Present Bias and Public Debt*

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Abstract

Can present-biased citizen preferences explain the accumulation of public debt? To answer this question, this paper develops a model of endogenous fiscal policy for an economy populated by households that exhibit a present bias due to imperfect self-control. Present-biased households are repeatedly tempted to vote in favor of deficit-financed tax cuts or increases in public spending. However, they are also more reluctant to save privately than non-biased ones. As a result, the market-clearing interest rate displays an upward bias for a given bond supply in this case, discouraging government borrowing. The relative size of these counteracting forces is debt-dependent and their net effect on public debt accumulation is not clear a priori. Calibrated to the United States, the model predicts a long-run public debt position that is positive and higher with than without self-control problems. The highest public debt-to-GDP ratio is predicted for the limiting case without any self-control, which corresponds to quasi-geometric discounting. If citizens are sufficiently present-biased, the model can match empirically observed public debt values. Naivete about present-biased behavior in future periods amplifies public debt accumulation.

Keywords: Public Debt, Self-Control, Quasi-Geometric Discounting, Lack of Commitment

JEL Classification: E71, G41, H63, P16

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