

# Macroprudential policies: A Singapore case study

Monetary Authority of Singapore

## Abstract

Macroprudential measures in Singapore have centred on the property market, as its stability is closely linked to that of the macroeconomy and the financial sector. Residential property is the single largest component in household balance sheets – it represents about half of total household assets, and housing loans account for three-quarters of total household liabilities. Property-related loans also account for a considerable share of bank lending. Adverse developments in the residential property markets could consequently have serious implications for the soundness of household finances, the banking system and the broader economy. Macroprudential measures have therefore been implemented in Singapore to safeguard financial stability and encourage financial prudence. This note outlines the macroprudential framework in Singapore and discusses the scope for cross-border coordination of macroprudential policies.

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## Introduction

Macroprudential measures in Singapore have focused on the property market, as its stability is closely linked to that of the macroeconomy and the financial sector. Residential property is the largest component in household balance sheets – it represents about half of total household assets and housing loans account for three-quarters of total household liabilities. Property-related loans also account for a considerable share of bank lending.<sup>1</sup> Adverse developments in the residential property market could therefore have serious implications for the soundness of household finances, the banking system and the broader economy.

The objectives of macroprudential measures in Singapore are to:

- (i) safeguard financial stability: unsustainably high and rising property prices could create financial stability risks, given both households' and the banking system's exposure to property.
- (ii) encourage financial prudence among households: the combination of low global interest rates and elevated house prices have led to some households over-extending themselves financially when purchasing property without sufficient regard to their longer term debt-servicing ability.

This note outlines the macroprudential framework in Singapore and discusses the scope for cross-border coordination of macroprudential policies.

## Institutional setup and the complementarity of policy mandates

The Monetary Authority of Singapore (MAS) is the central bank and integrated financial regulator in Singapore. Placing both functions under the same authority provides multiple vantage points for both the soundness of the financial system as well as individual institution in identifying potential risks that could arise from developments in the global and domestic financial systems. The synergies inherent in such an institutional arrangement provides a holistic perspective in tracing their transmission channels to the financial sector in Singapore, assessing the potential impact on macroeconomic and financial stability, and considering policy responses. The aim is to have the different arms of policy – macroprudential, microprudential and monetary – working together to secure overall macroeconomic and financial stability objectives through an integrated institutional setup that facilitates information-sharing and overlapping membership of decision-making forums.

## Macroprudential and monetary policies

Monetary and macroprudential policies can affect price and financial stability conditions simultaneously. MAS formulates its exchange rate-centred monetary policy based on overall macroeconomic and price stability considerations. Given

<sup>1</sup> Including housing loans and building and construction loans, these stand at about 30% of total non-bank loans as at Q3 2016.

Singapore's open economy, changes in the exchange rate have been found to have a larger impact on aggregate demand and prices than credit or interest rates have. In comparison to changes in the exchange rate, changes in macroprudential policies have a significant impact on credit, particularly in specific sectors including the property market, but only a modest and indirect impact on overall aggregate demand. Accordingly, macroprudential policy is formulated to complement monetary policy.

In practice, this complementarity calls for close coordination and information exchange among MAS staff. Such collaboration takes place informally at the staff level, as well as through formal channels such as the regular Financial Stability Committee (FSC), which provides a platform for joint assessments of the economy and the financial system. The FSC, chaired by the Managing Director of MAS, comprises members of senior management who oversee the monetary policy, financial stability and reserve management functions. The wide representation on the FSC facilitates policy coordination. Conversely, monetary policy decisions are taken at the Monetary and Investment Policy Meeting (MIPM), which could bring to bear relevant considerations of economic and financial stability issues discussed at the FSC.

### Macroprudential and microprudential mandates

Macroprudential and microprudential mandates complement each other. For instance, while loan-to-value (LTV) limits aim to address the top-down systemic risks associated with rapid increases in property prices and housing loans, they also support microprudential supervision by mitigating credit risk at the level of individual financial institutions. At the same time, active supervision provides useful bottom-up insights that inform macroprudential policy making and helps with effective enforcement of macroprudential policies across financial institutions.

Nonetheless, there could be occasions where priorities diverge. For example, housing loans are typically regarded as lower risk exposures and may not receive as much supervisory attention as other loan portfolios such as corporate loans, which are generally larger in size and pose greater risks. Yet, poor housing loan underwriting standards by banks could be a source of systemic risk. In MAS, the Management Financial Supervision Committee (MFSC) is charged with both the macroprudential and microprudential mandates, so as to help balance these differing perspectives.

### Coordination among various public agencies

Given the systemic risks posed by the property sector, the conduct of macroprudential policy requires coordination not only within MAS but also with other government agencies. For this reason, an inter-agency working group has been set up to promote sharing of surveillance findings and policy coordination across the relevant agencies.

The working group comprises representatives from MAS, the Ministry of Finance (MOF) and the Ministry of National Development (MND). MAS administers credit-based macroprudential tools such as the Total Debt Servicing Ratio (TDSR) framework, loan-to-value (LTV) ratios, and loan tenure limits; MOF is responsible for fiscal measures including the Additional Buyer's Stamp Duty (ABSD) and Seller's Stamp Duty (SSD), while MND implements supply side measures (eg government land sales). While each agency retains ultimate authority and accountability for its

respective tools, the working group provides a forum for the discussion of potential policy interactions and coordination of policy measures to achieve the common objective of a stable and sustainable property market.

### Complementary policy tools to enhance effectiveness

Policy coordination enables the relevant agencies to implement policies that complement one another. This in turn allows more precise targeting of specific groups of buyers in the property market. It also helps to reduce the risk of overreliance on any particular policy tool, which may otherwise have to be set at a very tight level. For example, to dampen investment demand for properties, investors buying their second or subsequent properties have to pay higher stamp duties. Similarly, borrowers taking on their second or subsequent housing loans are subject to more stringent LTV limits.

Reducing the scope for circumvention is another way in which policies can complement one another so that their effectiveness is enhanced. For instance, the introduction of loan tenure limits prior to the TDSR framework has strengthened the latter's effectiveness. Without the loan tenure restrictions, borrowers could have stretched their loan tenures to reduce their monthly repayments to meet the debt servicing threshold under the TDSR.

### Cross-border coordination

Beyond policy coordination domestically, one could also consider if policy coordination would be useful across borders. This is relevant as there is some evidence of spillovers from the implementation of macroprudential policies in one jurisdiction to another. For instance, in the early stage of the property market cycle in 2009–11, foreign demand featured prominently in Singapore's private residential property market. Some foreign investors from jurisdictions that had implemented macroprudential policies to cool their domestic property markets turned to Singapore. Similarly, as Singapore stepped up its macroprudential measures, there was increased interest in overseas property purchases by local buyers.

A number of considerations may be relevant in assessing the scope for cross-border coordination of macroprudential policies – the nature of risks, the policy instrument involved, and the type of spillover.

The extent to which systemic risk is driven by cross-border interconnectedness or domestic factors determines the nature of the risk. There could be greater scope for policy coordination in the case of risks that are cross-border in nature. For example, to address the risks posed by globally systemically important banks (G-SIBs), the Basel Committee on Banking Supervision (BCBS) has put in place a process to identify G-SIBs and to subject them to higher capital requirements and closer supervision. The latter includes setting up a data hub at the Bank for International Settlements to allow for the monitoring of G-SIB interconnectedness.

However, other macroprudential risks may be of a more local nature and can be dealt with adequately with domestic measures. For instance, Singapore imposed tight LTV limits on car loans in 2013 to address concerns that households were taking on too much leverage with their car purchases. The limits were effective in promoting a

prudent borrowing pattern, but would not have been appropriate for another jurisdiction with a different market structure and that faced a different constellation of risks.

The scope for cross-border coordination also depends on the policy instrument. Some policy tools require cooperation to be effective. For instance, the Basel countercyclical capital buffer requires reciprocity arrangements between the home and host supervisors because risks could be building up in the host market but capital requirements (especially for bank branches and cross-border lending) are set by the home supervisor. Aligning requirements across jurisdictions also helps minimise the risk of regulatory arbitrage.

On the other hand, there are policy measures, eg LTV ratios, exposure limits and transaction taxes, that can be implemented effectively by national authorities at a local level. There is less need for coordination in such cases.

While negative spillovers have often been cited as the main motivation for cross-border policy coordination, positive spillovers could arise from the implementation of macroprudential policies. For instance, steps taken to deal with domestic systemic risks (eg excessive credit growth) in one jurisdiction reduce the risk of financial instability in that jurisdiction, thereby lowering the probability of contagion risks to other jurisdictions. Further, whether spillovers are beneficial or detrimental may depend on how the financial cycles across jurisdictions are interlinked.

## Conclusion

Macroprudential policy is a rather newer policy area than fiscal or monetary policy, even if it has seen increasing use as a tool to mitigate the build-up of systemic risks. Many issues in its realm raise challenges for policymakers, such as the appropriate institutional setup, the scope for coordination domestically and across borders, the choice of policy measures, and their settings and communication strategies.

In the conduct of further studies and research into the implementation of macroprudential policy, there are useful parallels that can be drawn from monetary, fiscal and other policy areas. For example, coordination in surveillance can help to bring to policymakers' attention macroprudential risks that may have a broad impact. The sharing of country experiences will help deepen our understanding of macroprudential risks and the appropriate policy response. Over time, such collaborative efforts will enable us to implement macroprudential policies more effectively to address systemic risk.

## Appendix

### Macroprudential policy measures taken in Singapore

#### Limits on loan-to-value ratios

Housing loans granted by financial institutions (FIs) to:

- Individual borrowers, first housing loan: lowered from 90% to 80% (2010).
- Individual borrowers, second housing loan: lowered over time from 90% to 50%<sup>2</sup> (2010–13).
- Individual borrowers, third or subsequent housing loans: lowered over time from 90% to 40%<sup>2</sup> (2010–13).
- Non-individual borrowers (eg corporates): lowered over time from 90% to 20% (2010–13).

#### Limits on debt service

- Interest-only loans: disallowed for housing loans granted by FIs (2009).
- Loan tenure: maximum of 35 years for housing loans granted by FIs (2012); reduced to maximum of 30 years for housing loans granted by FIs for the purchase of Housing Development Board (HDB) flats (2013).
- Mortgage Servicing Ratio: set at 30% for housing loans granted by FIs for HDB flats and executive condominium units purchased directly from property developers (2013). Housing loans granted by HDB for the purchase of HDB flats are also subject to a mortgage servicing ratio limit of 30%.
- Total Debt Servicing Ratio (TDSR): set at 60% for housing loans granted by FIs (2013).

#### Tax

- Seller's stamp duty: levied on all residential properties sold within one year of purchase at the rate of 1% for the first S\$180,000, 2% for the next S\$ 180,000 and 3% for the remaining balance (2010). Minimum holding period extended to four years with tax rates of 16% for sales within a year, decreasing gradually thereafter to 4% in the fourth year (2010–11).
- Additional buyer's stamp duty: levied at a rate of 10% for foreigners and non-individuals buying any residential property, and 3% for permanent residents buying second or subsequent residential property or Singapore citizens buying their third or subsequent residential property (2011). Tax rates increased to 15% for foreigners and non-individuals buying any residential property, and 10% for

<sup>2</sup> An LTV limit that is 20 percentage points lower is applicable if the loan tenure exceeds 30 years (or 25 years where the property purchased is a HDB flat) or loan period extends beyond the borrower's retirement age (65 years).

permanent residents buying second or subsequent residential property or Singapore citizens buying their third or subsequent residential property (2013). Tax levied at a rate of 5% for permanent residents buying their first property and 7% for Singapore citizens buying their second property (2013).

### Bank lending limits

Cap on property exposures: property-related exposure of a bank capped at 35% of total eligible assets (2001).

