things might be different if certain flows had not changed. By considering several "what-if" scenarios we can determine which factors account for the change from the rapid growth of union membership during the early 1950s to the accelerating decline during the 1970s. We can also project these trends and consider the magnitude of the changes that would be necessary to reverse them.

Despite the lack of conclusive statistical evidence, many people seem to have strong opinions about the source of union decline. One widely held belief is that "economic forces": plant closures, layoffs and slower growth

in the core manufacturing industries -- the site of the greater concentrations of unionism -- are primarly responsible for the decline. On the other hand, some have argued that the decline is due more to increased management resistance to union certification efforts resulting in a lower organizing and success rate.[3] The analysis presented here, besides satisfying an intrinsic interest in the relative size of different flows in and out of the union sector, allows us to begin to consider the likely importance of these causes of union decline.

Considerable effort is now being expended in the detailed examination of several supposed causes of union decline. Before running down blind alleys, it is worthwhile to consider the relative importance of these different causes. Because of the startling paucity of basic data on unions, this paper takes the reasonable first step of combining the shards of information that are available in a simple analytic framework and asking whether the proposed explanations can be made consistent with the data. Our findings in this paper provide a framework within which more intensive and detailed studies of union decline may be placed.

The rest of this paper proceeds in three sections. Section II describes the data used and presents our estimates of the historical rates of organizing, organizing success, etc. Section III considers how union membership levels would be different if certain historical rates had been different. Section IV is a conclusion which reviews our finding, and considers their implications for theories of why the percent of the workforce organized has been declining, for future research, and for the future of the U.S. union movement.

II. Historical Rates

Many of the essential "facts" of union decline are neither well known nor directly accessible. For example the organizing rate must be carefully constructed from diverse sources, and the rate of growth due to "economic" forces must be calculated as a residual. This section describes our efforts to identify the time paths of these rates from 1950-1980.

There were four major sources of data used for this study. The NLRB annual reports from 1949-1980 provided information on the number of eligible voters in union certification and decertification elections, and the number in elections where union representation was chosen.[4] The BLS's annual survey of U.S. unions was our source for the number of union members in each year[5] supplemented with membership data on particular public-sector unions from the AFL-CIO's 1981 and 1955 convention Proceedings.[6] Finally, employment figures were obtained from the 1982 Economic Report of the President.

It is widely known that the recent experience of unions in the public sector has differed markedly from that of unions in the private sector, largely because of major changes in the laws restricting public sector collective bargaining. The analysis here focuses solely on experience in the private sector. For the purpose of this analysis, we have removed large public-sector unions such as AFSCME and the AFT from the union membership statistics.

Because construction unions are atypical in doing most of their organizing outside the NLRB election process, we have also removed construction workers from all stocks and flows.[7] Alternative calculations including construction workers show no substantive differences, other than increasing slightly the relative importance of net "economic" forces.

Table 1 presents the historic average membership, organizing and success rates computed from the above data using a few assumptions described below.

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Table 1 about here

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Let us look first at the rate of organizing. This is defined as the percent of currently unorganized workers taking part in certification elections. The number of employees who are not union members can be easily ascertained from the data described above. Estimating the proportion of these involved in certification elections poses some problems.

We must take care that the flow statistics (largely from the NLRB) are consistent with the stock statistics (largely from the BLS). The first problem is that not all certification elections are conducted by the NLRB. Some are conducted by state labor relations boards, others are conducted by the Federal Mediation Service. Luckily, the number involving national labor unions is small.[8] It is also offset by a second problem -- that some NLRB elections involve professional associations and unaffiliated local unions which are not counted as national unions by the BLS. This number is also relatively small[9] and the consequences of ignoring both these problems are offsetting and unlikely to be significant.

A third problem is that not all certification elections conducted by the NLRB involve previously unorganized workers. Some elections take place when one union "raids" another and some are attempts to organize inactive bargaining units of other unions. Between 1976 and 1981 elections of this type ranged from 2 to 7 percent of all workers.[10] What we cannot tell is

what proportion of these are raids where the members are already counted as union members as opposed to the organization of inactive units where workers are not counted as union members. All results reported in this paper were estimated assuming that 5% percent of workers involved in elections were already counted as union members. Results were insensitve to changes in this assumption within reasonable bounds.

Figure 1 about here

Given these caveats Figure 1 shows that the rate of organization fell through most of the 1950s, remained constant during most of the the 1960s and dropped again during the late 1960s and 1970s. These results are due both to changes in the numerator and the denominator of the organizing rate. Employment was growing during most of this period. In addition, by any measure, -- even the number of workers being organized -- organizing activity fell during the 1950s and 1970s and remained roughly stable during the 1960s.[11]

The success rate is defined as the ratio of the number of previously unorganized eligible voters in units choosing representation to the total of all eligible voters in previously unorganized units. The considerations that complicated the estimation of the organizing rate are also a problem here. But, once again the small number of cases involved means that the estimates based on the available data are likely to be very good.

Figure 2 about here

The history for the success rate in Figure 2 is similar to that of the organization rate -- a sharp decline during the 1950s, a slower decline in the 1960s with a jump in 1965, and another sharp decline in the early 1970s. The late 1970s are relatively stable.

The decertification rate is defined as the percent of all union members involved in decertification elections in a year. As with the organization and success rates the NLRB records do not cover all relevant elections and do include some elections involving groups which do not fit our definition of a union. Once again the small numbers of these types of elections make it unlikely that ignoring them would significantly affect the results.

Figure 3 about here

The decertification rate shown in Figure 3 has gone up by over 300 percent since 1950. Most of this increase has taken place in the last five years. However, the most notable aspect of the history of the decertification rate is that it has never been very large. Even at its highest and if every election resulted in decertification, it would take over 15 years for decertifications to cause a one percent drop in the percent of the labor force organized -- all other things held constant. Decertifications may be a nuisance to unions, but they can not account for even a small fraction of the decline in membership.

The decertification success rate is defined as the ratio of the number of eligible voters in units choosing to decertify their union to eligible voters in all decertification elections. Through the late 1960s this number varies a great deal -- from a low of 31 percent in 1968 to a high of 63

percent in 1957 as shown in Figure 4. In the 1970s the variation has diminished and there appears to have been a slight upward trend.

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Figure 4 about here

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Having computed these four rates we may now examine the inflow of union members through the certification process net of the loss due to decertifications. But, first we must deal with two problems. Multiplying the organization rate times the success rate gives us the ratio of workers in new collective bargaining units to previously unorganized workers. However, not all these workers will become union members. In right-to-work states many workers covered by collective bargaining agreements will not pay union dues or be counted as union members. About nine percent of all workers covered by collective bargaining agreements nationwide are not union members.[12]

The second problem is that many new bargaining units fail to negotiate a contract. When this happens either the unit votes to decertify or it may become inactive. In the latter case the workers will not be counted as union members and we will have no record of them leaving the union sector. Richard Prosten of the AFL-CIO reported that in a survey of 2,656 union representation elections held in 1970, 22.4 percent of the units where unions were certified did not have a contract when contacted five years later.[13] The units which failed to get a contract tended to be smaller units, so only 13.6 percent of new members were in units which failed to negotiate a contract. Some of these had decertified, and some firms had gone out of business. In others, the union had become inactive. More

recently, Charles McDonald of the AFL-CIO[14] has examined success rates in new units with over 100 workers. He found that contracts were obtained in 63% of all such units within a 3 year period after the election. However, only 56% were successful in obtaining a second contract. Once again many of these firms decertified, moved, or went out of business, but in others the union had become inactive. Firms going out of business are properly counted as losses due to economic circumstances. We have dealt with the other cases in which certifications do not result in union membership by assuming that 12 percent of the employees involved in certification elections won by unions never become union members. In many cases, decertification elections involve inactive units, so we also assume that half of all workers involved in decertification elections are not counted as union members at the time.

Figure 5 about here

Although the resulting numbers vary slightly depending on the assumptions made, the overall trend is the same.[15] The growth rate due to certifications net of decertification losses declined rapidly during the early 1950s, leveled off during the late 1950s, and began falling again in the late 1960s or early 1970s.

This net growth of membership through representation elections can be compared to the total growth or loss of union members in each year. The difference is the loss or gain due to a number of causes including plant closing, layoffs, new hires and the extension of contracts to new plants. We will refer to these as "economic" causes.[16] There is considerable year

to year variation in this number, as Figure 5 shows. Some of this variation may be due to errors in reporting total membership[17] but even the five year averages in Table 1 show considerable variation.

What is most interesting about these numbers is that although the growth of union membership due to "economic" causes has been significantly negative during the most recent period, this experience is neither unique nor part of any long term trend. Loss of membership due to economic causes was larger in percentage terms in the early 1960s than the late 1970s.[18] The period when growth due to those causes was greatest was not the early 1950s, when total growth was highest, but the late 1960s. Further, a regression of the growth rate due to "economic" causes on the growth rate of GNP (Table 2) yields a strong cyclical relation but no evidence of a secular decline. Coefficients on the contemporaneous percent change in GNP and GNP lagged once are large and significantly different from zero. The coefficient on the time trend is positive and extremely small. Given the size of the standard error we can not rule out a large negative trend. But, point estimates suggest a stable relation. Further, a Chow test fails to reject the hypothesis that the relation is the same in the first 16 years as in the last 15 years. Estimated coefficients are only marginally different in the two periods.

Table 2 about here

In summary, the early 1950s was a period of rapid increase in the percent of the workforce organized while the decade of the 1970s saw a large slide to the lowest levels of unionization in postwar history. Although

the rate of decertification activity was increasing during this period it was sufficiently low to have had no perceivable impact on percent organized. Instead, three other factors can be identified as being potentially important in explaining the slide in the 1970s and the difference between the early 1950s and the rest of the period under study. Both organizing activity and success rates in NLRB elections were very high during the early 1950s. In addition the early 1950s saw the lowest rate of labor force growth and one of second highest rates of growth of membership due to "economic" reasons. In contrast, the 1970s saw the lowest levels of organizing and organizing success, the highest rate of labor force growth and a net loss of members due to economic causes. The determination of the relative importance of these different causes is taken up in the next section.

III. Analysis

In this secton we attempt to determine how much of the decline in the growth rate of union membership between the early 50s and the more recent period can be accounted for by each of three factors: 1. Organizing activity, 2. Success rates in NLRB elections, and 3. Net economic causes.

As a first step we may look to see if historically relevant levels of any one of the three factors could have maintained the level of union membership that was experienced in the early 50s through to 1980 given the actual time path of the other two variables.[19] The answer is a clear no.

First, average success rates in excess of 100% would have been required in each period to maintain membership levels at their peak. Second, as Table 3 shows, the values of the organizing rate and the growth rate due to economic causes which would have been required during the late 60s and 70s are considerably larger than any five year average for those values

during the period under study.[20]

Table 3 about here

Since none of these factors approaches being able to account for the difference between the early 50s and the more recent period by itself, we conduct the following exercise to determine the relative importance of each factor.

Figure 6 depicts the actual time path of the percent of workers organized and five counter-factual paths:

1. The path if the success rate had remained at its 1950-1954 average value and all other rates followed their historical paths.

2. The path if only the organizing rate had remained at its 1950-1954 average value.

3. The path if both the organizing and success rates had stayed at their average levels for the 1950-1954 period.

4. The path if only the net growth rate due to economic causes had remained at its 1950-1954 average value.

5. The path if organizing activity, success rates and net growth due to economic factors had all remained at their 1950-1954 average values.

If all three values had remained at their 50-54 averages membership would have continued to increase fairly smoothly for the whole period reaching a level of nearly 41.3% in 1980. Instead, membership dropped to 21.2%. How much of the difference can be accounted for by each factor by itself?

If the organization rate had remained constant the percent of employed

workers who were union members would have dropped to about 27% in 1980. Thus this factor can account for only about 30% of the difference.

If only the success rate had remained constant the percent organized would again have fallen off to 25%. Thus only about 17% of the difference can be accounted for by this factor.

Of the three individual factors, net growth due to economic factors explains the greatest part of the difference. With that rate fixed member- ship rises to a peak of 38% in 1958 and falls off to 28% in 1980. Thus this factor alone can account for about 35% of the difference.

The effects attributed to the three individual factors do not sum to one. This is because there is substantial interaction between these factors. Individually, organizing and success rates account for only 47% of the difference, but fixing both of them simultaneously we can account for 63%. This is because the terms enter multiplicatively -- a higher success rate applied to a higher number of elections results in far more union members than a single increase. The remaining 37% of the difference is due to net economic growth directly and its interaction with the other two factors.

Thus Figure 6 presents four notable findings. First, comparing the actual union share of the workforce in 1954 with that in 1980 understates the drastic reversal of unions' fortunes since 1954; it is fruitful to ask not only how unions have declined, but also how it is that they have ceased to grow. Second, even if unions had won 3/4ths of the elections they were involved in since 1950, their share of employment would still have fallen nearly as much as it has.[21] Third, even if union growth due to economic factors continued as in the early 50s, the percent organized would still have declined - especially in the late 1970s. Fourth, of the factors con- sidered, only holding both organizing and success rates at their early 50s

heights could have come close to maintaining the unions' share of the work-force.

IV. Conclusion

The figures presented in Section II point to a number of factors which can help account for the decline in the percent of the workforce organized since the mid 1950s. Comparing the 1970s to the early 1950s the rate of organization is down -- even the absolute number of workers being organ-ized is down. In addition, the success rate of union organizing is substan-tially lower, the labor force is growing substantially faster, the rate of de-certification is higher and the net growth of union membership due to economic causes is lower. Of these factors the only one that does not play a major role in explaining the change is the loss of members due to decerti-fications. Among the remaining factors all are at historical lows during the last half of the 1970s except for the net growth due to economic causes.

What the analysis in Section III shows is that no single factor can ac-count for the decline in the percent of the workforce organized since the early 50s. Further, while fixing both the level of organizing activity rela-tive to union membership and the success rate of organizing activity results in only a slight drop in percent organized over the entire period (1955-1980) of about 2.3 percent, only by fixing those rates and the net growth rate due to economic causes at early 1950s rates can a decline be prevented.

What are the implications of these findings? First, while a deteriora-tion in the economic conditions facing the highly unionized industries in the 70s could explain a decrease in both the net growth of union membership due to economic causes and growth from representation elections, this story is not consistent with the observation that there have been periods such as

the early 1960s which were "economically" much worse for union firms when organizing activity was greater and more successful. Further, the argument that the decline in organizing activity and success are due to a drying up of opportunities resulting from the decline of the core industries is not consistent with the observation that the percent of the workforce organized in these core industries has been falling.[22] Finally, as was noted in Section II, the recent experience with respect to employment growth in union firms is not out of line with the record of past decades given the recent level of economic activity. What is unusual is the low level of organizing activity and the extremely low success rates. This could be explained by a decrease in both the extent and intensity of union organizing efforts or by a decreased willingness on the part of workers to join unions. The latter could lead the unions to invest less effort in organizing units with lower possibilities of success. The decreased willingness of workers to vote union could be due to attitudinal changes or to an increase in management resistance as has been suggested by some. In any case, theories which explain the drop in percent organized by reference to the historically low rate of organizing and success derive more support from these results than those that suggest that there is anything unusual about the recent economic position of organized firms.[23]

What are the implications of these findings for future union growth? The answer to this question must depend on which trends one chooses to project. However, a few simple extrapolations may prove instructive.

During the 1970s the total number of private sector non-construction union members remained roughly constant. If that number remains constant and employment continues to expand at about 2.5% per year the percent organized will fall below 15% before 1995 -- plenty of time for structural

changes to reverse current trends.

What would it take for the percent of employed workers organized to expand? Given the rates of labor force growth that are predicted for the near future, it would most likely require both a substantial improvement in the economic performance of union firms and a large increase in both the amount of organizing and its success.

Such changes are probably beyond the magnitudes that the union movement by itself could effect. Perhaps a deliberate effort to increase the extent and intensity of organizing in the new growth industries could be successful in reversing trends, but that would only be the case if increased union efforts would lead to higher success rates.

Finally, what are the implications for future research? First, there is a surprising paucity of basic data on union activity. No information is available in any organized form on the activity of state labor relations board. No data on the economic performance of union establishments rela-tive to non-union establishments is readily accessible. It would be instruc-tive if we could decompose the loss of membership due to "net economic causes" but that is impossible given existing data.

Second, while considerable effort has gone into the study of the deter-minants of organizing success little work has been done on the determinants of organizing activity[24] and virtually no analysis exists of the determinants of differences in the net rate of change due to economic causes.[25] The fact that these do not all move together in a lock step suggests that aggregate models of union growth do not tell the whole story and that there may be much to gain in understanding and predictive accuracy by looking at each element separately. This paper presents a first step in that direction.

FOOTNOTES

1. This is not exactly correct since union membership figures include some unemployed workers. Since we don't know the number of unemployed workers the alternative would be to compute the percent of the labor force who are union members. This approach also has drawbacks so we have chosen to relate membership to the relevant employment statistics. This choice does not substantively affect the analysis below.

2. For example Orley Ashenfelter and John H. Pencavel, "American Trade Union Growth: 1900-1960," Quarterly Journal of Economcs, Vol. 83 #3 (August 1969), pp. 434-448, or more recently Farouk Elsheikh and George Sayers Bain, "American Trade Union Growth: An Alternative Model," Industrial Relations, Vol. 17 #1 (February 1978), pp. 75-79.

3. For example, Richard Freeman has argued this position, most recently in "Why are Unions Faring Poorly in NLRB Representation Elections?", Harvard mimeo (1983)

4. National Labor Relations Board Annual Report, 1949-1980. We begin analysis in 1949 because the number of workers in units choosing certification is not available before this date.

5. Bureau of Labor Statistics, Directory of National Labor Unions, 1979. Membership for 1978-1980 was obtained by calling the BLS.

6. <u>Report of the Proceedings of the 74th Convention of the American Federation of Labor</u>, 1955 and <u>Proceedings and Executive Council Reports of the AFL-CIO 14th Constitutional Convention</u>, 1981.

7. Data on employment in construction was obtained from the 1982 <u>Economic Report of the President</u>. Eligible voters in representation elections involving construction workers were obtained from NLRB Annual Reports. Data on construction workers in units choosing representation was available in the NLRB Reports from 1965 on. For the period before 1965 that number was estimated from the number of eligible voters and the percent of elections won in the construction industry. Counts of organized construction workers were available from the BLS for even numbered years from 1956 to 1978. For the years 1949 to 1955, 1979 and 1980 estimates were constructed based on a regression of construction union members on members of the Laborers union. Membership was interpolated for odd numbered years between 1956 and 1978.

8. We conducted a survey of 30 states to determine the extent of national labor union participation in state board elections. We attempted to get information from the ten states wth the greatest number of NLRB elections, the ten with the fewest, and ten others chosen at random. We were able to contact state-boards (or ascertain for certain that there was no board) in all but 5 states. For the states for which data was available the ratio of workers in NLRB elections to state board supervised elections in 1980 was greater than 4 to 1. Further, of the unions taking part in state board elections less than 40% were national

labor unions which represent private sector workers. Thus, of the new private sector national labor union members due to certification elections, probably less than a 1/11th are due to state board certifications.

Some elections for railway workers and airline employees are handled by the federal mediation service. However, the small number of union members in these industries insures the insignificance of this consideration.

9.   These unions are a subset of the NLRB category "other local unions." This category makes up less than 10% of all elections. (National Labor Relations Board, Annual repots, 1949-1980).

10.   From NLRB Election Reports: Six Month Surveys 1976-1981.

11.   Paula Beth Voos, Labor Union Organizing Programs, 1954-1977, unpublished Harvard Ph.D. dissertation (1982), argues that union organizing expenditures increased from 1955-1975 in real terms and fell only slightly relative to the number of unorganized workers. This may not be inconsistent with the trend described here for two reasons. First, Voos considers only those unions for which data on organizing is available for all years. It is quite possible that those unions would be the ones for which organizing is most important and which would have the lowest reduction in expenditures. Other unions may be decreasing their expenditures. Second, even if unions are increasing their expenditures, other factors, such as management resistance, could be decreasing the number of workers involved in certification elections.

12. Richard B. Freeman and James L. Medoff, "New Estimates of Private Sector Unionism in the United States," Industrial and Labor Relations Review, Vol. 32 #2 (January 1979), p. 171, Table 8.

13. Richard Prosten, "The Longest Season: Union Organizing in the Last Decade," Proceedings of the Industrial Relations Research Association, Winter 1979, p. 247.

14. Charles McDonald, "Study of the Success in Obtaining Contracts After Winning an NLRB Election and After Obtaining a Bargaining Order," memorandum to the National Organizing Committee of the AFL-CIO, February 18, 1983. The study covered elections conducted in April of 1979 through March of 1981.

15. Since the McDonald study suggests that the percent of cases where the union fails to obtain a contract and the unit becomes inactive may be increasing, results were also recomputed allowing for this possibility. This reversed the slight downward trend in the net growth due to "economic" causes and increased the de-acceleration of growth due to organizing activity. The program and data used to do this calculation and all others reported in this paper are available from the authors.

16. Considering the list of ways union membership may grow or decline in section I, the only possible complication to the interpretation of this rate as due to "net economic" causes would be if a substantial number of new units gained recognition from previously unorganized employers without going through a certification election. Voos, Labor Union

<u>Organizing</u>, pp. 178-179 suggests that this number has been quite small during the period we are considering.

17. In fact, the graph of percent change in membership strongly resembles that of a MA1 process (particularly in the early years). This is exactly what one would expect if union membership was subject to measurement error on a year to year basis. Thus a series smoothed with a two or three period moving average might give a more accurate picture of the true rates of change. That has not been done here.

18. The effect of slower growth of employment in union plants than in non-union plants has never been empirically addressed. One advantage of the approach adopted here is that it allows us to gauge the relative importance of this effect.

19. The "everything-else-held-the-same" restriction here is more important than usual. We would not really expect the rate of success to remain unchanged if, for example, unions were able to substantively increase organizing activity. Thus the rates that are being set equal to their historic values are as much a part of the counter-factual as those being set to some constant value. Given this caveat, it is clear that fixing any one rate could not have maintained the early 50s membership levels.

20. This is not to say that these rates have never been obtained. During the late 1930s and early 40s, as the country was recovering from the depression and immediately following the passage of the Wagner Act

union membership grew by more than 3% of employed workers a year on average. Such performance is clearly atypical. The early 50s are not characterized by such major changes or economic extremes and thus provide a better benchmark for evaluating recent history.

21. More strikingly, the percent organized would have fallen even if unions had won every election they were involved in since 1950.

22. BLS, <u>Directory of National Labor Unions</u>, several years between 1950-1979.

23. Two additional pieces of information supporting this view can be found in recent work by Henry Farber and Richard Freeman. Henry Farber, "The Extent of Unionization in the United States (1983)," notes that even if the industrial composition of U.S. employment hadn't changed during the 70s the drop in the percent of the workforce organized would only have been 16% smaller. Richard Freeman, "Why are Unions Faring Poorly in NLRB Representation Elections? (1983)," estimates a model of union voting and shows that only 8% of the drop in success rate can be accounted for by the change in the industry, occupational, race and sex make up of the labor force.

24. Voos, "Labor Union Organizing ...," considers the effect of union organizing expenditures. Other studies include Richard N. Bloch, "Union Organizing and the Allocation of Union Resources," <u>Industrial and Labor Relations Review</u>, Vol. 34, #1 (October 1980), pp. 101-113, and Daniel J.B. Mitchell, <u>Unions, Wages and Inflation</u> (Washington,

D.C.: Brookings, 1980), p. 270.

25. Voos, "Labor Union Organizing ...," p. 65, briefly considers the
cyclicality of this factor but does not perform any formal analysis.

TABLE 1

History of Factors Determining the Level of Union Growth

1950-1979

Five Year Averages
(in percent)

Period	Percent Union	Organizing Rate	Success Rate	Decertification Rate	Decertification Success Rate	Net Growth Due to Representation Elections	Net Growth Due to "Economic" Causes
1950-54	34.4	2.59	76	.07	52	3.6	.08
1955-59	34.6	1.53	62	.09	49	1.6	-1.59
1960-64	31.2	1.56	55	.12	49	1.6	-2.27
1965-69	29.0	1.46	55	.10	42	1.8	.38
1970-74	27.2	1.25	46	.14	48	1.3	-.73
1975-79	23.8	.97	37	.23	54	.9	-1.91

TABLE 2

Results of a Regression
of Net Growth Due to Economic Causes
on Percent Change in GNP and a Time Trend

	Coefficients	S.E.	T-Statistic
Constant	-4.702	1.545	-3.04
time trend	.013	.057	.23
% ΔGNP	.355	.191	1.85
% ΔGNP$_{-1}$	.590	.190	3.11
R^2	.335		

TABLE 3

Rates Necessary to Maintain Percent
Organized at 36.1% Assuming
All Other Rates Follow Historic Paths

Five Year Averages
(In percent)

	Organizing Rate	Net Growth Rate Due to "Economic" Causes
1955-59	2.82	.00
1960-64	4.51	.23
1965-69	3.66	2.37
1970-74	3.68	1.05
1975-79	8.22	2.45

FIGURE 1.

ORGANIZATION RATE
% NON-UNION LABOR INVOLVED
IN CERTIFICATION ELECTIONS
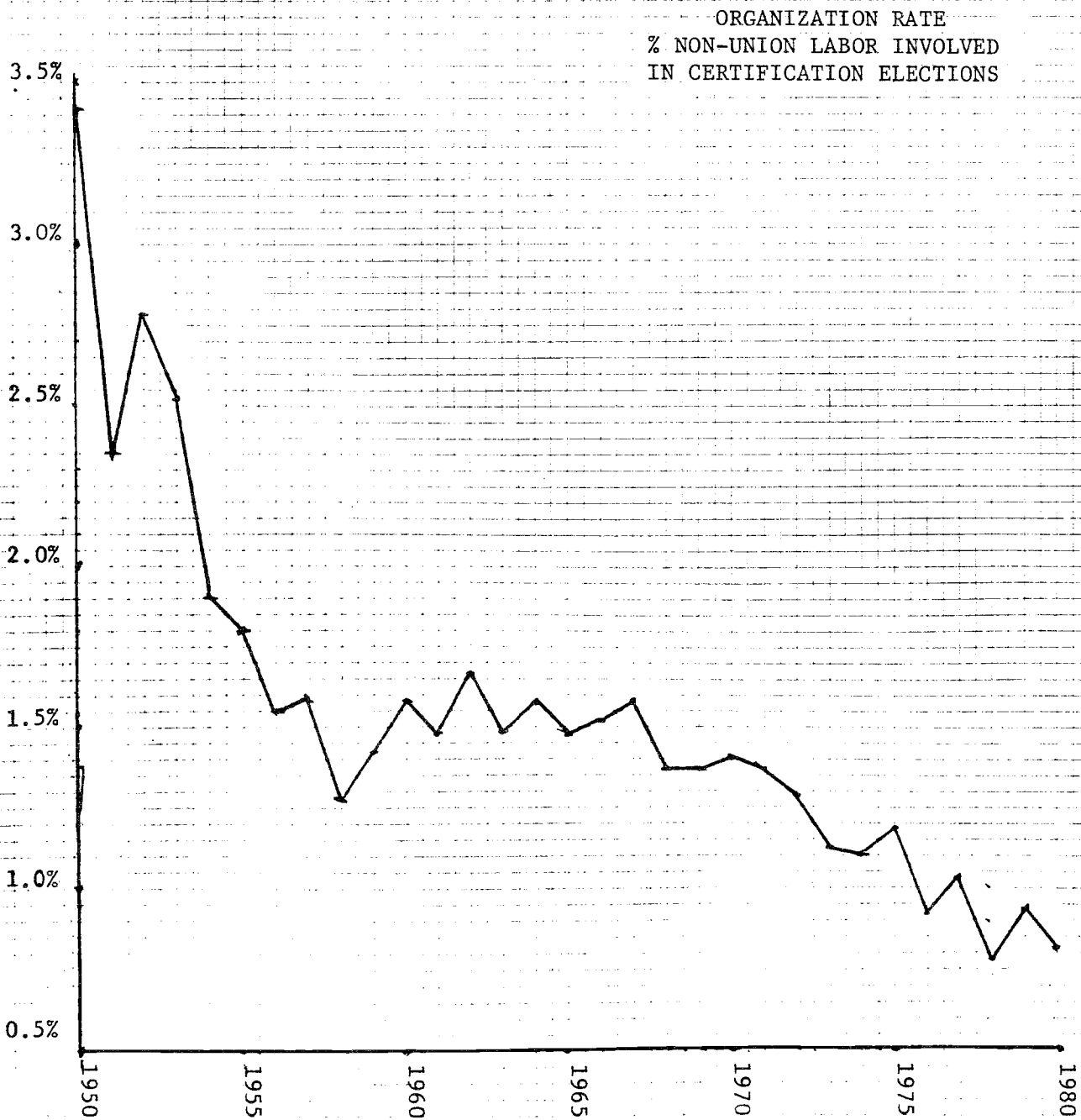
FIGURE 2.

Success Rate in Union Certification
Elections 1950 – 1980
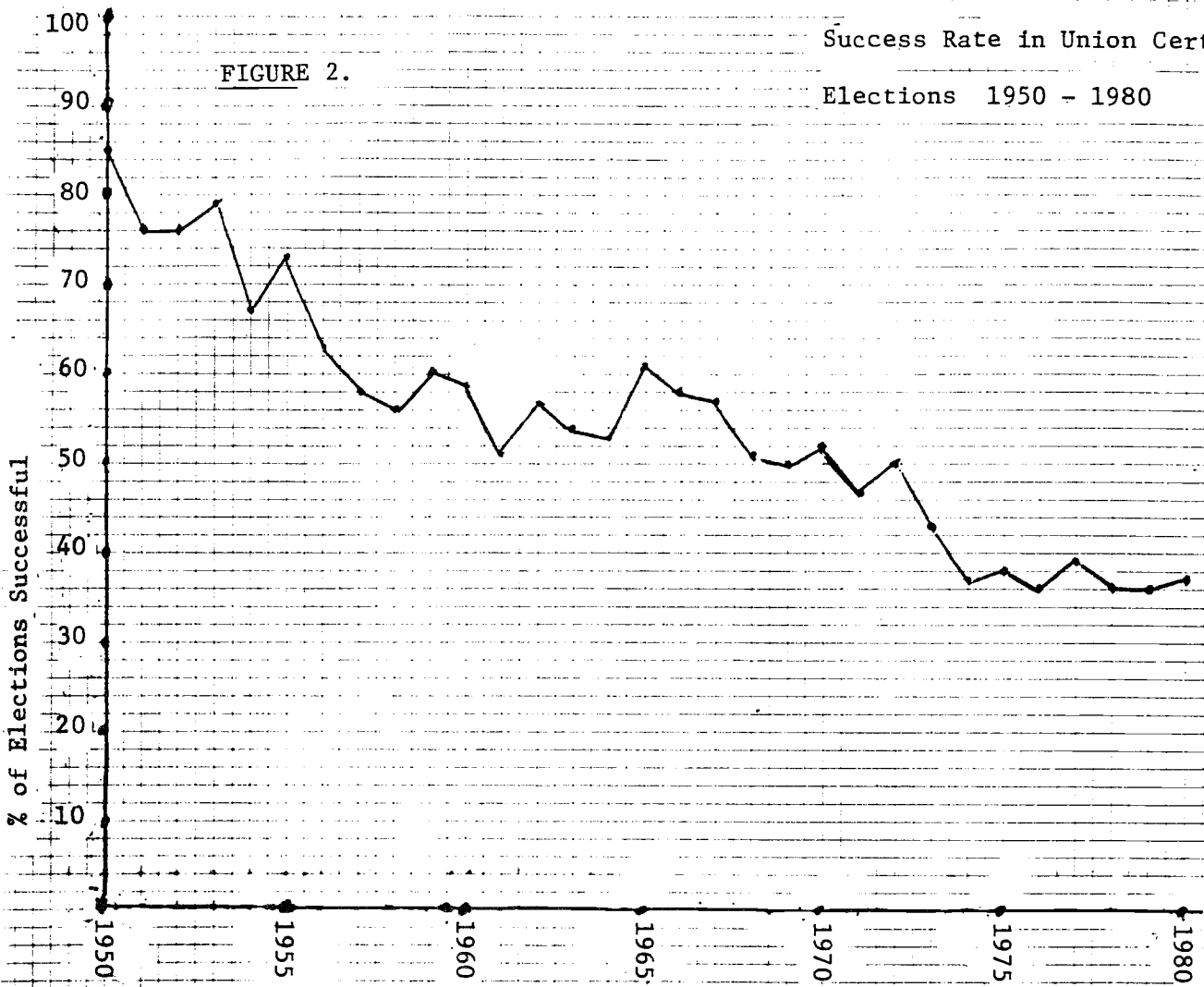
Organization Rate:

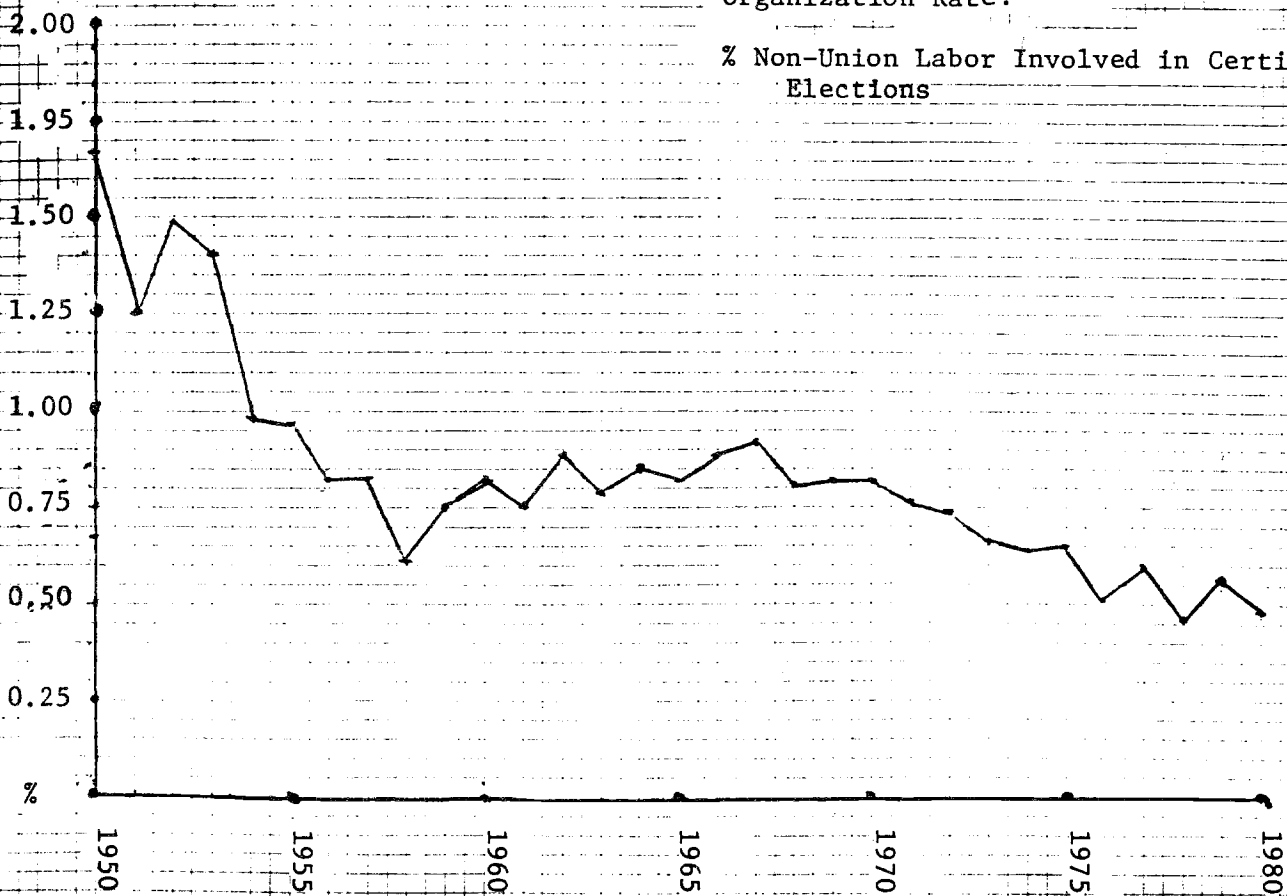% Non-Union Labor Involved in Certification
Elections

FIGURE 3.

Decertification Rate:
% Union Workers Involved in Decertification
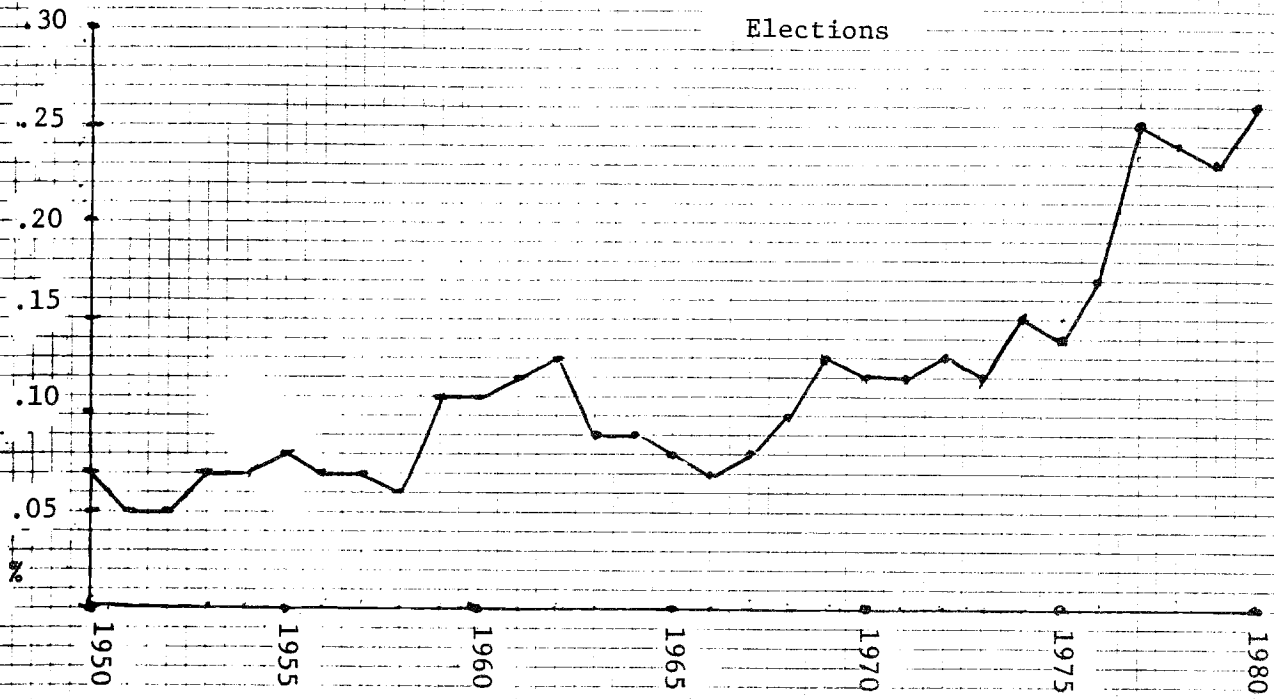Elections

FIGURE 4.

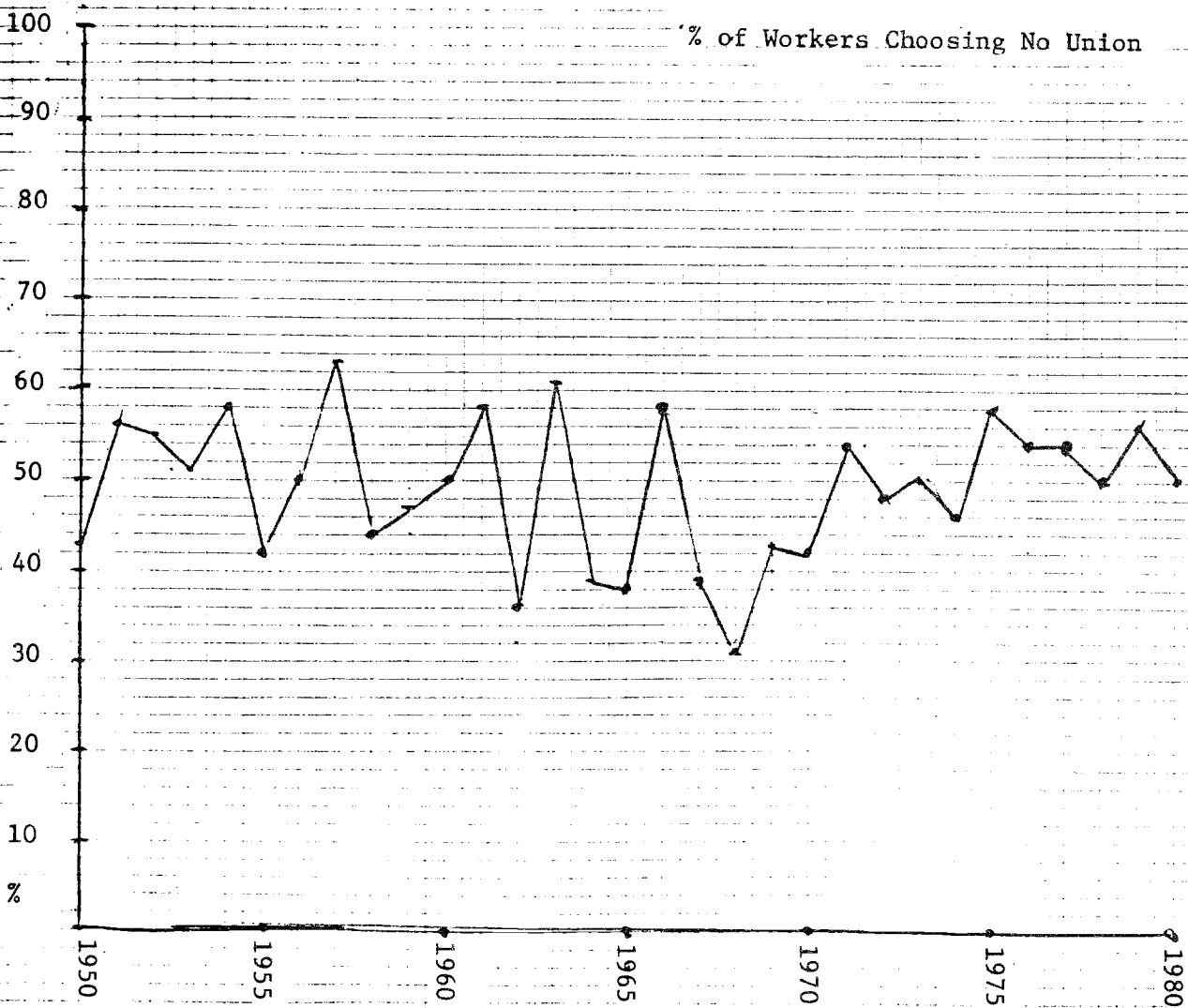Decertification Success Rate:
% of Workers Choosing No Union

FIGURE 5.   CHANGE IN UNION MEMBERSHIP
——— Total Union Growth
---- Change Due to Certification Elections
······ Change Due to Other Factors

1951 Total Growth
=12.7%
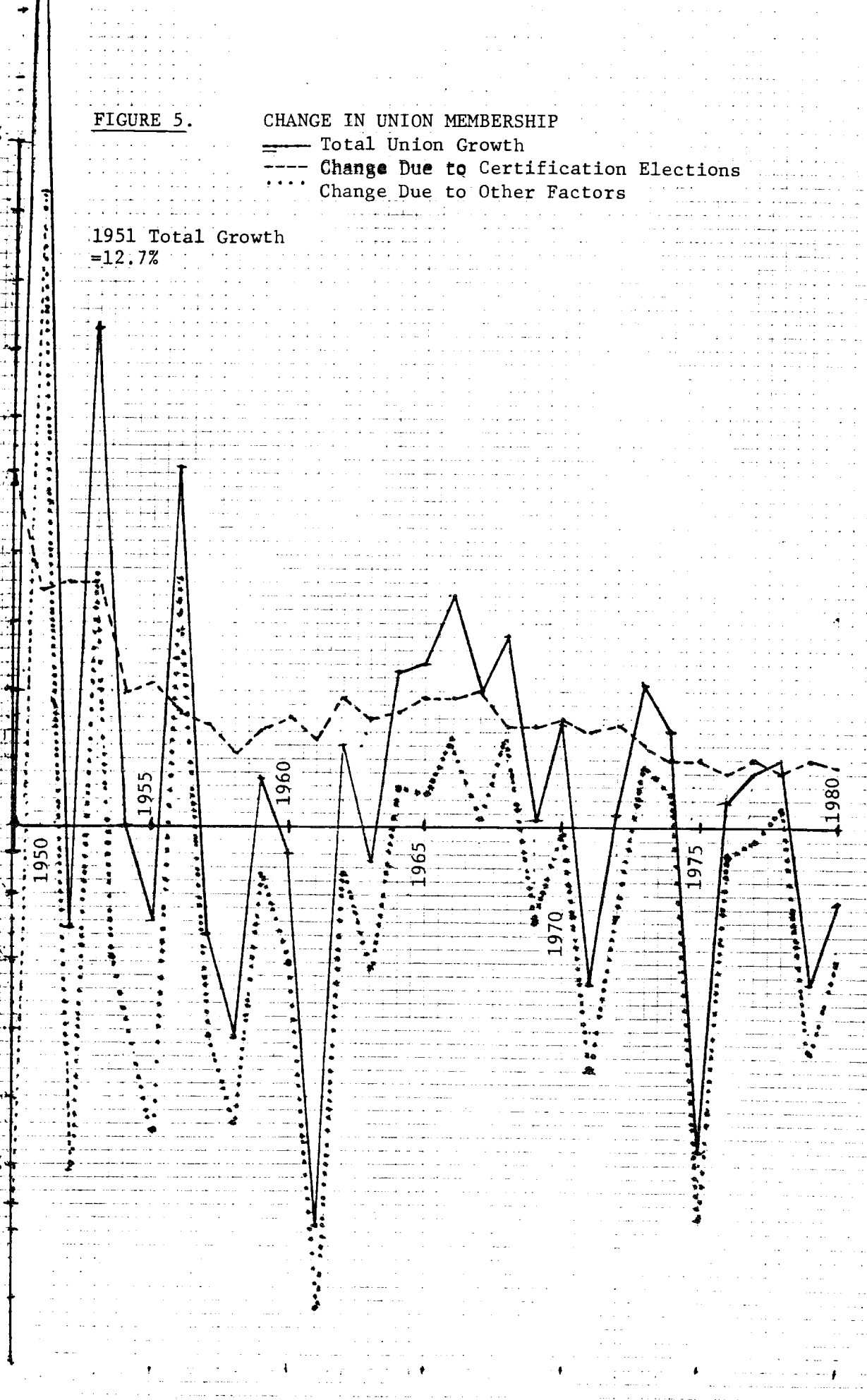
10%

5%

0%

-5%

1950   1955   1960   1965   1970   1975   1980

FIGURE 6.

PERCENT OF WORKFORCE ORGANIZED

All rates
held constant

Organizing and
success rates
held constant

Economic growth
rate held
constant

Organizing
rate held
constant

Success rate
held constant

Actual percent
of workforce
organized

40%

35%

30%

25%

20%

1950   1955   1960   1965   1970   1975   1980