

成人寿命の教育への影響に関する計量的研究

Empirical Research about the Effect of Adult Longevity on Education

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In this research, we investigate the effect of adult longevity on educational attainment focusing on the precautionary motive for financing future post-retirement consumption and expenses through an increase in education and lifetime income. We use country-level panel data taken from the World Development Indicators and education statistics on five years (1990, 1995, 2000, 2005, and 2010), and independent variables are the average years of total education at 25–29 years and 30–34 years. We also use as dependent variables the survival rate at 65 years of age (adult survival rate), the fertility rate, the capacity of educational institutions, and parental education. In the analysis, we compare the results for the world, OECD, and non-OECD countries. The survival rate at 65 years of age represents the probability that individuals are still alive at the start of the senior period, i.e., at 65 years of age. A higher survival rate at 65 years of age means that individuals have a longer post-retirement lifetime, so they need to finance future consumption and increase their lifetime income through educational investment. The capacity of educational institutions refers to the accessibility to educational institutions in each country.

Our empirical results indicate the followings. First, the adult survival rate has a positive effect on schooling except at 25–29 years in OECD countries. As for the survival rate at 65 years, the results show the existence of a precautionary motive for post-retirement lifetime through education in the world, OECD, and non-OECD countries. Even developing countries are expected to eventually face an ageing society, so educational attainment is an important factor for future population ageing. Second, the capacity of educational institutions also has a positive, significant effect in the world, and the same results are shown in both OECD and non-OECD countries. The size of enrolment in the former period means greater ease of enrolment for people in the current period, so a larger enrolment size promotes educational attainment. This result shows that ease of enrolment is an important factor for educational attainment in both developed and developing countries. As for other variables, parental education has a positive, significant effect on education, and fertility rate also has a negative effect in all models. Our results show a positive effect of post-retirement survival rate on education by applying life-cycle saving behaviour to educational behaviour, which is the key contribution of our study. In conclusion, economic growth via accumulation of human capital is important for ageing societies, thus, there should be a focus on educational attainment as well as saving behaviour.