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THE CONCEPT OF EQUALITY OF INCOME FOR PEOPLE
ENGAGED IN OR DIRECTLY DEPENDENT UPON AGRICULTURE 1/

by

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I shall discuss this topic in reverse order--people first, income next, and then equality.

The people engaged in or directly dependent on agriculture cannot be assumed to be the farm population as reported in the census. Although I believe that the workers in packing sheds, canneries, etc., are directly dependent on agriculture, for lack of data they will be left out of consideration and the discussion confined to people represented by farm operators and hired employees who work on farms, using California data for illustration.

The 1930 Census lists the California farm population on April 1 as 620,000, of which 41,000 lived on urban farms and 580,000 on rural farms. Gainful workers in the rural farm population were: farm owners and tenants 101,400, managers and foremen 5,900, unpaid family workers 6,000, paid farm laborers 83,400, and gainful workers in other industries than agriculture 42,600, or one such worker for every 2½ farm operators.

The number of workers in other industries living with families of urban and rural non-farm farm operators, where opportunities for such employment are greater, is not given in the census.

By using census data pertaining to population, age, sex, race, school attendance, families, occupations, and agriculture, and by making a few assumptions, the most questionable of which is that the workers in other industries than agriculture living on rural farms have no dependents, the following conclusions about the California agricultural population can be made. 2/

1. About 50,000 people, mostly farm laborers, moved to farms in California between January 1 and April 1, 1930, and this may be the normal seasonal movement to farms each year.

2. About 18,000 farms in California were unoccupied, the operators living elsewhere, mainly in cities and towns. These farm operators represent a population of approximately 68,000 persons not included in the census definition of farm population.

3. About 111,000 farm laborers, representing a population of 240,000 persons, were not living on farms on April 1 and were also not counted as farm population.

4. After excluding the workers in other industries who live on rural farms but not their dependents, if they have any, the total agricultural population was

1/ Paper No. The Giannini Foundation of Agricultural Economics. Presented at the American Farm Economic Association meeting, Atlantic City, N.J., December 28, 29, and 30, 1937.

2/ Peterson, George M. Composition and Characteristics of the California Farm Population. Manuscript to be published by the University of California.

estimated to be 886,000, or 43 per cent greater than the census figure for farm population. This total is divided approximately half and half between farm operators and farm laborers.

5. Roughly one-third of the so-called "farm operators", included in the above quoted totals worked for pay or income off the farm. Total days worked amounted to the full-time equivalent of 25,000 workers, 7,000 as farm laborers and 18,000 as workers in other industries than agriculture. Adjusting the occupational classification for these equivalents raises the farm-labor population, including dependents, to the point where it exceeds the farm-operator population, and on the basis of gainful workers alone there were nearly two farm laborers to every full-time equivalent farm operator; and at least one worker in other industries than agriculture living on farms to every two full-fledged farm operators, both urban and rural.

In New England the ratio of workers in other industries living on farms to full-time-equivalent farm operators is 5 to 6.^{3/}

Similar figures for the whole United States, without any adjustments for work off farm by operators, show a total of 1,500,000 workers in other industries living on rural farms, or about one worker in other industries for every four farms both rural and urban.

From my study of census data especially for California, the following conclusions relative to a discussion of farm income seem justified.

1. January 1 Census total of farm population is an erroneous figure to use for determining per-capita farm income from agricultural production. A figure later in the year would be better but still practically no good. Income must be related to what people do and not where they happen to live.

2. Gainful workers in other industries living with farm families, their dependents if any, and their income must be accounted for in the method used for estimating income to people engaged in agriculture.

3. Income to people engaged in agriculture should be related not only to source and what people do, but also to time spent in agriculture with due allowance for necessary idle time on part of the farm operators and the farm laborers.

4. California may be the only state in the union in which the farm-labor population equals or exceeds the farm-operator population, but it is a part of the union, so how can we be human and leave farm laborers out of consideration in a national agricultural policy? Is it more important "to give to him that hath" through soil conservation payments than to conserve human resources?

Let us consider income briefly. The two main sources of income are from human effort and from property rights. Since income from human effort tends to be as unequal as human ability modified by unemployment, and since income from property tends to be as unequal as property holdings, the total income from all sources will be very unequal.

3/ Peterson, George M. Gainful workers in the rural farm population. Journal of Farm Economics, August 1937. In this note I say "about one to one." In R.H. Allen's reply, he estimates 3 to 4, but after careful rechecking of data I arrive at the ratio 5 to 6.

3.

To discuss equality of income without considering income from property is almost unscientific; to suggest modification of our social institution of property rights and the equalization of income from property is dangerous even for a scientist; but to assume inequality between agriculture and other industries and to spread meaningless slogans about equalization of income for farm people is good political propaganda.

Unless we tackle the difficult questions of equalizing income from property and subsidizing those with inferior human abilities, we must limit our discussion to the concept of equality under conditions of inequality, or, in brief, to a discussion of the corresponding segments of skewed frequency distributions of income to people engaged in agriculture and to other people.

Since wealthy people diversify their holdings and seldom engage directly in agricultural production, most of their incomes are excluded from incomes to people engaged in agriculture even though they may live on farms. The frequency distribution for incomes to people engaged in agriculture will therefore be much shorter than that for other people. Under these conditions, the arithmetic average of incomes to people engaged in agriculture will always be less than the arithmetic average of incomes to all other people unless the poor people not in agriculture fall as far below the poor in agriculture as the wealthy rise above. This, of course, is impossible, for the lower limit of income for all poor is subsistence, but the upper limit for the wealthy is up in the millions. Corresponding portions of frequency distributions of income for the two groups may, however, be identical and indicate equality as far as equality can be considered within our social system of property rights.

Unfortunately, data pertaining to the distribution of incomes by size are meager and unreliable except for income-tax returns, and only a small percentage of the people have sufficient income so they must file returns. The present method of calculating national income and the income to farm people, by estimating totals and dividing, results in non-comparable but politically expedient averages.

Census data on distribution of gross farm income and crop land harvested in California are both equally skewed but less skewed than the distribution of all land in farms. If the fact that several banking institutions may own several thousand farms each is ignored, these distributions on the basis of the census number of farms, are about as skewed as the distribution of all family incomes in the United States as estimated in America's Capacity to Consume by Brookings Institution. However, since the number of farms represent only about half of the agricultural population, the other half being laborers at the lower end of the income scale, the inequality of incomes among people engaged in agriculture in California appears to be greater than the inequality of incomes among all families within the nation.

Even if comparable data were available for the distributions of incomes by size for various occupational groups, the problem of analysis and comparison of equality would be difficult. Lorenz curves and percentage distributions of totals will not work. My tentative suggestion would be to plot income from all sources by income classes for groups of people on semilogarithmic paper. I would consider identical slopes for corresponding segments of such curves as the greatest degree of equality attainable under our social institutions.

Five years ago I gave a paper entitled "Wealth, Income and Living" ^{4/} at a meeting of this association. In this a comparison of income of farmers and other groups was attempted. Incomes of over \$5,000 net were eliminated, because averages of corresponding segments of skewed distributions are more comparable than averages

^{4/} Journal of Farm Economics, July 1933.

of the entire distributions. The conclusions I made at that time have not been altered by the collection and publication of better data since. The results of the Bureau studies which have been under way for over two years may lead to different conclusions and, therefore, I am anxious to see the results.

Agricultural policies directed at raising the average income to farmers may lead to greater inequality by making the distributions more skewed within the farm-operator class, and they are very likely to create greater inequality for the people engaged in agriculture if the gains to large farm operators come from curtailing the amount of work to be done by paid farm laborers.

In no case can we rely on simple arithmetic averages as measures of equality for people engaged in or directly dependent on agriculture. Such averages may fool many farmers and congressmen; that is to be expected. The sad part about the continued indiscriminate use of average-income data, however, seems to be that, after a while, "the statistics deaden the higher brain cells"^{5/} and some persons who, by education, training, and experience should know better, seem to fool themselves into believing that the differences between such averages prove that there is inequality.

^{5/} Coyle, David Cushman. Brass tacks. p. 12. National Home Library Foundation, Washington, D.C., 1935.
