

Childcare Support Policies and Pay-As-You-Go Pension with Endogenous Fertility and Human Capital Accumulation

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ABSTRACT

Annual Report on the Declining Birthrate (Cabinet Office, 2022) establishes that the ideal number of children to have as a household (average ideal number of children) has decreased from 1987 to 2015 (2.32 children) to record low levels. Also, the number of children a household actually plans to have (average planned number of children) reached a record low of 2.01. The primary reason most households do not bear the ideal number of children is “the cost burden of childcare and education” and the ratio amounts to 56.3%. In addition, Annual Report on the Aging Society (Cabinet Office, 2023) establishes that the percentage of the population aged 65 and over is 29.0% and that aged between 65 and 74 years is 13.5% of the total population. Moreover, the population aged 75 years and over is 15.5% of the total population, and has overtaken the population aged 65-74 years in size. 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.

This study builds an overlapping-generations model featuring endogenous fertility, human capital, and pay-as-you-go pension. We assume that childcare supports are financed by consumption tax and income tax. We consider the effects of tax-financed childcare support policies—expand child allowances or childcare services—by consumption tax increase or income tax increase on fertility rate, human capital accumulation, and pay-as-you-go-pension.

Key words: *Human Capital, Endogenous Fertility, Overlapping-Generations, Childcare Subsidy, Childcare Services, Consumption Tax, Income Tax, Pay-As-You-Go Pension.*

JEL Classification: H24, H31, H55, I25, J13, O15