Abstract

Since the 1970s, due to the combination of the declining birthrate and rising longevity, the speed of population aging in Japan has been more dramatic than in any other developed country. Consequently, the growth of the working population, which had been faster than the growth of the total population, has gradually become slower in recent years than the latter in Japan. Moreover, similar rapid demographic changes are taking place at various speeds in all prefectures. By introducing demographic variables into empirical models of regional economic growth, which is based on prefecture-level panel data for the period 1980–2010, this paper shows that the recent demographic changes in Japan have had significant effects on its regional economic growth: the contribution of the growth rate difference between the working population and the total population to per capita Gross Regional Domestic Product (GRDP) growth rate, i.e., the demographic bonus, has disappeared. In addition, the growth rate of the aged population (65 years old and over) has had a very significant negative effect on per capita GRDP growth rate, while the growth rate of the young population aged 0–14 has had a significant positive effect. The findings of this study imply that Japan's population aging and other ongoing demographic changes will continue to depress economic growth in all prefectures. Given the low probability of a significant rise in the birth rate and the rapid increase in the local labor supply, it is important for all prefectures in Japan to raise the quality of their labor-force and improve productivity. Meanwhile, effectively attracting young skilled workers to migrate from other regions/countries should be a key policy issue for both local and central governments in Japan.

Keywords: Aging; working population; demographic change; regional economic growth; per capita GRDP; effects; Japan.

JEL Classification: O47, O53, R58, J11.