Interactions between Macroprudential and Monetary Policy in India

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Macroprudential policies (MPPs) refer to a broad class of policies that ensure the stability of the financial system and prevent disruptions in credit flow or other financial services necessary to sustain stable economic growth. However, most of such measures are accompanied by a similar response from monetary policy in India. During monetary tightening phases (2004-08, 2009-11, and 2013-14), most of the macroprudential policies also were tightened, and vice versa in periods of loose monetary policy, making it difficult to capture their individual effects. Preliminary evidence (Verma (2018)) suggests that MPPs are effective, but more analysis is needed to identify the true effects of MPPs by eliminating the confounding effects of monetary policy. Although the global financial crisis in 2008 renewed interest in the use of MPPs across economies, it has been implemented in India atleast since 2004(Reserve Bank of India and Sinha (2011)). In comparison to most advanced economies, Indian policymakers have a large number of policy instruments[1] available. The authros develop a theoratical framework to disentangle the effects of MPPs and monetary policy.

The dynamic stochastic general equlibrium framework is built on the motivation to evaluate the interplay of MPPs and monetary policy. The model economy is similar to Gerali et al. (2010) and Angelini et al. (2011). The model includes key features of two types of households - patient(savers) and impatient(borrowers), entrepreneurs who produce intermediate goods, final good producers, banks, shadow lenders, capital and housing stock producers, a central bank, and a government. The patient households deposit their savings in the banks, using them to finance loans to the impatient households and entrepreneurs. We have three key innovations in our model. First, there are two types of production economy - formal and informal sector (India's parlance). Second, we account for non-banking financial companies with no regulations imposed in the model. The non-banks borrow from the banks and loan out to the households in the economy. The main difference between the banks and the non-banks is that NBFCs cannot accept deposits. The banks are subject to all the supply-side MPPs mentioned above. However, the NBFCs are not subject to any regulation. Finally, we have four types of macroprudential policies. The MPPs and monetary policy are expected to contain unnecessary credit growth.

Calibrated to Indian economy, the model analyzes three shocks: a positive consumption shock, a total factor productivity shock, and a housing boom. Provisioning norms are the most effective at containing credit expansion, while risk weights and capital requirements have milder effects in a cosumption demand shock or housing boom. Loan-to-value ratios, a demand-side instrument, sharply reallocate the loans to unregulated non-banks compared to other policies. Monetary policy—though potent—can prove costly in terms of reduced output and higher inflation.

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[1]It includes loan-to-value (LTV ratios) mostly in the case of mortgage loans, preemptive provisioning requirements for standard assets, risk-weights on sectoral exposures, and minimum capital requirements

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