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HAS PUBLIC DEBT BEEN TOO HIGH IN CANADA AND THE U.S.? A QUANTITATIVE ASSESSMENT

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Abstract

I quantify the welfare effects of changing the long-run value of public debt using a two-region OLG model with rich income dynamics over the life-cycle, incomplete insurance, and an integrated asset market. I consider two model calibrations, one for Canada and one for the US. In the former case, I find that changes in public debt cause small interest rate effects. To validate the model, I conduct a formal empirical analysis, which does not reject the two-region theoretical framework. The quantitative model is used to perform a welfare analysis of counterfactual debt policies. In the long-run, for both Canada and the US, I find that negative quantities of public debt involve considerable welfare gains. For the US economy, when taking into account the welfare costs of the transitional dynamics, the result is reversed. However, imposing the empirical correlation between changes in public debt and changes in public expenditure found in the OECD data restores the finding that moving to equilibria with public wealth leads to welfare gains.

Keywords: Public debt, Incomplete markets, Welfare.

JEL Classifications: D52, E21, E62, H63.

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