THE EXTENT OF TRADE UNIONISM

By Leo Wolman, University of Michigan.

The quantitative analysis of phenomena is assuming in the study of the science of economics a position of increasing importance. Recognition is at last, if grudgingly, being given to the fact that discussions of the influence of economic forces and tendencies are of great or of little value in proportion as there exists some numerical measure of the strength or extent of these forces. Particularly is this the case where the discussion is concerned with the intricate problem of tracing the influence of such an institution as modern trade unionism. A prerequisite to an intelligent study of the labor movement consists in an accurate statistical estimate of the extent and ramifications of the movement. While it is of course true that the influence of a movement is frequently out of all proportion to the numbers participating in it, as in the case of the Industrial Workers of the World, a knowledge of the statistics of increase and decrease in membership will even in such a case throw considerable light upon the successive rise and decline in influence.

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The problem of determining the extent of trade unionism in a country can be attacked first by registering the absolute membership of labor organizations and then by calculating the ratio of this membership to the industrial population of the country. The first step, because of the present disorganization in the collection of this form of labor statistics in the United States, necessitates laborious compilation from a large number of scattered sources. Beyond this, although some slight difference of opinion may exist as to the definition of a trade union and hence as to the statistical limits of the study, the problem is one of mere enumeration. With regard, however, to the calculation of the relative extent of trade

¹ For a comprehensive discussion of this whole subject see the author's article on "The Extent of Labor Organization in the United States in 1910," *Quarterly Journal of Economics*, May, 1916, p. 486.

unionism, the difficulties are many and real. If a trade union be defined as a voluntary organization of wage-earners, an accurate index of the numerical extent of the trade union movement would be the ratio of the total membership of trade unions to the wage-earning population. Unfortunately, no attempt is made in the census to distinguish a wage-earning class; and previous to the publication of the Census of Occupations of 1910, which contains a much more detailed analysis of the occupational distribution of the working population than can be found in any earlier census, not even a reliable estimate of the extent of a wage-earning class was feasible. With the material that is now available, however, it is possible, by making rough deductions of those groups included in the Census of Occupations of 1910 that are clearly comprised by members of the employing and salaried classes, to obtain a reasonably accurate basis for calculating the extent of trade unionism among the wageearners of the United States.

The total membership of trade unions in the United States in 1910 was 2,116,317; in the same year the total number of persons gainfully engaged in industry in this country was 38,134,712. members of trade unions, therefore, constituted in the last census year 5.5 per cent of the industrial population of the United States. This percentage, however, appreciably underestimates the strength of the trade union movement because of the inclusion, in the aggregate of persons "gainfully engaged" in industry, of members of the employing and salaried classes. By combining those groups in industry that are composed of members of the employing, salaried and fee-receiving classes, such as merchants, managers and clergymen, a total for this group of 10,939,808 is obtained. Accordingly, the wage-earning class in 1910 can be said to have numbered 27,-194,904 persons; and of this number 7.7 per cent were members of labor organizations. Adherents of the labor movement would maintain that this last index, based upon a group that includes such wage-earners as agricultural laborers, domestic servants, and clerks, was still not fairly indicative of the actual strength and extent of trade unionism. They would use as a basis for the calculation of the percentage of organization that group of wage-earners which the modern trade union makes definite and sustained efforts to organize. Since no such efforts have been made, until the present at least, to organize agricultural laborers and domestic servants, because

of their condition of individual isolation, and because the social and economic status of such employes as clerks and stenographers precludes any large extension in organization among that class of workers, it is contended that a fair estimate of the extent of labor organization can be based only upon a group in which these classes are not included. Furthermore, practically every trade union has established an age limit below which it will not admit workmen in the industry into membership in the union. The average lower age limit for all trade unions may be roughly stated at twenty years. When all persons engaged in industry as agricultural laborers, in domestic and personal service, in such occupations as stenographers and saleswomen, and also persons below the age of twenty be combined and the total for this group be deducted from the 27,000,-000 wage-earners in the United States in 1910, a resulting group of 11,490,944 persons, who may be characterized as constituting a potential trade union membership, is obtained. And with this class as a basis, the degree of organization is found to be 18.4 per cent. Accordingly, the most conservative survey of the situation would indicate that in the United States in 1910, 92.3 per cent of the wage-earners were unorganized; whereas, the most liberal estimates would show that 81.6 per cent of those persons who are susceptible of organization were without the trade union.

The foregoing statement must be qualified in one important re-A large factor in the relative extent of trade unionism is the territorial distribution of the working force of the nation. fluence upon the growth of labor organizations of the urbanization and concentration of industry is well known to every student of industrial history. It is generally true that, where workmen live in thinly settled communities and work in small establishments, the rise and growth of trade unions is long retarded. It is this condition that, to a great extent, explains the surprisingly low percentage of organization. Large numbers of carpenters and bricklayers, for example, are to be found in the rural sections of the country. Even though such workmen may constitute potential competitors of laborers in the urban districts, the union finds it not only difficult but also undesirable to organize them because of the expense of propaganda and of organization. If, therefore, it were possible to calculate the extent of organization among workmen living in cities of 10,000 population and over, the available data on the subject lead one to believe that the percentage would be much higher than for the country as a whole.²

II

The trade union movement is naturally made up of relatively strong and relatively weak component parts. In some industries the unions have attained an absolutely and relatively large membership, while in others the degree of organization is so small as to be almost negligible. It would be desirable, therefore, to classify the various industries according to the strength of the organization, with a view to throwing some light upon the causes of low and high percentages of organization. The absence of practically any organization among agricultural laborers, and among those employed in domestic and personal service and in clerical service has already been noted.3 The subsequent discussion will be limited to the mechanical and manufacturing, extractive, transportation and building industries. For the purposes of analysis the industries are classified into three groups. The first group is composed of the highly organized industries or those having an organization of over 30 per cent; the second group contains those industries that are fairly organized and in which the extent of organization lies between 15 and 30 per cent; the last group of poorly organized industries is comprised of those having an organization of less than 15 per cent. The following table presents the industries of the first group:

Name of industry	Number of persons in industry	Percentage organized
Breweries	55,413	88.8
Marble and stone yards	55,558	45.4
Printing and bookbinding	249,456	34.3
Glass factories	83,641	34.2
Mining	834,456	30.5
Total		

Of the five industries included in this table, three are organized along occupational lines and two industrially. In the marble and

² George E. Barnett, "Trade Agreements and Industrial Education," Bulletin No. 22, National Society for the Promotion of Industrial Education, p. 3.

³There were approximately 6,000,000 agricultural laborers in the United States in 1910; only several hundred were members of trade unions. Of the 5,265,818 persons employed in domestic and personal service and as clerical workers, less than 2 per cent were organized.

stone yards, printing and bookbinding industry, and glass factories the ratio of the number of skilled to unskilled workingmen is comparatively high; and the high degree of organization in these industries is to be explained by the high percentage of organization among the skilled workmen. In mines and breweries, however, although the relative amount of unskilled labor is somewhat greater than in the first three cases, the adoption of the industrial form of organization, together with other factors, has effected as high a degree of organization as where the ratio of skilled workmen is somewhat greater. The unusually high percentage in breweries is attributed to the effective use by the United Brewery Workmen of the boycott as an organizing device.

In the next table are given those industries that show an organization from 15 to 30 per cent:

Name of industry	Number of persons in industry	Percentage organized
Cigar and tobacco	170,904	27.3
Potteries		21.9
Transportation	2,862,260	17.3
Clothing		16.9
Building trades	2,444,395	16.2
Total	6,112,820	

The facts elicited in the discussion of the first table are for the most part confirmed by the evidence contained in the second. Defining an occupation in the broader sense as including closely related forms of labor, it is not improper to state that the unions claiming jurisdiction over the various operatives in each of the foregoing industries are all trade or occupational unions. Furthermore, the ratio of unskilled to skilled workmen is appreciably higher in this than in the first group of industries. Whatever organization does exist is to be found in the main among the skilled workers. notably the case in the building and transportation industries where such skilled workmen as locomotive engineers and bricklayers are highly organized whereas the unskilled maintenance of way employes and building laborers are totally unorganized. In the clothing industry there is still room for a considerable extension of organization even among the skilled or semi-skilled operatives; here, however, the policy of the union and the changing character of the labor force in the industry have constituted serious obstacles to increased

organization. In the manufacture of cigars and tobacco, also, the problem has been not only one of organizing unskilled workers and of opening the union of the skilled to the unskilled, but the difficulty of organizing the latter has been greatly enhanced by effective opposition to unionism from the American Tobacco Company.

The last table is composed of those industries that have an organization of less than 15 per cent:

Name of industry	Number of persons	Percentage or-
	in industry	$\mathbf{ganized}$
Leather	293,035	14.5
Electric light and power	252,883	14.3
Lumber and furniture	597,174	10.7
Iron and steel	1,746,387	9.9
Food and kindred products	299,176	7.6
Quarrying	85,919	7.3
Metal	320,041	4.7
Textile	800,251	3.7
Paper and pulp	101,797	2.6
Chemical and allied industries	73,585	0.4
Total	4,570,248	

The high correlation between skill and extent of organization Where trade is again the most striking feature of this table. unionism is most extensive, the great bulk of trade unionists are The iron and steel industry, for example, shows skilled workmen. an organization of 9.9 per cent; but practically all of the organization exists among such skilled workmen as iron molders and pattern makers. The unskilled laborers in the steel mills, over whom the Amalgamated Association of Iron, Steel, and Tin Workers claims jurisdiction, have an organization of probably less than 2 per cent. The same situation exists in the leather, lumber, textile, paper and chemical industries. Another, and perhaps a more important, element responsible for the lack of organization in several of these industries is the concentration of ownership which places in the hands of the managers of the industry various means for combating the growth of organization. The persistent opposition of the United States Steel Corporation, the International Paper Company, and of the American Woolen Company to trade unionism has been as potent a factor in hindering the organization of their employes as the presence in these industries of large numbers of unskilled laborers

The American labor movement, however, is almost completely, in the strict sense of the term, a trade union movement. Only in recent years has there been any palpable extension in the direction of industrial organization. The extent to which the industries of the country are organized does not for this reason indicate with the greatest accuracy the success of labor organizations in organizing those workers over whom the individual organizations claim jurisdiction—that is, those workingmen who are employed in well-defined and in, for the most part, skilled trades. The foregoing analysis should accordingly be supplemented by a survey of the extent of organization in the more important occupational or trade divisions of industry. Unfortunately, the available material does not permit of an exhaustive treatment, but it is possible to obtain a sufficient number of occupations to warrant guarded generalization.

Excluding from the discussion those occupations in which there was no organization, of the thirty-three trades concerning which statistics were obtainable, five—railway conductors, electrotypers, brakemen, locomotive engineers, and stonecutters—were from 50 per cent to 100 per cent organized. In the next group of occupations, from 30 to 50 per cent organized, were brick masons, printers, locomotive firemen, mail carriers, molders, pattern makers, plasterers, potters, and woolsorters. The third and largest group, comprised by trades from 15 to 30 per cent organized, included bakers, barbers, bartenders, bookbinders, carpenters, coopers, loomfixers, metal polishers, painters, plumbers, switchmen, tinsmiths and woodcarvers. And in the final class, with an organization of less than 15 per cent, were blacksmiths, brickmakers, glove workers, machinists, teamsters and waiters.

In practically all occupations the percentage of organization is higher than in the various industrial divisions; and this is the natural result of the occupational character of the typical American labor union. Where these organizations have expended the greatest efforts, they have met with the most signal success. Beyond this, however, differences in organization can as before be explained by the varying proportions in different industries and occupations of skilled and unskilled workmen.

A summary of the situation in 1910 would indicate that the small percentage of organization is due primarily to four factors: 1. The great bulk of the unorganized workers live in small towns and

rural districts where their inaccessibility and dispersion make organization both difficult and, if not undesirable, at least not pressing.

2. Of almost equal importance as a problem of organization is the unskilled worker. By reason of the large supply of unskilled labor and the ease with which it may be replaced, organization of the unskilled has, up to the present at least, made little progress.

3. A somewhat greater success in organizing the unskilled laborers seems to have been attained by the use of the industrial form of organization than by the trade union. It should be noted, however, that, although the majority of American unions are nominally occupational organizations, many are rapidly assuming the character of industrial unions.

4. Finally, the concentration of ownership, combined with a hostility to labor organizations, has constituted in most cases an insurmountable barrier to the labor organizer.

TII

Trade unionism has in this country made little progress in organizing woman labor. The temporary character of the labor of women, their youth, and the fact that in the great majority of instances their wages are designed to supplement the family income have all constituted serious obstacles to their organization. Accordingly, of the 8,075,000 women "gainfully engaged" in industry in the United States in 1910, 73,800 or only 0.9 per cent were members of labor organizations. And if deductions, similar to those made above, are made of those women engaged in employing and salaried positions, in agriculture, domestic and personal service, professional service, and as clerical workers, a residuum of 1,819,741 women, having an organization of only 4.1 per cent, is obtained. In only one industry is there what might be considered a relatively high percentage of organization; of the 2,407 females employed in the liquor and beverage industries, from 20 to 30 per cent were members of the union. In the clothing industries, where the number of female workers is large, organization ranges from only 10 to 15 per cent. The same is true of the more important occupations in which there are large numbers of female employes. The highest percentage of organization in all occupations is among the bookbinders of whom

⁴ For an authoritative account of the characteristics of woman labor, see C. E. Persons, "Women's Work and Wages in the United States," Quarterly Journal of Economics, February, 1915, p. 201.

less than 20 per cent are organized. It is probable that since 1910 the proportion of organized female labor has increased rapidly. In the period from 1910 to 1913, for instance, the female membership of American unions increased more rapidly than their total membership. One explanation for this disproportionate increase is, of course, to be ascribed to the small number of female unionists in the basic year of 1910. It is still true, however, that a significant factor in the increase has been the organization of women in industries in which the trade union has for the first time secured a foothold among the female employes.

IV

Of perhaps greater interest and importance than the ascertainment of the extent of labor organization in any one year would be the determination of the relative growth of organization over a long period of years. In the only exhaustive study of the growth of labor organization in this country,5 Professor Barnett finds that from 1897 to 1914 the membership of American trade unions increased from 444,500 to 2,674,400; the maximum membership in this period being 2,701,000 in 1913. By using the method of interpolation, he calculated the industrial population in the years 1897 and 1914. With these as a basis, the 445,000 trade union members in 1897 were seen to constitute 1.66 per cent of the number of gainfully occupied persons in that year; whereas, in 1914, the 2,674,400 trade unionists constituted 6.28 per cent of the gainfully occupied. In the period under discussion, therefore, the trade unions showed a substantial relative as well as an absolute increase in membership. The relation between the growth in membership and the growth in the number of wage-earners can unfortunately be calculated for only the census years. Here, too, Professor Barnett has roughly calculated the wage-earning population in the United States in 1900 and 1910; in the former year the trade union membership was four per cent of the number of wage-earners and in 1910 seven per cent of the wage-earners were members of labor organizations.

In the period from 1910 to 1913, it is likely that the increase in the membership of unions kept pace with the increase in the number of wage-earners. The industrial depression in 1914 caused

⁵ George E. Barnett, "Growth of Labor Organization in the United States, 1897-1914," Quarterly Journal of Economics, August, 1916, p. 780.

a significant decrease in membership. Since 1914 there has probably been a large absolute and relative growth of trade unions, due primarily to the great expansion in industry in this country following the outbreak of the European War. It is well known that in times of industrial prosperity and of sharp demand for labor, the growth of labor organization is rapid; in times of depression. on the other hand, membership either remains stationary or suffers a slight fall. During the last year or more, not only has there been an enormous industrial expansion and a consequent scarcity of labor, but this scarcity has been greatly accentuated by the unprecedented decrease in the volume of immigration. The net effect of these forces should be, first, a large increase in the absolute membership of labor unions and second, a corresponding increase in its growth relative to the increase in the number of wage-earners. That there has been in the last year a remarkable growth in the membership of trade unions is evident from the facts contained in contemporary reports on trade unions; and that the second circumstance is being effected, it is not, in the light of present conditions, unreasonable to assume.