

necessary multiplicity of dates and details confusing to one not familiar with English social and political practice, and there is also an apparent lack of logical sequence in his chapters. The book does, however, enable one interested in present-day services of maternity and child hygiene to understand more clearly the various origins of the movement, and the many factors contributing to this development. With this knowledge, the reader should have increased confidence that the maternity and child welfare movement will continue to expand in England, and let us hope also in this country, until adequate provision is made for every mother and young child.

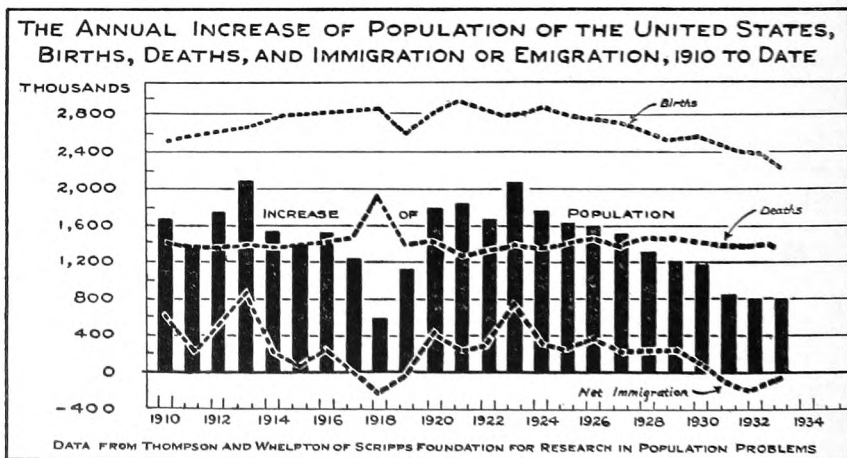
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### THE OUTLOOK FOR POPULATION<sup>1</sup>

A CONCISE and graphic summary of the slowing up of our population growth is afforded by a chapter, "The Outlook for Population," cooperatively prepared by O. E. Baker and Nettie P. Bradshaw,

Fig. 1. Ten years ago the population of the United States was increasing about 1,800,000 a year. Now the increase is only 800,000. A stationary population is approaching rapidly. The number of births has been trending downward since 1921. There are now fully 11 per cent fewer children under 5 years of age than when the census was taken nearly 5 years ago, and 9 per cent fewer 5 to 10 years of age. The number of deaths remains almost stationary, but must increase soon because of the rapid increase of old people.



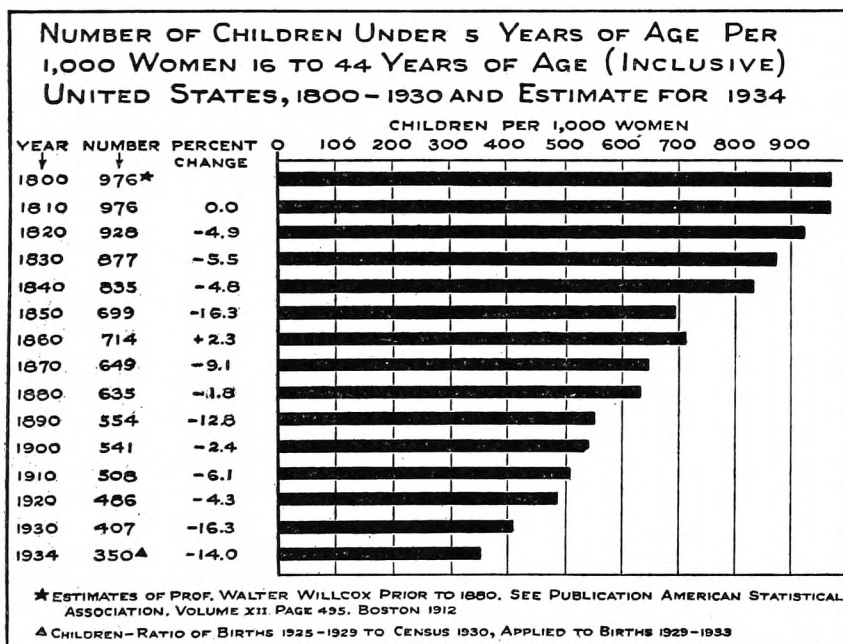
<sup>1</sup> A chapter included in the Report of the Land Planning Committee (Part II of the general reports of the National Resources Board), Washington, Government Printing Office, 1934, pp. 92-97.

United States Department of Agriculture, and Warren S. Thompson and J. B. Dennison of the Scripps Foundation for Research in Population Problems. The chapter was included in the Report of the Land Planning Committee of the National Resources Board for its intimate bearing on policies of land utilization, discussed in other sections of the general report.

Several charts together with the authors' comments are sufficient to tell the story of what is taking place in our population growth. While the growth of population in this country has probably been without precedent in the history of the world, the rates of increase are now diminishing and a stationary, or perhaps a declining population, is approaching. This condition is due partly to our immigration restrictions and partly to the decline of the birth rate.

The annual increase of population, as shown by the bars in Figure 1,

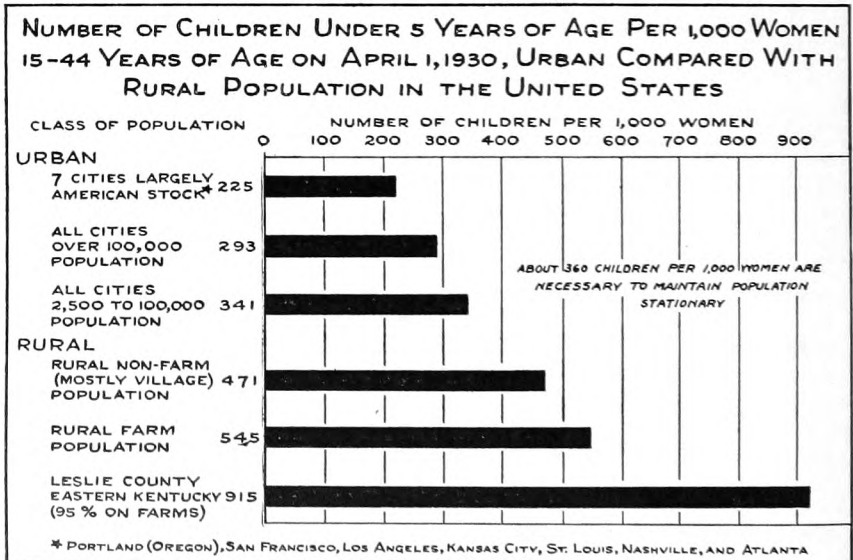
Fig. 2. The birth rate, as measured by the ratio of children under 5 to women of child-bearing age, has been decreasing in the United States for more than a century. From 1920 to 1930, the decline was over twice as rapid as in previous decades, except those ending in 1850, 1870, and 1890, when it is evident there was an abnormal under-enumeration of young children. From 1930 to 1934, the decline was almost as great as in any previous decade. The significant fact shown by the graph is that the declining birth rate is a long-time trend, and that the rate of decline has become more rapid in recent years.



was over 2,000,000 in 1923 and only 800,000 in 1933. From the lower line of the chart it will be seen that in 1923 the net immigration (excess of arrivals in the United States over departures) was almost 800,000. From the time of the quota laws (in effect after July 1, 1924) until 1929, the net immigration was approximately 250,000 per year. Since 1931, due to the depression and consequent administrative restrictions, the outward movement has actually exceeded the inward movement.

While the decline in the birth rate has been of long duration, the rate of decline in recent years has been very conspicuous (*see* Figure 2). In fact, from 1921 to 1933<sup>2</sup> there was a marked decline in the actual annual number of births (*see* Figure 1). This decline averaged about

Fig. 3. About 360 children under 5 years of age per 1,000 women 15 to 45 years of age (childbearing age) are required to maintain population stationary at the 1930 expectation of life in the United States of 62 years. In 1930, the seven cities largely of American stock, represented in the top bar of the graph, lacked, therefore, about 38 per cent of having enough children to maintain their population permanently without accessions from outside, and all cities of over 100,000 population had a deficit of nearly 20 per cent, while the smaller cities had a deficit of about 6 per cent. On the other hand, the rural non-farm (mostly village and suburban) population had a surplus of 30 per cent, and the farm population a surplus of 50 per cent. In 1932, urban deficit and rural surplus about balanced.



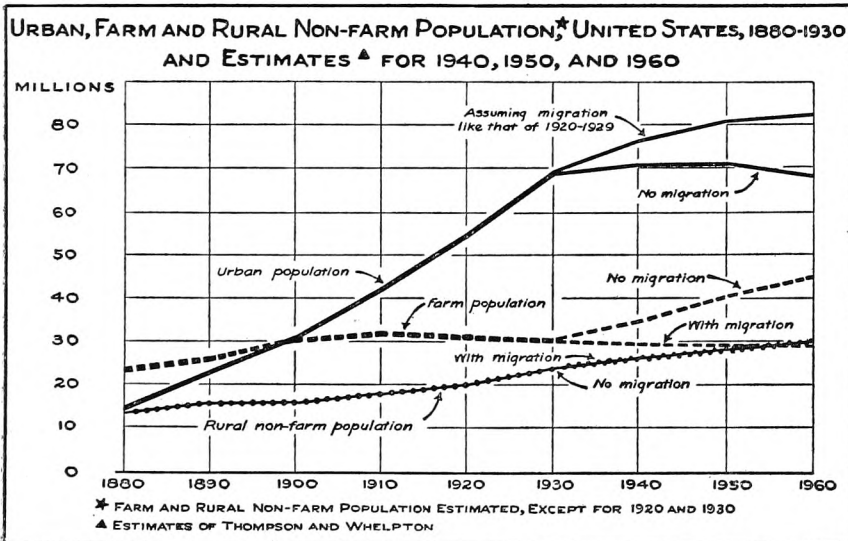
<sup>2</sup> Since the report was published, official figures have indicated a slight rise in the 1934 birth rate, due perhaps to marriages which had been postponed during the earlier years of the depression.

50,000 per year in 1922-1929 and 100,000 per year in 1930-1933.

Factors such as social status, rural-urban residence, migration, and age-composition, have important bearing on the birth rate and on the future size and characteristics of our population. Studies of the Milbank Memorial Fund are cited to indicate that "families of business men average 5 to 10 per cent more children than those of professional men, skilled laborers a quarter to a third more than business men, and unskilled laborers about a fourth more than skilled laborers."

It is clearly indicated in Figure 3 that urban centers are not reproducing their numbers but must depend upon the rural regions for replenishment. The extent of rural-urban migration will probably exert much influence on the natural increase in the United States

Fig 4. During the half century, 1880-1930, urban population in the United States increased more than fourfold, rural non-farm population (estimated prior to 1920) nearly doubled, and rural farm population increased scarcely a half. Practically all of this increase in farm population took place before 1910, little change in number occurring between 1910 and 1930. Looking to the future, and using Dr. Thompson's assumptions as to births and deaths, with no net immigration from foreign lands, it appears that the urban population, under the assumption of no internal migration, will increase less than 3 per cent by 1945 and then decline slowly; rural non-farm population will increase gradually until after 1960, by which year it will be about one-fourth larger than in 1930, while rural farm population will increase by about a half. But assuming the continuation of the 1920-1929 migration, urban population will continue to increase until after 1960, by which year it will be nearly 20 per cent larger than in 1930, rural non-farm population will increase about the same as if no migration occurred, while farm population will slowly but constantly decline.



because urban residence will serve as a deterrent to birth rates of the migrants. Therefore, in presenting estimates of the future growth of

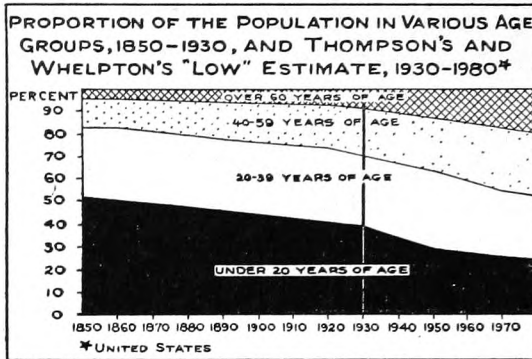


Fig. 5. In 1870, over half the population was under 20 years of age, but in 1930 less than 40 per cent. By 1950, these children and young people probably will constitute only 30 per cent of the population and by 1980 or before, only 25 per cent. In 1870, about 5 per cent of the population was over 60 years of age. By 1930, the proportion had risen to 8.6 per cent. By 1950, these old people will constitute 13 per cent of the population, and by 1980 probably 20 per cent. In 1870, about 45 per cent of the population was between 20 and 60 years of age, which may be considered the productive years of life, taking the people as a whole. By 1930, people in these productive ages constituted 52.6 per cent of the total population. By 1950, they will constitute about 57 per cent, and by 1980 perhaps 55 per cent. During the next few decades, when population will be almost stationary, a larger proportion of the population will be of productive age than in the past, or, probably, in the more distant future.

population. Even those who do not share in the grave concern manifested by some students will agree that fundamental changes must accompany such trends of population. In the past, commercial planning and much of the population thinking have been geared to the prospect of rapidly increasing population. However, students who view the present trends with interest but not with despair probably base their stand on the belief that readjustments can be made gradually and that the "good life" of the individual need not be curtailed in a stationary population.

urban, farm, and rural non-farm population, two widely different assumptions of the extent of migration are made (*see* Figure 4). The true growth will probably lie between the extremes presented.

An important corollary of the declining birth rate and cessation of immigration is the aging of our population shown in Figure 5. The decrease in the proportion of young people will have its repercussions in birth rates of the future, while the increasing proportion of older people presents economic and social problems for social engineers of tomorrow.

Students of population differ in their attitudes concerning the implications of an approaching stationary or declining