

Social Security, Public and Private Education, Endogenous Fertility, and Human Capital Accumulation

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ABSTRACT

Evidence suggests that the burden of educational expenses contributes to Japan's declining birthrate. The primary reason most households do not bear the ideal number of children is "the cost burden of childcare and education". In addition, share of the old in total population is rapidly rising in Japan. Aging population in Japan is caused by a decrease in the number of children and increasing longevity. Public pension is financed on a pay-as-you-go basis and Japanese government is forced to respond to declining birthrate. Publically funded child allowances and subsidies of educational investment in the form of providing free high school education are thought to relieve these problems, but it is known that there is a trade-off between fertility rate and human capital accumulation in high-income countries.

This study builds an overlapping-generations model featuring endogenous fertility, human capital, and pay-as-you-go pension. We introduce childcare subsidies financed by income taxes and public pension financed by pension insurance premium, and assume that education production function takes a variable elasticity of substitution (VES) form. We analyze the effects of social security policies on endogenous fertility, human capital accumulation, and public pension.

Key words: *Human Capital, Endogenous Fertility, Overlapping-Generations, Childcare Subsidy, Educational Expenditures, Public Pension, VES Production Function.*

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