

Research-data

A. No. 8

Standardized Birth-, Death- and Natural
Increase Rate by Rural and Urban Districts,
1920, 1925, 1930 and 1935.

by

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I. Aim.

Researches into the natural increase of the urban population must be begun with the study concerning the difference between the natural increase rates both in the urban population and the rural one. This is the problem of much importance, but researches in such field still lag behind in this country.

II. Method.

The striking difference in population constitution in urban and rural districts makes it inappropriate for us to make a survey into the natural increase rates in these cases by means of crude birth-rate, death-rate, natural increase rate, etc. So we, based on Newshlm-Stervenson's Indirect Standardization Method, in the census years, have calculated out the Standardized birth-rate, death-rate, and natural increase rate in urban and rural communities. The standard population is based on the whole population in 1925, and the boundaries of the communities are those of October 1 present, 1935.

III. Results.

The Results are shown in the last table of this data paper.

The summary of the results so far examined and found out is given below:

1. The birth-rate.

- a) In each census year it is clear that the standardized birth-rate is remarkably lower in urban than in rural districts. The disparity is quite conspicuous compared with the case of crude birth-rate, which means that in towns and cities the young and the ripened youth are so many living that the crude birthrate is more

excessively

excessively shown than the fertility.

- b) The standardized birth-rates in urban districts decline in 1925 and 1930 when compared with that of 1920. Such phenomenon is seen in the cases of rural districts as well, but the general tendency is that the degree of the decline is remarkable in urban and slow in rural districts. In 1935 these tendencies get back in both districts, but the increase rate is more conspicuous in urban than in rural communities.
- c) Thus the fertility seen in urban districts is a good contrast to that seen in rural districts, i. e. there has grown the wider disparity between the two districts. The birth-rate of rural districts was 138% of that of urban community, but in 1930, 141%, and 150% in 1935.

2. Death-rate.

- a) It has been generally admitted that the crude death-rate is higher in rural districts than in urban districts, but when standardized, the case has come to be quite the contrary. The reason is that the young and the ripened youth are comparatively more in number who live in urban communities, whose death-rate is low, while in the rural communities the case is reverse.
- b) In urban districts the rate of the decline in death-rate, showing in 1930 to be 9% and in 1935 18% of that of 1925, is very conspicuous in its decline, and it tells us the more speedy degree than the average rate of decline seen in the death-rate. In rural districts, however, the rate of 1930 being 5% and that of 1935 showing 10% fall of that of 1925, which tells us of even a very slight rise, compared with that of urban districts. In short, the death-rate decline is

a common phenomenon both in urban and rural districts, but this phenomenon is worth mentioning, since the death-rate which remained lower in the latter districts jumped in 1935 to the same position as the former districts because of the slower degree of decline.

3. Natural Increase Rate.

- a) In each census year the standardized natural increase rate suffers such remarkable difference between urban and rural districts.
- b) Such striking difference of natural increase of population in both districts is not caused by the deaths but the fertility.
- c) Until 1930 sudden decline in the death-rate had urged the natural increase in both districts, but during the period of 1930 - 1935 this tendency was much spurred as the birth-rate got to be on the rise. In urban districts the index number with that of 1925 to be 100 became respectively 121 and 161 in 1930 and 1935, while in rural districts, 102 and 123 respectively, telling the rise of the natural increase rate in the latter case is nothing compared with that in the former case. It goes without saying that this is caused by the remarkable decrease in the death-rate in urban districts. Thus the disparity in natural increase rate has been levelled to some extent; the natural increase rate in rural district was 334% of that of urban districts in 1925, 28% in 1930, but in 1935 practically 255% of that of urban districts.

IV. Summary.

As stated above, the natural increase of population differs much in both rural and urban districts, and that of the latter gains only $\frac{2}{5}$ of that of the

former.

former. It is a matter for joy that the decrease in death rate is actualized in urban districts, but the slowness in the efforts of lessening the death rate in rural districts through the betterment of health is to be more seriously considered. In short, it is of the utmost importance for the study of population trend to seek after the true nature and causes of the decline in rates by making minute analyses into urban fertility which will lead to the difference between the natural increase in both districts.