## Various Combinations of Demographic Assumptions, and It's Dynamic Changes in the Future Population

## Futoshi Ishii and Shigesato TAKAHASHI

According to the new future population projections prepared by the National Institute of Population and Social Security Research, the overall population of Japan will start facing the decrease in population that has not been experienced ever before. It is necessary to analyze the element of the following cohort change to consider demographic reasons to produce the population trend. Those are future trend of the fertility rate, the mortality rate, the international-migration rate, and the sex ratio at birth. However, the main factor of the decrease in population is a fertility rate. Because it depends on the value's assumed to be a fertility having fallen below the population replacement level.

In this text, the assumed values of the fertility rate and the international migration rate, etc. were variously set, and the influence on the population structural index was evaluated.

The overall population of population structural indices shows the level of the decrease in population in the future. The average age shows the level of aging in the population in the future. Moreover, the decrease of population momentum in the future means the low fertility rate has already formed the inertia of the decrease in population.

According to the result of analysis, it is meant to work at the direction where the inertia of the decrease in population becomes strong more and more because the low fertility will continue in the future. High fertility assumption and high international migration assumption work from the result concerning a dynamic change in a population structural index at the direction where the population is increased. However, it is understood that the appearance given to the dynamic change is different based on the assumptions.