Optimal Monetary Policy when the Fiscal Authority is Impatient: The Role of Government Debt Maturity*

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How should the central bank conduct monetary policy when the fiscal authority is impatient? To address this question, we develop a New Keynesian model in which the fiscal authority (i) does not have access to lump-sum taxes and must finance exogenous expenditures by imposing sales taxes on firms, (ii) issues long-term nominal government debt, and (iii) discounts the future more than the public. The model is used to study a linear-dynamic game between the impatient fiscal authority and the benevolent central bank. The two policymakers strategically interact though the government's budget constraint. We examine how the macroeconomy responses to government debt shock. The results are twofold. First, when the duration of government debt is short, the central bank should raise the nominal interest rate excessively smoothly to accommodate an increase in inflation. Second, when the duration of government debt is long, the central bank should raise the nominal interest rate excessively sharply to urge the fiscal authority to increase the sales tax rates.

* I am grateful to Hirokazu Ishise, Gongya Koh, Takeshi Murooka, Masahiko Shibamoto, Shinichi Nishiyama, Etsuro Shioji, Katsuya Takii, Yoshiro Tsutsui, and seminar participants at Kobe university and Monetary Economic Workshop for their helpful comments and suggestions. Any remaining errors are the sole responsibility of the author.