The Optimum Quantity of Debt for a Depopulating and Aging Japan: Welfare Level or Future Population?

Akira Okamoto (Okayama University)

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Abstract

The optimum quantity of debt for a depopulating and aging Japan is examined in an extended lifecycle simulation model with endogenous fertility. The Lump Sum Redistribution Authority (LSRA) is introduced into the model, which enables to distinguish potential efficiency gains or losses from possibly offsetting changes in the welfare of different generations when alternative debt policies are evaluated. Simulation results show that a rise in interest rates decreases the quantity of debt that maximizes a leveled and common individual welfare gain via the LSRA transfers, and that a reduction of the debt (and a conversion to fiscal surplus) ameliorates the individual welfare but diminishes the future total population, while a further increase in the debt deteriorates the welfare but augments the population.

Keywords: Optimal government debt; Depopulating and aging societies; Welfare level; Future population; Simulation analysis

JEL classification: H30; C68

References

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