Optimal monetary and fiscal policy without fiscal backing for the centrla bank*

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Abstract

This paper examines optimal monetary and fiscal policy when the Treasury is unable to provide fiscal support to the central bank. The central bank holds excess reserves and incurs interest expenses. During periods when costs exceed earnings, the Federal Reserve does not receive transfers from the Treasury to offset the losses. I analyze the optimal monetary and fiscal policy in a New-Keynesian model with central bank and Treasury budgets, where the transfer of resources from the Treasury to the central bank is constrained, but not vice versa. This lack of fiscal support has several implications: (i) the central bank, without fiscal backing, tolerates higher inflation in response to cost-push shocks, and this inflation response increases with the level of reserves; (ii) while the lack of fiscal support increases the volatility of the optimal inflation rate by 3%, the average optimal inflation rate is minimally affected; (iii) the welfare gains from fiscal support are small over the business cycle, but in the case of large shocks, a fiscal backstop reduces the welfare cost of the shock by 20%.

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