International Comparison of Migration - A Construction of Model-mobility Using Japanese Indicators -

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Migration is one of the three components of population dynamics but compared to birth or death, the event of migration is difficult to define. In this study, the migration data of 92 countries are collected from censuses and surveys conducted after the year 2000. The data are classified in 12 different migration indicators using different time points and range of migration.

As for the data on migration in Japan, there are 3 sets of data; census, resident registers and the National Survey on Migration (NSM) carried out by the National Institute of Population and Social Security Research. Using these data, including the raw data of the NSM data, all 12 indicators can be calculated.

Here we suppose that a population, either of a country or a region, has a level of mobility which determines migration indicators. When all of migration indicators are determined by one "model" country then the mobility level of another country with limited migration indicator(s) can be estimated by the proportion of the indicators of the model country. With this assumption, using the data of Japan as the model country, the mobility indices of 91 countries are calculated.

The highest mobility index is that of Australia (1.926), followed by Switzerland (1.841) and Republic of Korea (1.841). There is a strong, positive and significant correlation between the mobility index and the level of economic development, a weak and negative correlation between the mobility index and the proportion of the young people, and former communist or socialist countries tend to have lower mobility indices.

To test the assumption, the relations between the different migration indicators of Japan are assessed. The correlations between the indicators of 1-year, 5-year and 10-year migration are observed to be fairly stable. For the lifetime migration indicators or indicators derived using the administrative divisions, on the other hand, the correlations are weaker.

The calculated mobility indices have significant correlation with 11 out of 12 indicators which suggests that the model-mobility can be constructed with the method used here and further refinement would be possible using additional sets of indicators of other model countries.