

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Distribution of Union Membership among the States, 1939 and 1953

Volume Author/Editor: Leo Troy

Volume Publisher: NBER

Volume ISBN: 0-87014-370-0

Volume URL: <http://www.nber.org/books/troy57-1>

Publication Date: 1957

Chapter Title: Appendix: Sources and Methods of Measurement

Chapter Author: Leo Troy

Chapter URL: <http://www.nber.org/chapters/c2691>

Chapter pages in book: (p. 28 - 32)

## APPENDIX

### *Sources and Methods of Measurement*

As in earlier National Bureau studies on trade unions, union membership is defined as those individuals for whom the national or international union has either received or paid a membership fee over a calendar or fiscal year. Whenever possible membership was computed from the financial reports of the union. Where data on dues received from locals or dues paid to an affiliated body were unavailable, figures were obtained from reports of officers, by correspondence with unions, or were estimated on the basis of voting representation at conventions. The membership figures obtained from such varied sources would not always be strictly comparable. Duplication of membership, as is likely in construction and railway transportation, overreporting, strikes, unemployment, service in the armed forces offered additional problems in measurement. As is well known to students of the subject, statistics of union membership have never met exacting standards.

State estimates offered further difficulties with respect to both sources and methods. The most reliable sources were financial statements which reported dues received from each local union. Many unions keep records of their membership by state and generously made these available. Very often, however, it was necessary to derive estimates from voting or delegate representation officially reported by a convention credentials committee. Finally, reports of referenda on some internal issue or election served as an adjustment factor for results obtained by other means.

Figures derived from representation at conventions presented the most difficulties. Not all locals attend the national convention, but generally only the smaller ones or those in arrears in per capita dues are absent. Uneven and large class intervals for delegate entitle-

ment, the guarantees of minimum representation, and limitations on the size of delegations also had to be taken into account in estimating the distribution of membership.

In practice, the margin of error arising from these constitutional regulations does not appear to be large. Comparison of local membership figures estimated from dues receipts and voting representation shows little divergence between the two estimates (Table 8).

All but 6.3 per cent of known membership in the United States could be classified by state in 1939, and all but 2.8 per cent in 1953. Data for 1953 were available in greater detail, and the unions whose membership could not be distributed in both years did not greatly increase their membership during the period.

The Bureau of Labor Statistics has estimated total union membership for 1954 at 17,956,000; the NBER estimate for 1953 is 17,147,000, smaller by 809,000 or about 5 per cent. Since total membership declined between 1953 and 1954, the difference in estimation apart from different timing would be somewhat larger.

More than half the 809,000 discrepancy between the BLS figure

TABLE 8

Voting and Per Capita Membership Estimates for Two Unions, 1953  
(thousands)

Rubber Workers			Chemical Workers		
Local	From voting representation	From per capita dues receipts <sup>a</sup>	Local	From voting representation	From per capita dues receipts <sup>a</sup>
2	15.2	15.1	1	0.6	0.8
5	10.7	10.7	2	1.1	1.4
62	0.1	0.1	21	0.3	0.2
91	0.1	..	38	0.4	0.4
132	1.0	1.0	64	0.1	0.1
154	3.2	3.0	75	..	..
196	0.4	0.4	143	2.1	2.2
252	0.1	..	271	1.6	1.4
307	1.0	1.0	450	0.1	0.1
383	0.5	0.5	316	0.2	0.2

<sup>a</sup>Where no figure is shown, the estimate of membership was less than 51.

Sources: *Report of General Officers to the 18th General Convention, 1953*, United Rubber, Cork, Linoleum and Plastic Workers; *Proceedings of the Tenth Annual Convention 1953*, International Chemical Workers Union.

for 1954 and the NBER's for 1953 (453,000) can be accounted for by a few unions, as the following tabulation shows.

	BLS	NBER	
	1954	1954 (thousands)	1953
Clothing Workers	385	274	288
Communications Workers	300	252	254
Electrical Workers (CIO)	362	282	266
Garment Workers, Ladies	441	387	399
Steelworkers	1,194	987	1,101
Textile Workers (CIO)	293	200	242
Textile Workers (AFL)	90	53	62
Total	3,065	2,435	2,612

Apparently, different definitions of union membership account for the discrepancies between the two sets of figures. Many unions report employees represented as members, and this number usually exceeds that estimated from dues receipts, the definition used by the NBER. Since most of the BLS membership data were obtained from questionnaires, it would appear that some unions reported the number represented rather than those paying dues.

A number of unions reported the same membership, or nearly so, to the BLS as was estimated or reported to the NBER for 1954. Examples are the Automobile Workers (CIO), Letter Carriers, Operating Engineers, Teamsters, and Rubber Workers.

Another source of difference between the totals are 22 unions that failed to respond to the BLS questionnaire. For this group the BLS estimated a combined membership of 1,371,000 in 1954. The NBER count included 7 of these unions, with an estimated combined membership of about 900,000 in 1953. The principal unions in the group are the United Mine Workers, the United Electrical, Radio and Machine Workers, and the United Packinghouse Workers.

On the other hand, NBER figures for 1953 exceeded those of the BLS for 1954 in some cases. The most notable examples were the Automobile Workers (CIO), the Hotel, Restaurant and Bartenders Union, the Machinists, Railway Clerks, Railroad Trainmen, and Sheet Metal Workers. Also, the NBER included in its total many local independent unions excluded by the BLS.

Figures published by two states, Massachusetts and California, are compared with NBER estimates in Table 9.

The official Massachusetts figures are larger than the NBER's

TABLE 9

Official and NBER Estimates of Union Membership, 1939 and 1953  
(thousands)

	1939			1953		
	Official (1)	NBER (2)	Difference (1) - (2)	Official (1)	NBER (2)	Difference (1) - (2)
Massachusetts	319.7	208.9	110.8	592.8	546.1	46.7
California	n.a.	424.0	....	1,577.9	1,392.5	185.4

Sources: *Thirty-Ninth Annual Directory of Labor Organization in Massachusetts, 1940*, Labor Bulletin 182, p. 90; and *Forty-Ninth Directory . . . , 1954*, Bul. 197, p. 131, Massachusetts Department of Labor and Industries; *Union Labor in California 1953*, California, Department of Industrial Relations, Division of Labor Statistics and Research, p. 11.

by more than 50 per cent in 1939 and about 9 per cent in 1953. Aside from differences in the definition of union membership, in sources, and in the date to which the data refer (the NBER's are calendar- or fiscal-year averages while the official figures are as of a single date), there are other reasons for the discrepancies, especially in 1939. First, it appears that a number of unions were overreporting to Massachusetts in 1939. This was particularly true in textiles and clothing, where large-scale organizing was under way at that time. The principal unions in these two industries alone account for more than 60,000 of the total 111,000 difference. (The official figures in textiles show almost no growth in membership between 1939 and 1953, yet the Textile Workers, CIO — an organizing committee in 1939 — increased their national membership from 68,000 in 1939 to 226,000 in 1953, based on dues receipts, and it is clear that this gain did not take place in the South.)

A second reason for the discrepancy is that in the NBER tabulation part of the membership could not be distributed by state.

Finally, it is evident from the Massachusetts directories that the official figures include membership for a substantial number of independent unions not available to the National Bureau.

The reasons for the 13 per cent difference in the California figures for 1953 seem to be the inclusion of membership of independent unions reported in the official tabulation but unavailable to the NBER; inclusion of membership of unions in the official total that could not be distributed by state by the NBER; and the anticipated discrepancy arising out of definitional differences, sources, and

methods. (As with Massachusetts, the California data refer to a single date.)

Since the NBER's data have been gathered, it has been learned that the official California figure included nearly 50,000 members in independent unions not available to the Bureau. And no less than another 47,000 were in unions whose membership the Bureau could not distribute by state in 1953. Together, these two factors account for about half the discrepancy between the official California figures and those of the NBER.