

## Macroprudential framework – the case of Thailand

Bank of Thailand

### Abstract

This note provides an overview of Thailand's macroprudential framework. While the Bank of Thailand (BOT) takes the lead role in safeguarding financial stability, it works in close coordination with two other regulators, namely the Securities and Exchange Commission and the Office of Insurance Commission, to assess and contain systemic risks in a consolidated manner. The BOT views macroprudential policy as part of its overall policy package; it is designed to complement rather than substitute for sound monetary policy. To date, the BOT has implemented three main macroprudential policies: (i) measures on loan-to-value ratios; (ii) dynamic loan loss provisioning; and (iii) credit limits on credit card and personal loans. The BOT and other regulators are increasing coordinated efforts to oversee systemic risks, enhance the effectiveness of its existing macroprudential policy as well as explore additional measures going forward.

Keywords: macroprudential framework, institutional arrangement

JEL classification: E58, E02

## Introduction

The use of macroprudential policy has been an integral part of the policy package in Thailand for the past decade. While lessons from the Asian financial crisis highlighted the importance of a strong microprudential framework, the Global Financial Crisis (GFC) reminded regulators to carefully assess and limit systemic risk through the use of macroprudential policy. In response to these crises, the Bank of Thailand (BOT) strengthened its microprudential policy framework – resulting in substantially more resilient financial institutions – and implemented macroprudential policies in the light of increasing interconnectedness within the financial system.

The main objectives of Thailand’s macroprudential framework are aligned with the definition of macroprudential policy used by the Bank for International Settlements (BIS), the Financial Stability Board (FSB) and the World Bank (WB); in particular, to increase the resilience of the financial system and contain the build-up of systemic vulnerabilities. With this in mind, macroprudential policy has been used periodically – primarily in the forms of measures on loan-to-value (LTV) ratios, maximum credit limits on credit cards and personal loans, and dynamic loan loss provisioning. The BOT and other key regulators have also stepped up their coordinated efforts to oversee an increasingly interconnected financial system.

This note provides an overview of the macroprudential framework in Thailand, first outlining the institutional setup pertaining to financial stability, and then discussing the framework itself, the implementation of macroprudential policy and the communication strategy.

## Institutional setup

### Institutional framework

In Thailand, the BOT, the Securities and Exchange Commission (SEC) and the Office of Insurance Commission (OIC) are the three main regulators jointly responsible for maintaining financial stability through the supervision of financial institutions under their respective jurisdictions. Their roles and responsibilities with regard to financial stability are as follows:

- The BOT’s mandate for achieving financial stability (as can be inferred from Section 7 of BOT Act BE 2485 and BE 2551 (amended)) states that “the BOT’s objectives are to carry on such tasks as [they] pertain to central banking in order to maintain monetary stability, financial institutions stability and payment systems stability.” With such mandate, the BOT effectively takes a leading role in safeguarding the country’s overall financial stability,<sup>1</sup> the BOT is legally charged with the supervision of commercial banks, specialised financial institutions (SFIs),

<sup>1</sup> Three policy committees have been established to carry out the BOT’s objectives: the Monetary Policy Committee (MPC) for price stability, the Financial Institutions Policy Committee (FIPC) for financial institutions stability, and the Payment Systems Committee (PSC) for payment stability. A biannual joint MPC-FIPC meeting was established in 2012 to discuss and decide on cross-cutting macro-financial issues and potential policy responses.

finance and credit foncier companies, asset management companies, and credit card as well as personal loan companies.

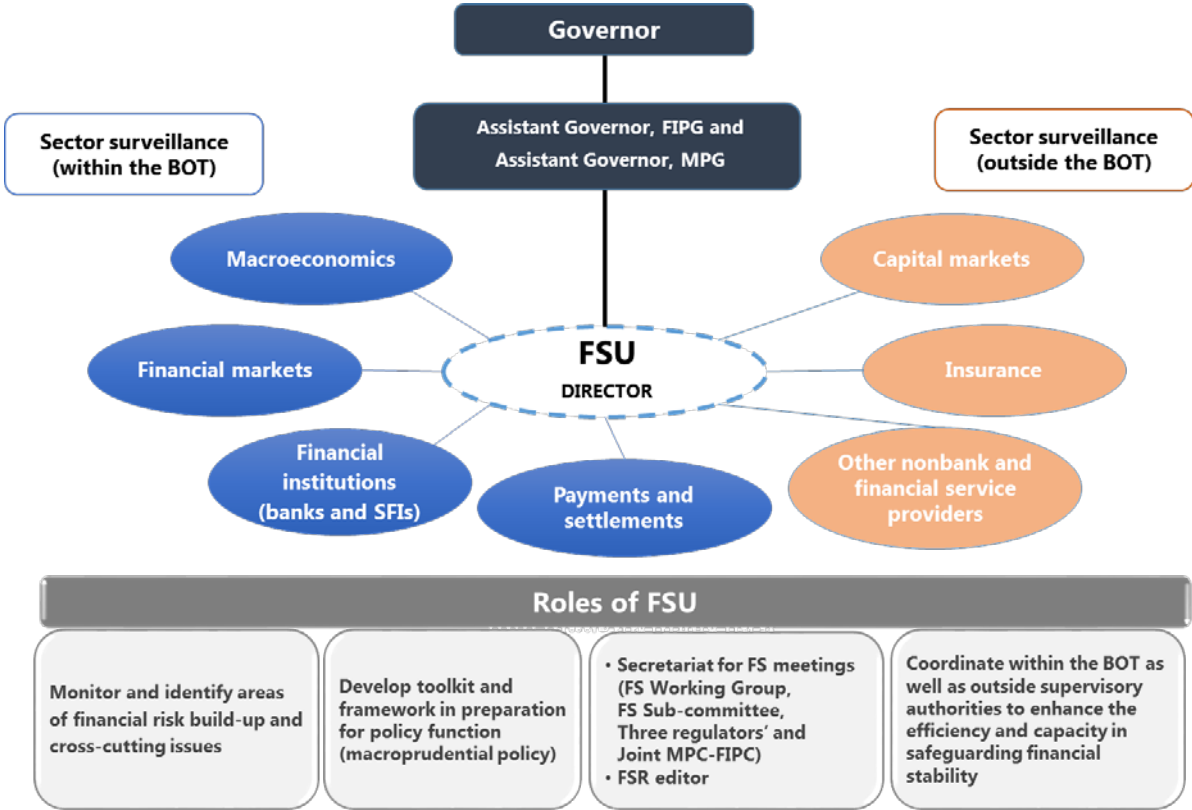
- The SEC is an independent public agency established in 1992 (under SEC Act BE 2535) and is tasked with the supervision and development of Thailand's capital markets. The SEC approves securities issuance for sale to the public and, following a listing, oversees an issuer's disclosure of information and supervises transactions, such as acquisitions or the disposal of assets, transactions with related persons and tender offers for business takeovers. Securities companies, asset management companies and derivatives business operators are supervised by the SEC.
- The OIC was established in 2007 (under Insurance Commission Act BE 2550) and is in charge of supervising the country's insurance industry. It regulates insurance companies, brokers and agents by governing the issuance of operating licenses and ensuring adherence to regulations.

### Financial stability work at the BOT

Several departments within the BOT help to oversee financial stability risks. The Monetary Policy Group (MPG) is directly responsible for the macroeconomic aspects of financial stability; in particular, the vulnerabilities faced by the household, corporate and fiscal sectors, and developments in the real estate market and the external sector. The Financial Markets Operations Group (FMOG) oversees the functioning of financial markets – primarily money, bond and foreign exchange (FX) markets. The Financial Institutions Policy Group (FIPG) and the Supervision Group (SVG) monitor and safeguard financial institutions' stability, while the Payment Systems Policy and Financial Technology Group supervises and maintains the stability of payments. The FIPG, SVG and FMOG issue regulations pertaining to the operations of financial institutions and exchange controls.

In April 2016, the BOT established the Financial Stability Unit (FSU) as the central point of its financial stability functions. The FSU monitors and identifies areas of financial risk build-up and cross-cutting issues, drawing on sectoral surveillance conducted by different departments within the BOT as well as from the SEC and OIC. In addition, it is in charge of developing the tools and capacity for financial stability assessments, undertaking the design of macroeconomic scenarios for stress testing, and developing a macroprudential toolkit and framework in preparation for policy functions. The FSU also acts as secretariat for financial stability meetings and is the editor of the *Financial Stability Report*.

The FSU and line departments meet regularly to discuss and assess financial stability issues. In addition, the Financial Stability Working Group and the Subcommittee of Financial Stability hold formal, quarterly meetings chaired by the BOT Governor, during which risk assessments are discussed.



### Inter-agency forums and coordination

Different types of financial institutions are supervised separately by the relevant agencies, and because interlinkages often exist between them, ensuring close coordination among supervisory agencies is critical. Such inter-agency cooperation is also relevant to non-bank financial institutions, especially considering that, as of 2016, the asset size of commercial banks accounted for only around half of the total financial system.

Inter-agency forums and the cross-directorship of the various regulators provide important channels for inter-agency coordination. Risks to financial stability are discussed at three-regulators' meetings– which the BOT coordinates with the SEC and OIC in an effort to consolidate key issues. Issues are then escalated to the Joint Meeting of the Monetary Policy Committee (MPC) and the Financial Institutions Policy Committee (FIPC), the latter of which comprises representatives from the BOT, SEC, OIC and the Fiscal Policy Office (FPO).

Furthermore, cross-directorships within the BOT, SEC and OIC serve as an ongoing channel for coordinating policy actions related to financial stability.

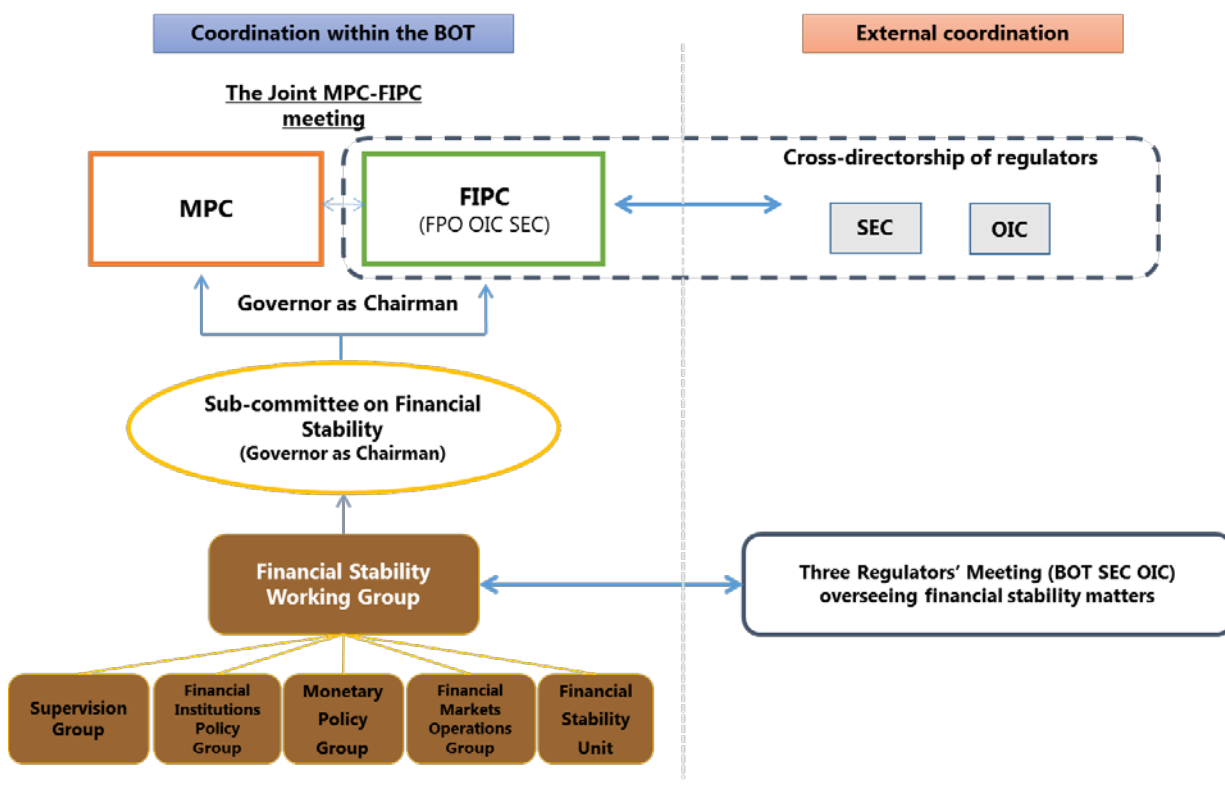
Inter-agency forums

Table 1

Inter-agency arrangement	Agencies involved	Objectives	Frequency of meetings
Three regulators' meeting	Representatives from BOT SEC OIC	Provide an avenue for the exchange of views, information, experiences as well as risk assessments in a consolidated manner before submitting relevant financial stability issues to the joint meeting of the MPC and FIPC.	Bi-annual (and when necessary)
Joint Meeting of the MPC and FIPC	Top executives from BOT SEC OIC FPO	Assess financial stability issues and formulate as well as coordinate macroprudential policy action and, if necessary, communication strategy.	Bi-annual

Work process and policy coordination

Graph 2

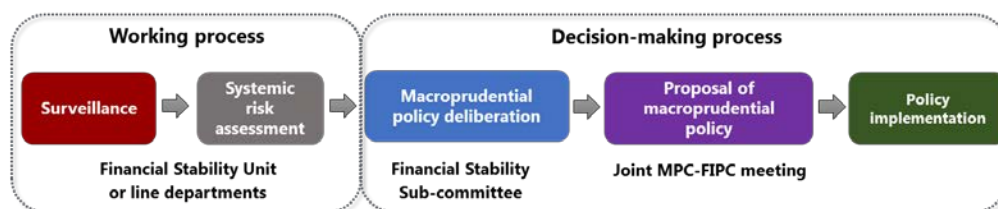


## Macroprudential policy framework

### Policy deliberation

The BOT has the jurisdiction to implement both macroprudential and microprudential policies on financial institutions under its supervision. As noted earlier, interconnectedness across different types of institution in the financial system prompted the need for inter-agency cooperation. Thus, while the BOT has the authority over the design and implementation of macroprudential policy,<sup>2</sup> other regulators are consulted in the policy formulation process. This helps to ensure transparency and policy consistency.

In assisting with macroprudential policy decisions, the Financial Stability Sub-committee presents risk assessments and reviews policy options during the Joint MPC-FIPC meeting. This meeting functions as a platform for the exchange of information and discussion.



### Macroprudential policy as part of the policy package

The design and implementation of the overall policy package at the BOT, particularly in terms of policy consistency, is enhanced by the cross-membership setup of certain committees. All policy committees, i.e. the MPC, FIPC and PSC, are chaired by the BOT's Governor. The Deputy Governor for Financial Institutions Stability is a vice chairman of both the FIPC and PSC, while the Deputy Governor for Monetary Stability is a vice chairman of the MPC and a member of the FIPC. This overlapping setup allows the BOT to take a holistic approach in developing macroprudential, microprudential and monetary policies – all the while taking into account fiscal policy.

Macroprudential and monetary policies work in tandem in safeguarding overall financial stability. In Thailand, while financial markets are becoming increasingly important as a source of financing, the financial system is primarily bank-based – meaning that the interest rate channel plays a crucial role in monetary policy transmission. This paves the way for the use of monetary policy in addressing financial stability concerns. The MPC views macroprudential policy as a complement rather than a substitute to sound monetary policy. That is, macroprudential policy would be

<sup>2</sup> The BOT has the power to employ macroprudential measures as stipulated in the Financial Institutions Business Act (Section 5), which states: "If the undertaking of any business in the manner of mobilization of funds from the public by accepting deposits of money or by any other means, granting of credits, or financial business affects the overall economy of the country and there is no law that specifically controls the undertaking of such business, the Bank of Thailand may propose an enactment of a Royal Decree prescribing business undertaking in such manner to be subject to the provisions of this Act in whole or in part including the relevant penal provisions. In this regard, the Royal Decree may also specify rules for the supervision of the undertaking of such business." (unofficial translation)

less effective after a prolonged period of low interest rates, because in this environment the underpricing of risks by investors could not be fully resolved by tighter regulation alone. At the same time, the use of macroprudential policy has been more specifically targeted, particularly on the real estate and household sectors. Increasing sector-specific vulnerability would generally be addressed by macroprudential policy to avoid potential trade-offs between macroeconomic and financial stability, which could arise from a change in the monetary policy stance.

As the FIPC is responsible for the implementation of macroprudential and microprudential policies, supervisory insights are taken into account prior to choosing macroprudential tools. To that effect, microprudential policy can be used to complement macroprudential policy, especially in cases where sectoral policy implementation is being considered.

The implementation of macroprudential policy also takes on board existing fiscal measures. A good example of this is in the property sector, where fiscal measures, in general, have thus far helped to revive the market during a slowdown. Macroprudential measures, meanwhile, helped to contain potential systemic risks and tended to be more targeted.

## Implementation of macroprudential policy

The implementation of macroprudential policy rests upon a holistic systemic risk assessment framework and process. The BOT plays an instrumental role in providing key inputs to macroprudential policymaking, including building the necessary tools/quantitative models and calibration techniques, and setting up the process regarding the overall systemic risk assessments as well as stress testing.

At present, the BOT has made progress in developing a systematic framework for the assessment of the effectiveness of macroprudential policy. The framework takes into account the interactions between macroprudential policy and other policies (i.e. monetary and fiscal), as well as spillovers from the effects of cross-border policies. This is to ensure that the prescription of macroprudential policy yields the intended outcome.

Thus far, the BOT has implemented three main forms of macroprudential policies: measures on the LTV ratio, dynamic loan loss provisioning, and maximum credit limits on credit cards and personal loans.

## Implementation of LTV measures

Table 2

LTV measure	motivation	action	status
<b>2003:</b> first imposition of LTV limit	Prevent speculation in the property market and to mitigate the build-up of risk in the high-value segment	Imposing a 70% LTV limit on high-value residential properties ( $\geq 10$ mln THB)	<b>removed</b>
<b>2009:</b> increase in LTV limit and imposition of higher risk-weighted capital charge on high-value mortgages ( $\geq 10$ mln THB)	Support activities in property market in times of global economic slowdown*	Increasing LTV limit for high-value mortgage from 70% to 80% and imposing higher risk-weighted capital charge of 75% for loans with LTV greater than 80%, otherwise risk-weighted capital charge of 35%	<b>still in place</b>
<b>2011 and 2013:</b> imposition of risk-weighted capital charge on low-value mortgages (less than 10 mln THB)	Ensure consistency across different segments of the property market	<p><b>2011:</b> high-rise property</p> <ul style="list-style-type: none"> <li>Imposing risk-weighted capital charge of 75% for loans with LTV greater than 90%, otherwise risk-weighted capital charge of 35%</li> </ul> <p><b>2013:</b> low-rise property (single house, duplexes and townhouses)</p> <ul style="list-style-type: none"> <li>Imposing risk-weighted capital charge of 75% for loans with LTV greater than 95%, otherwise risk-weighted capital charge of 35%.</li> </ul>	<b>still in place</b>

\* During this time, concerns over risk build-up in the high-value segment subsided. To add flexibility to banks' strategies and business model in line with risk management practice and international standard, instead of a strict limit on the LTV ratio at 80%, loans with LTV ratios greater than 80% were subject to a higher risk-weighted capital charge.

## Measures on LTV ratios

A measure on LTV ratio was first applied in 2003 as a pre-emptive measure against speculation in the property market and to mitigate a build-up of risk in the market. The LTV ratio could, for instance, be lowered (tightened) to rein in an acceleration of asset prices and mortgage credit growth during the upswing, and raised (eased) to help revive demand and alleviate an oversupply of residential property during an economic slowdown. The LTV measure implemented has been somewhat sectoral in that it has been applied unevenly to different segments of residential mortgages. The LTV ratio was tightened in December 2003, January 2011 (high-rise property such as apartment buildings) and January 2012 (low-rise property such as houses). Following the GFC, the LTV ratio was eased in March 2009. Planned tightening on the low-rise property was postponed from January 2012 to January 2013 due to severe flooding at the end of 2011, which seriously impaired the economy.

## Dynamic loan loss provisioning

Since 2012, commercial banks have been asked to implement extra loan loss provisioning on higher risk loans to ensure an adequate buffer during times of distress, eg during an economic slowdown. At the time of its introduction, the measure was deemed appropriate for banks to build up extra loan loss provisions as bank profitability was sufficiently high. This was in spite of banks already having a



non-performing loan (NPL) coverage ratio in excess of 100% (which was higher than regulatory requirements).

### Maximum credit limits on credit cards and personal loans

An increasing role of credit cards in facilitating households' transactions has prompted concerns over its potential impact on household debt. At the same time, wider participation of providers in the credit card market has raised issues regarding consumer protection and calls for a common set of standards in the industry. In light of this, in 2004 the BOT mandated financial institutions to take into consideration borrowers' ability to repay debt, and tightened regulations of the industry by:

- increasing the minimum monthly payment from 5% to 10%;
- setting a minimum income for credit card holders to at least 15,000 THB per month;
- setting a combined credit line limit for every credit card provider to no greater than five times the average monthly income; and
- requiring the cancellation of a credit card after three months of nonpayment on an outstanding balance.

To align the standard practice on personal loans with that of the industry, the BOT implemented in 2005 a measure on personal loans that sets overall credit limits to no greater than five times the average monthly income.

In 2017, due to concerns over potential spillovers from high level of household debts, the BOT further tightened regulations on credit cards and personal loans by:

- Lowering a credit line limit for credit card holders with monthly income lower than 50,000 THB per month – from 5 to 1.5 times the average monthly income times (if card holders' monthly income is less than 30,000 THB per month) and to 3 times (if card holders' monthly income is between 30,000 – 50,000 THB per month).
- Lowering a credit line limit for personal loan borrowers with monthly income lower than 30,000 THB per month – to 1.5 times the average monthly income with restrictions on the number of personal loan providers not to exceed three companies.

### Communication strategy

The BOT communicates its assessment of financial stability and policy actions through various channels. A flagship publication on financial stability is the annual *Financial Stability Report*. The report provides in-depth analyses and assessments of risks to financial stability and other issues of concern (eg key risks) as well as an outlook for financial stability. In addition to the *Financial Stability Report*, the quarterly *Monetary Policy Report* also addresses the BOT's most recent assessment of financial stability. Press releases on the outcome of joint MPC-FIPC meetings also provide a brief overview of key risks and assessments on financial stability.

For those issues requiring timely announcements, BOT executives can voice their immediate concerns through the media or during speeches. In addition, press conferences are typically held following each policy committee meeting.

## Conclusion

This note has outlined the design and implementation of the macroprudential framework in Thailand, which has been influenced by the institutional setup. The BOT, as the primary authority in safeguarding financial stability, is tasked with implementing sound macroprudential policy, all the while embracing interlinkages among financial entities and regulators to assess and contain systemic risks in a consolidated manner.

The BOT and other regulators are in the process of stepping up coordinated efforts to oversee systemic risks, enhance the effectiveness of existing macroprudential policy as well as explore additional measures going forward. Furthermore, the existing institutional arrangement is currently under review to ensure its agility in providing adequate safeguards and surveillance on financial stability in an increasingly volatile, complex and interconnected environment.

