## Regional Conditions on Population and Child-rearing, and Fertility

## IWASAWA Miho and SUZUKI Takashi

Reproductive behavior is influenced not only by the attributes and attitudes of individuals but also by the socioeconomic and cultural condition and population structure surrounding the individuals. We examined the relationship between the local environment and fertility using municipal data. We used not only the overall total fertility rate but also the effects of marriage and marital fertility on total fertility in the region as dependent variables. We also examined contextual effects by categorizing municipalities according to similar regional characteristics. Using the census and various open administrative data, we prepared fertility indicators (dependent variables) and variables related to the population regime and child-rearing environment (explanatory variables) for each municipality in 2015.

Looking at fertility indices for each of the nine clusters, we found "Rural coastal areas (No.4)" with high marital and couple fertility, "western/northern NortheastJapan and depopulated areas (No.9)" with high couple fertility, "Areas in the Tohoku region and on the Sea of Japan coast with many dual earner couples (No.3)" with average fertility, "Southern Tohoku areas and areas where relatives are involved in childcare (No.2)" with high marital fertility only, "Suburb aeras (No.8)," "Tosan areas and WLB (No.6)" with high couple fertility only; "Hokkaido (No.1)" with low couple fertility; "City areas and childcare oriented (No.7)"; and "Ward areas and housewives and career (No.5)" with low nuptiality and marital fertility.

Factors related to the marriage effect index were men's and women's working hours, and the ratio of women's leave (childcare leave). In addition, women's working hours, the ratio of day-care center use, and the percentage of children waiting to go to day-care centers were positively related to the marital fertility effect index. These relationships differed by regional characteristics, and the sign of the relationship between income or men's working hours and the marriage effect index differed by regional characteristics.

While the results indicate which regional conditions can promote marriage and childbearing nationwide, they also show that the conditions that affect fertility differ by regional characteristics. It would be effective to focus on these key regional conditions and apply them to policy implementation.

Keywords: total fertility rate, municipality, marriage, marital fertility, child-rearing environment