Importance of Awareness of Default Risk on Conducting Monetary and Fiscal Policies

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We develop a class of DSGE models with nominal rigidities and investigate importance of awareness of default risk at the point of conducting monetary and fiscal policies. We introduce the default risk in the model. The default mechanism is based on Uribe’s who show the trade-off between stabilizing inflation and suppressing default. We assume two policy authorities: the policy authority who are aware of the default risk and it who are not. If the policy authorities are aware of the default risk, the welfare costs function which stems from second-order approximated utility function contains the quadratic term of the premium difference which is difference between the government debt yield and its coupon rate. If they are not, the welfare costs function does not contain such a quadratic term. We analyze two policies: the exact and the false policies. The exact is optimal monetary and fiscal policy and conducted by the policy authorities which are aware of default risk. The false is optimal monetary and fiscal policy and conducted by the policy authorities which are not aware of default risk. We solve the LQ problem and the model are solved numerically. Further, we calculate coefficients of simple rules which are a class of Taylor rules and a class of Bohn rule. We find that there is no distinction on simple rules between the exact and false policies if the interest spread is low. However, if the interest spread in the steady state is high, the policy authorities should give up to stabilize inflation and minimize the premium difference. We calculate welfare costs under two policies. if the interest spread is low, there is much difference on welfare costs between two policies. However, if it is high, the difference on the welfare costs are not negligible and is very high. If policy authorities are not aware of the default risk, the policy authorities introduce tighter policy which generates much welfare costs. If the interest spread is high, policy authorities should be aware of the default risk.