

Reserve Requirements, Financial Frictions, and Bank Runs: A Regime-Switching DSGE Approach to China's Open Economy Dynamics *

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Abstract

We develop and estimate a small open economy DSGE model featuring a regime-switching required reserve ratio (RRR) policy within a banking sector characterized by financial frictions. Incorporating key characteristics of the Chinese economy, the model examines the macroprudential effects of RRR policy in managing excess liquidity during the global recovery period. Our findings indicate that the RRR policy adopted a counter-cyclical feedback rule, specifically targeting foreign exchange lending, effectively stabilizing the economy and serving as a substitute for higher interest rate adjustments in response to external shocks. This policy shift enhances financial stability by reducing the risk of bank runs. The counterfactual analysis further checks the impact of the international capital flows, which helps dampen the price volatility.

JEL classification: C11, E58, F41, G18

Keywords: Required Reserve Ratio, Bank run, Macroprudential Policy, Capital Flow, Regime Switching DSGE, Bayesian Estimation

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