Monetary Policy under Large Public Debt

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Abstract

Since the outbreak of financial crisis on September 2008, major countries conduct unorthodox monetary and fiscal policies. In order to rescue troubled financial institutions, many countries inject capital and bought assets from them. Many governments expand fiscal expenditures in unusual manners. As a natural consequence, many countries accumulated large public debt and expand the balance sheets of the central banks. In this paper, we consider strategic interactions between the fiscal authority and the central bank. In particular, we use Dixit and Lambertini (2003) as a starting point and extend their model such that the second best solution cannot be obtained even if the policy objectives are strictly separated between the two authorities. In other words, the central bank would have an inflation bias when public debt is too large. However, at least, empirical evidences show that public debt has no significant positive effect on the long-run inflation among the major developed countries. In our empirical investigation, we need to identify the relationship between the inflation rate and public debt in general and that between the expected inflation rate from the yield curve of government bond and public debt. We also investigate a threshold level of public debt that would lead to the inflation bias in monetary policy.

JEL classification: E31, E60

Key words: Central Bank Independence, Fiscal policy, Monetary policy, Inflation, Public Debt, Open Market Operation, Yield curve.

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