Pay-as-you-go Social Security and Child Allowances:
Welfare Analysis Using a Lifecycle Growth Model with Endogenous Fertility*1

Akira Okamoto (Okayama University)*2

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Abstract

The existence of pay-as-you-go financed social security arrangements implies that the investment element of a child is socialized. Therefore, fertility choice is only based on the direct utility that a household gets from its offspring, neglecting the fact that progeny benefits all in society. Apparently, to some extent, children are a public good and consequently involve positive externalities under a pay-as you-go social security system. As individuals do not take account of this positive effect when deciding on the number of their own children, the number of children may become smaller than the socially optimal number of children. We examine this issue using an extended lifecycle simulation model with endogenous fertility, where the number of children is endogenously determined and thus future demographic changes explicitly introduced.

Keywords: Aging population; Depopulation; Pay-as-you-go Social Security System; Child Allowances; Endogenous Fertility

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*2 Professor, Faculty of Economics, Okayama University, Japan.