# Demographic Components of Future Population Growth Rates by Municipalities

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This paper exhibits components of the future population change of Japanese municipalities in the "Region Population Projections for Japan" (2018) published by the National Institute of Population and Social Security Research in March 2018, with using the method of Bongaarts and Bulatao (1999) to identify four factors of age structure, fertility, mortality, and net-migration.

The results show that mainly age structure and migration factors determine the future population growth rates of the municipalities. Mortality's contributions are 4.6–4.8%, irrespective of population size, and contributions of fertility factors are as small as less than 1%. Meanwhile, under hypothetical assumptions that foster population growth, demographic factors to the future population growth depend on population size: increases in fertility rates contribute more significantly in municipalities with larger populations, and decreases in net-migration rates contribute more in municipalities with smaller populations.

Analysis of the population momentum shows that years attaining the stationary population are roughly 2075–2080 given no migration, replacement fertility and fixed mortality at the current level. Stationary population ratios exceed one in 12 municipalities, located mainly in Okinawa Prefecture, meaning that population structures of these municipalities include growth potential. In turn, the other 1,670 municipalities have demographic structures to obey population decline in the long run. The populations most of Japanese municipalities, including those in metropolitan areas, have the demographic structures to decline inevitably.

【Keywords】Regional Population Projections, Population Growth Rate, Demographic decomposition, Population Momentum