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PRESS RELEASE

Monetary and macroprudential policies in an estimated model with financial intermediation

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The financial disruptions that started in the second half of 2007, which eventually led to the most severe global economic crisis since the Great Depression, have highlighted the importance of financial stability in maintaining overall macroeconomic stability, and paved the way for economists and policy makers around the world to think about setting up new regulatory frameworks to better monitor financial developments and to act preemptively in order to avoid the build-up of financial imbalances, and hopefully reduce the likelihood of future crises.

This paper aims to contribute to these discussions by studying the implications of macroprudential policy in the context of an estimated medium-scale DSGE model for the US featuring a financial intermediation sector that is subject to frictions. In particular, we study the interaction between macroprudential policy, aimed at stabilizing nominal credit growth and the output gap, and monetary policy, which has been assigned a standard inflation-targeting mandate. The gains from coordination are investigated under the assumption that both policy makers have the task to minimize their respective quadratic loss functions using separate instruments.

We find that, to the extent that the macroprudential regulator assigns a sufficiently high weight to stabilizing the output gap, which is the objective it shares with the central bank, coordination between both policies implies a less volatile macroeconomic environment than the alternative case of no-coordination. When the regulator's financial stability objective becomes more pronounced, however, lack of coordination yields better outcomes in terms of lower volatility of loss function objectives for the macroprudential regulator, but not for the central bank. This trade-off in coordination gains is also present in a situation characterized by high real and financial volatility such as experienced during the most recent financial crisis, and is robust to alternative definitions of financial stability.

We perform a counterfactual analysis to demonstrate the effectiveness of a countercyclical macroprudential tax/subsidy on bank capital in reducing the amplification mechanism triggered by adverse credit market conditions. Based on these findings, we conclude that monetary policy alone could not have prevented the massive drop in credit supply, and that the presence of a separate macroprudential regulatory tool in addition to monetary policy would have been crucial to safeguarding a stable macroeconomic environment.