

Government Debt and Social Security in a Life-Cycle Economy*

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Abstract

This paper develops a tractable overlapping generations model that is useful for analyzing both the short and long run impact of fiscal policy and social security. It modifies the Blanchard (1985)/Weil (1987) framework to allow for life/cycle behavior. This is accomplished by introducing random transition from work to retirement, and then from retirement to death. The transition probabilities may be picked to allow for realistic average lengths of life, work and retirement. The resulting framework is not appreciably more difficult to analyze than the standard Cass/Koopmans one sector growth model: Besides the capital stock, there is only one additional state variable: the distribution of wealth between workers and retirees. Under reasonable parameter values government debt and social security have significant effects on capital intensity.

JEL Classification: E13, E60

Keywords: Overlapping Generations Model, Government Debt, Social Security

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