



OPTIMAL FISCAL POLICY
IN A SIMPLE MACROECONOMIC CONTEXT

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ABSTRACT

This article derives optimal fiscal rules within a stochastic model of Keynesian type in the context of Poole (1970) analysis. By using optimal control theory and applying the Hamilton-Jacoby-Bellman equation, we extend the original Poole results concerning the output stabilization properties of monetary policy to the case of fiscal policy. In particular, we look for the optimal setting of government expenditure and lump-sum taxation in the case that the fiscal authority wishes to keep the product close to a reference value and that the economy is assumed to be affected by stochastic disturbances of real and/or monetary type. According to the findings an optimal government expenditure rule is on average preferable to a taxation rule whatever the source of disturbances.

Classification JEL: C6, E6.

Keywords: Fiscal Policy, Poole model, Hamilton-Jacoby-Bellman equation.

Working Paper n° 111
April 2013