Migration Models and International Marriage Migration

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This paper considers international migration in Japan from the viewpoint of migration models. First, we discuss the following three main factors of labor force migration: distance friction factor, population size factor and economic difference factor, and introduce two notable migration models, i.e. gravity model and modified gravity model, which are derived from the above three factors. The gravity model shows that the amount of migration between two areas is proportional to the product of populations of the two areas in inverse proportion to n-th power of distance between the two areas. Meanwhile, the modified gravity model explains the quantitative difference between main stream and counter stream by the economic difference between the two areas.

Secondly, we introduce an international marriage model developed by the author as one of migration models. The author derived the model from the general principle that women are much likely to hope hypergamy, namely marriage to men of more developed countries, after defining B-G ratio as a ratio of the number of marriages with foreign brides to the number of marriages with foreign grooms. The model consists of the following two hypotheses using the B-G ratio: the B-G ratio of country i for country j conforms to the reciprocal of the B-G ratio of country j for country i; the both B-G ratios of country i for country j and of country j for country i change according the economic difference between the two countries and the ratios become 1.0 when the economic difference completely disappears. The latter hypothesis takes a form that a ratio is explained by the economic difference, and the form is basically the same as that of the modified gravity model.

Thirdly, we examine the model using recent data of international marriage between Japanese and Korean. The results of the examination are summarized as follows: the B-G ratio of Japan for Korea approximates the reciprocal of the B-G ratio of Korea for Japan; the both ratios link to the economic difference between Japan and Korea, i.e., the ratio of the GDP per capita of Japan to that of Korea, with a seven-year time lag. These results suggest that international marriage migration in Japan can largely be explained on the analogy of modified gravity model based on the economic difference, although including unique migration occurring with hypergamy and hypogamy.