

Foreword

One of the main challenges in implementing a new framework for financial stability is evaluating the effectiveness of macroprudential policies. Most of the evidence produced so far has been obtained from country- or bank-level data using publicly available sources at the annual frequency. The low granularity of the data makes it very difficult to clearly disentangle supply and demand effects and assess the effectiveness of the policies over time. Consequently, in 2018 the BIS initiated a research protocol project on “Measuring the effectiveness of macroprudential policies using supervisory bank-level data” with a quarterly frequency.

The project focused on the effectiveness of macroprudential policies on containing excessive household credit growth and bank risk using bank-level data. When analysing these effects, we control for bank-specific characteristics and macroeconomic variables. In a second step, the project evaluates whether the responses to a macroprudential shock differ for banks with different characteristics. Finally, the project also analyses how the effectiveness of macroprudential policies can be affected by monetary policy stance, the business cycle and the financial cycle. The quarterly frequency helps us to analyse the different steps in the transmission mechanisms. Carlos Cantú, Leonardo Gambacorta and Ilhyock Shim of the BIS were the project’s research advisers.

Supervisory data are highly confidential. This means that it is not possible to merge the data into a single data set. The only possibility is to coordinate a common exercise and summarise the different results. The BIS sent a research protocol to the Asian Consultative Council (ACC) central banks in June 2018. Five ACC central banks agreed to join the exercise: the Reserve Bank of Australia (RBA), Bank Indonesia (BI), the Reserve Bank of New Zealand (RBNZ), Bangko Sentral ng Pilipinas (BSP) and the Bank of Thailand (BOT). Each central bank developed its own analysis, following the methodology from the protocol to enhance the comparability of the results. Preliminary results were presented in two Asian Research Network workshops held in New Zealand and Australia, respectively.¹ Taking into account the comments from the two workshops, the authors of the five country papers finalised them in September 2019. Results were summarised using meta-analysis techniques.

This volume is a collection consisting of the six papers. Here we provide a synopsis for time-constrained readers.

The first paper, by Carlos Cantú, Leonardo Gambacorta and Ilhyock Shim, summarises the results of the five country papers using a meta-analysis methodology. It finds that macroprudential policy actions taken by the five countries are largely effective in reducing excessive household credit growth, and that tightening actions have a stronger effect than easing actions. It also finds that macroprudential policy is effective in reducing bank risk as measured by the non-performing loan (NPL) ratio.

¹ The results of the analyses by the country teams of the RBA, BI and the RBNZ using the protocol for bank-level supervisory data were presented at the 12th Asian Research Network workshop held in Sydney, Australia, in June 2019. The results of the analyses by the country teams of BSP and the BOT, based on a similar protocol circulated in 2017 using loan-level and credit registry data, respectively, were presented at the 11th Asian Research Network workshop held in Wellington, New Zealand, in March 2018.

In the paper titled “Assessing the effects of housing policy measures on new lending in Australia”, Corrine Dobson (RBA) shows first that two housing policy measures, announced in Australia in 2014 and 2017, reduced the flow of total new housing lending. In addition, she considers new loans to owner-occupiers and those to investors separately, and finds that these measures had a stronger effect on the growth of lending to investors, which was the policy’s primary target.

The paper by Rani Wijayanti, Nur M Adhi P and Cicilia A Harun (BI) titled “Effectiveness of macroprudential policies and their interaction with monetary policy in Indonesia” shows that decreases (or increases) in the maximum loan-to-value (LTV) ratio and the macroprudential intermediation ratio² between 2010 and 2018 significantly reduced (or increased) household loan growth, and that such policy measures were more effective when real GDP growth was low or the credit-to-GDP gap was large. They also find that the use of such policy instruments effectively reduced the NPL ratio.

In their paper titled “The effectiveness of loan-to-value ratio policy and its interaction with monetary policy in New Zealand: an empirical analysis using supervisory bank-level data”, Fang Yao and Bruce Lu (RBNZ) show that the LVR policy implemented in New Zealand between 2013 and 2016 reduced housing loan growth on average by 2 percentage points over the six months following each policy announcement. They also find evidence that the LVR policy has a statistically significant negative impact on the NPL ratio, although the economic magnitude is rather small.

The paper by Veronica B Bayangos and Jeremy De Jesus (BSP) titled “Have domestic prudential policies been effective? Insights from bank-level property loan data” examines the effects of domestic macroprudential policy in the Philippines over the sample period from March 2014 to December 2017. In particular, the authors consider the following six types of instrument: currency, capital-based, liquidity-based, asset side, reserve requirement and structural.³ The paper finds that tightening macroprudential policies has a negative impact on real bank loan commitments to borrowers which lasts up to four quarters. It also shows a negative impact of tightening domestic macroprudential policy on the NPL ratio.

The final paper, titled “The impact of LTV policy on bank lending: evidence from Thailand”, by Chantawit Tantasith, Nasha Ananchotikul, Chatlada Chotanakarn, Vorada Limjaroenrat and Runchana Pongsaparn (BOT) analyses the impact of three LTV measures in Thailand based on bank- and contract-level data provided by domestic commercial banks over the period 2004–18. They find that the policy effect does not manifest itself in the pace of credit growth at the bank level, but rather in the LTV distribution of newly issued loans. In particular, a loosening measure taken in 2009 prompted banks to increase the LTV ratio for the targeted loan sector, while tightening measures taken in 2011 and 2013 led to a more cautious LTV setting, reflecting the tightened credit standards the policy aimed to achieve.

² Since July 2018, the definition of the macroprudential intermediation ratio has been the ratio of the sum of loans extended and securities owned by a bank to the sum of deposits and securities issued by the bank. For the history of different definitions of this ratio, please see Table 1 in the BI’s country paper in this volume.

³ Structural or interconnectedness instruments aim to address vulnerabilities arising from interconnectedness between financial institutions and thus to limit contagion. They include interbank exposure limits and additional loss-absorbing capacity for systemically important banks. For details, please see Section 3.1 of the BSP’s country paper in this volume.