

Projection for Marriage and Birth —Approached by Social-Econometric Model—

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It is discussed that the tendency of low fertility and population aging have negative effects on potentiality of economic growth, financial aspect of social security, and other social activities such as industrial structure, educational opportunities, so on. Meanwhile we should consider the reverse effects on population variation through marriage behavior or fertility decline caused by the change of economy and social phenomenon. Provided that some factors of economy or social activities affect on population dynamics statistically, we may be able to construct a Social-Econometric Model focused on such factors and to forecast the future trend of marriage and childbirth under the several scenarios.

The model of this article has several sectors. The Marriage sector determines the tendency of the first-marriage of women aged from 15 years to 49 years, and calculates the number of population of currently married women taking account of divorce and remarriage. The choice between working and retiring by the married women are analyzed in the Labor Market sector considering economic situation, wage rate or academic careers. After obtaining the number of married women, the Birth sector produces the birth rate and the number of childbirth. Using this social-econometric model, we can project the future rate of first-marriage and childbirth.

In the base-case projection, which assumed that the economic growth rate would be 1% to year in 2005 and 2% from year in 2006, and unemployment rate would be 6.3% in 2005, the total fertility rate would retain the current level, such as 1.30-1.35, and slightly increase to 1.42 in 2015. In the case of other scenarios, we found that the high economic growth would bring the low fertility tendency relatively to low economic growth case, since the high economic growth would make the labor demand for women stronger and enhance the opportunity cost of having child as the result of rising wage.