Chapter 11

PECKING ORDER MACRO-PRUDENTIAL TOOLS: BOT’S EXPERIENCE FROM TAILORED POLICY MEASURES TO BASEL III’S COUNTERCYCLICAL BUFFER

By
Maetinee Hemrit

1. Introduction

1.1 Objective and Scope of the Study

Basel Accords have evolved over decades as the international standard for banking supervision applicable to anchor viability and resilience of internationally active banks. Starting from a limited group of advanced countries with complex financial systems and expanding to include countries with open economies, Basel III - the latest release of regulatory reform in response to the global financial crisis in 2008 – has inevitably affected most countries to some varying extent. Thailand, as a small open economy, has complied with Basel I since early 1990s and it gradually adopted Basel II since 2008.

For Basel III, the Bank of Thailand (BOT) has resolved to speed up the implementation of the minimum capital requirement ratio to be fully enforced in 2013, instead of following the Basel Committee on Banking Supervision (BCBS)’s phase-in arrangement between 1 January 2013 and 1 January 2015. This is undoubtedly achievable as Thai banks have maintained their BIS ratio above the international standards and weathered through the global financial crisis with trivial impacts. Nonetheless, Basel III also contains a number of innovative measures that are designed to address various aspects of financial stability, such as procyclicality and systemic risk. For example, it features the introduction of non-risk based and add-on capital measures like leverage ratio and conservation buffer, as well as the first international framework for liquidity risk. Some of these newly conceived measures, however, are not so straightforward in implementation and are still under refinement, while a certain degree of contextualisation may also be required.

1. Financial Institutions Policy Group, Bank of Thailand. The views expressed in this paper are those of the author. They do not necessarily represent the stance of the Bank of Thailand or The SEACEN Centre.
This paper focuses on the implementation challenges and opportunities of Basel III’s countercyclical buffer which is one of the add-on capital measures and the first international attempt to put forward the standardised macro-prudential policy framework. The proposed measure is distinct not only in concept but it is also complicated in practice, as it entails existing micro-prudential measures as well as other macroeconomic policies. Moreover, many countries including Thailand have more or less been devising different measures – specific to certain sectors and/or time periods – to preempt procyclicality on the basis of macro-prudential policy. This practice is quite apparent in countries that have learned the lessons from the previous financial crisis. It is thus worth exploring in the context of Thailand such issues as to whether and how Basel III’s countercyclical buffer is to be incorporated, given the existing mix of policies.

1.2 General Outline of the Paper

The paper is organised in six parts. Section 1 lays out the background and structure of the paper. Section 2 presents an overview of Thailand’s financial system and risk assessment. Then, Section 3 articulates the emergence of macro-prudential policy after the global financial crisis in relation to the conventional micro-prudential policy. Section 4 explains the logic and mechanism of Basel III’s countercyclical buffer. Section 5 demonstrates the BOT’s experience in macro-prudential policy choices in terms of motivations, mechanisms, and effectiveness. Last but not least, Section 6 argues the BOT’s reflection on the use of countercyclical buffer.

2. Overview of Financial System and Risk Assessment

2.1 General Overview of the Financial System of the Country

The development of Thailand’s financial sector has been a story of restructuring, adjustment and renewal, following the severe effects of the Asian financial crisis in the late 1990s. At the peak of the crisis in 1998, the Thai banking sector was afflicted with large net losses, a declining net interest margin, low capital levels, and a non-performing loan ratio at 43% of total loans. To tackle such a devastating systemic banking crisis, the government embarked on a comprehensive restructuring of the financial sector, intervening in weak banks and focusing on recapitalisation, debt restructuring, reform of the regulatory and supervisory framework, strengthening of the corporate governance of banks, and introduction of initiatives to deepen and broaden the capital market.
Regarding the regulatory and supervisory reforms, it has helped in moving Thailand’s financial regulation and supervision towards a risk-based framework on par with international best practice. The key elements of the reforms centered on risk-based supervision under the Basel Accord, consolidated supervision, and the phased implementation of IAS 39. The financial institutions were also restructured to rationalise and consolidate the financial system under ‘One Presence’ policy. These reform efforts were coordinated under the broad agenda of the Financial Sector Master Plan I (FSMP) (2004 – 08) which aimed to improve the financial system’s efficiency, broaden access to finance and improve consumer protection.

By mid-2007, when the global financial crisis erupted, many weaknesses in Thailand’s regulatory and supervisory framework had been addressed. Consolidation of the financial system brought the number of deposit-taking institutions down to 41 from 124 before the 1997/98 crisis, while the process of debt restructuring in the private sector was more or less complete, with the debt-to-equity ratio declining from 1.2 in 1998 to 0.7. The domestic capital market also grew rapidly in response to the funding needs of Thailand’s government and firms, further strengthening the system’s resilience. Importantly, these improvements resulted in much stronger balance sheets for firms and banks.

**Chart 1**
**Structure of Thai Financial System**

*Total Asset 40.8 Trillion Baht as of June 2012*
The immediate impact of the global financial crisis on the Thai economy and the financial system was thus limited, due to the funding structure of Thai banks and the low exposure of the Thai banking sector to subprime assets. This structure was based on domestic deposits that helped insulate Thai banks from the tight liquidity conditions abroad. The second-round effects from the decline in economic activity and deleveraging were slightly more pronounced, and a policy response was required at the macroeconomic- and financial-sector levels. The key challenge for Thailand has been to help small and medium enterprise adjust to the impact of the global slowdown while maintaining confidence and ensuring a normally functioning financial sector.

Lessons from the global financial crisis point clearly towards the importance of having a sound and resilient financial system to prevent the risk of crisis and help the economy adjust to shocks. Along this line, reforms to strengthen the financial sector continue under the broad agenda of the Financial Sector Master Plan Phase II (2010 – 2014). The plan focuses on improving the financial system’s efficiency through greater competition, reducing the financial system costs, expanding access to financial services, and enhancing banks’ risk management capacities by developing better and more sophisticated financial markets and infrastructure.

2.2 Risk Oversight Assessment and Vulnerabilities

The continuous adjustment also helps Thailand’s financial sector in adapting to the new global regulatory reform, i.e. Basel III. Based on results of the Quantitative Impact Study (QIS)\(^2\) that the BOT had conducted five times using data of December 2009, December 2010, June 2011, December 2011, and latest June 2012, the Thai banking sector is well capitalised and not much affected by the new minimum capital requirements, which raise both quality and quantity of the capital base. This is due to the fact that the current capital structures of Thai banks are mostly comprised of Common Equity (over 90%) with highest loss absorbing capacity. Only a trivial part contains different types of capital instruments that will be gradually phased out along the timeline of Basel III implementation. Note that as of September 2012, the average Tier 1 Ratio (mostly CE) for Thai-registered banks equals to 11.1%, while the average Total Capital

---

2. The QIS results are based on the strong assumption set out by BCBS, that is, full implementation of Basel III in 2013, meaning: (1) to fully exclude (instead of “phase-out”) capital instruments that no longer qualify as non-CET1 or Tier 2 capital; and (2) to fully deduct (instead of “phase-in) of the newly defined regulatory adjustments BIS Ratio.
Ratio equals to 15.6%. For foreign bank branches, the average Total Capital Ratio\(^3\) amounts to 17.4%.

These figures clearly reflect strong profitability of the Thai banking sector that has buoyed up since 2003. Evidently, these ratios are not only beyond the minimum capital requirements but also they are even sufficient to comply with the conservation buffer. In terms of the non-risk-based approach, these solid levels of core capital together with relatively low levels of off-balance sheets items also yield satisfactory results. That is, the average Leverage Ratio for both Thai-registered bank and foreign bank branches are well above BCBS’s minimum requirement.

Accordingly, the BOT is supportive of the objective of the Basel III and intends to adopt the capital standards under the Basel III following the BCBS’s implementation timeline. In formulating the Thai regulations and implementation plan, the BOT has taken into account not only QIS results, but also the Thai financial environment and feedbacks from the Thai banking industry in order to ensure the main purpose of maintenance of the stability and resilience of Thai financial system is achieved while the negative or unintended impacts are kept to a minimum. As a result, the BOT notification on capital framework is to be issued and binding from 1 January 2013.

For the liquidity standards, whilst the principle is generally well accepted, the exact implementation of such principles must be carefully carried out to prevent any unintended consequences. Based on the QIS results thus far, some of the Thai banks may need to adjust their liquidity profiles, but keeping in mind that the standards is still under BCBS’s recalibration that may lead to less stringency, such as lowering the run-off rate of certain items or expanding the list of high-quality liquid assets. In the meantime, the BOT will keep abreast with the development and carry out the impact studies on a regular basis to further address any “unintended consequences” and fine-tune the regulation best suited for the financial system of Thailand.

To date, three concerns are raised. Firstly, the rules may lead to higher loan rates and reduction in bank lending and, as a result, smaller profits due to the need to hold more safe and liquid instruments. This is a concern particularly for

---

3. Components of the regulatory capital of foreign bank branches differ from those of Thai-incorporated banks. It is thus a point of consideration how to impose the Basel III capital requirements for foreign bank branches in a comparable way as imposed for Thai-incorporated banks.
any bank-based economy. Secondly, the rules may also obstruct bond market
development. As the banks’ buy-and-hold investment increases, the free-float of
government bonds is reduced which leads to illiquidity in the market. Ironically,
the liquidity requirement is then self-defeating its own propose. Lastly, the need
for liquidity profile adjustments potentially intensifies competition in retail deposit-
taking banks. As deposit from retail customers is currently considered as having
relatively low run-off rate, the competition however may make this class of
funding less stable.

Along this line, the challenges thus lie in implementing some of Basel III’s
new measures. The focus of this paper is on the countercyclical buffer that
advocates imposing additional common-equity ranging between 0 – 2.5% of risk-
weighted assets, corresponding with the buildup of system-wide risk as a macro-
prudential measure to alleviate the procyclicality of the banking sector. This
novel concept is yet uncertain and debatable in practice. For instance, how can
we actually monitor the situation and identify the size of the buffer? How reliable
are the macroeconomic indicators (e.g. Credit-to-GDP) and models in determining
when the country is at risk of excessive credit growth?

3. Why Macro-prudential?

The evidence of the 2008 financial crisis and its severe impact on the real
economy has incidentally drawn attention to the studies of macro-financial
linkages. The main argument is the need for better handling of systemic risk
that is endogenous to individual institutions via their collective actions,
fundamentally as a consequence of excessive credit growth. Along this line, a
number of macro-prudential tools have thus been increasingly advocated for
regulating two externalities incurred in the build-up of system risk: (i) common
exposures across institutions that contribute to their joint failures and (ii)
procyclicality between the financial system and the real economy that is
conductive to the amplitude of booms and busts.
In the favour of the macro-prudential approach is the underlying assumption that the existing micro-prudential measures are insufficient and unintentional to address systemic risk and ensure the resilience of the financial system as a whole. The distinction between the two approaches is discussed in the reviewed literature – e.g. BIS working paper No. 337 (2011) and Boris (2009) – see Table 1 for the summary. Principally, it claims that the conventional micro-prudential approach may not account for interconnectedness and macro-financial responses; and what is rational for an individual institution does not always optimise the aggregate outcome. Say, the collapse of asset prices, margin calls, liquidity drain, and financial melt-down may be triggered by a prudent motive of an individual bank that becomes uncomfortable with the risk profile of certain assets and its actions could drive other institutions to also sell, realize losses, and eventually paralyse the entire system. Hence, such self-interested behaviour could worsen the situation when institutions are highly correlated.

On the contrary, the micro-prudential approach’s proponents would counter that the recent financial collapse in fact boiled down to the undermined risk management of troubled banks as well as governance issues of related parties like investment banks and credit rating agencies. Concerning the regulatory gaps and ability of financial institutions to circumvent measures, the correction of micro-prudential practices could hypothetically hamper the over-indulgent lending coupled with the surge of leverage especially via non-core liabilities, e.g. securitised notes, which had basically tied up different institutions. With less of the interconnectedness, the chance of systemic spiral would thus decline and the financial resilience would also be strengthened indirectly.

<table>
<thead>
<tr>
<th>Proximate objective</th>
<th>Macro-prudential</th>
<th>Micro-prudential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit financial system-wide distress</td>
<td>Limit distresses of individual institutions</td>
</tr>
<tr>
<td>Ultimate objective</td>
<td>Avoid output (GDP) costs linked to financial instability</td>
<td>Consumer (investor/deposit) protection</td>
</tr>
<tr>
<td>Characterisation of risk</td>
<td>Endogenous</td>
<td>Exogenous</td>
</tr>
<tr>
<td>Correlations and common exposures across institutions</td>
<td>Important</td>
<td>Irrelevant</td>
</tr>
<tr>
<td>Calibration of prudential controls</td>
<td>Contribution to system-wide risk; top-down</td>
<td>Risks of individual institutions; bottom-up</td>
</tr>
<tr>
<td>Likelihood of failure of individual institutions</td>
<td>Maybe different</td>
<td>Same</td>
</tr>
</tbody>
</table>

Note: Based on Borio (2009). The two perspectives are intentionally stylised. They are intended to highlight two orientations that inevitably coexist in current prudential frameworks.
Despite this line of argument, the current policy discourse has clearly established that the conventional micro-prudential approach is necessary but not sufficient. The latest regulatory reform of Basel III has not only elevated the demand on core capital for ensuring loss absorption along with the improvement of risk coverage calculations, but also proposed a number of newly innovated measures that is partly of systemic concern. For example, the leverage ratio is to constrain total exposures of banks’ balance sheets; the liquidity ratios are to ensure better liquidity risk management with sufficient high quality assets to cover short-term outflows as well as more reliance on stable funding; and the countercyclical buffer is to help reduce procyclicality and stabilise the banking sector by means of supervisory discretion to impose further requirements on core capital in relation to excessive credit growth. Altogether, the reform aims to reduce the vulnerability of the financial system and prevent, or at least lessen, the likelihood of financial crises that would invariably save the society from enormous costs.

Nonetheless, it is worth emphasising that there have been practices of different macro-prudential tools in various countries prior to the introduction of the countercyclical buffer framework. Dynamic provisioning has long been advocated by Banco de EspanPa to smooth out total provisions required over the cycle, based on historical loss experiences of different lending types (Saurina, 2009). In East Asia, measures like loan-to-value (LTV) and debt-to-income (DTI) caps are often used to tackle excessive growth in particular sectors. For instance, a limit on LTV of mortgage loans basically reduces the pool of borrowers that can obtain funding and thus lower demand pressures of real estate booms (Hong Kong Monetary Authority, 2011). Likewise, DTI ratio sets a ceiling on the spending power of individuals, especially to restrain speculative investment. A number of empirical studies have shown the merit of elective macro-prudential tools often specifically designed to address different kinds of potential financial distress and thus yield more resilience in the banking sectors (e.g. Bank of England, 2009; Hyun Song Shin, 2011). These existing tools are thus distinct from the broad-based nature of Basel III’s countercyclical buffer.

4. Basel III’s Countercyclical Buffer

To correct the procyclical implications of Basel II, the BCBS by the mandate of G-20 has worked on four regulatory elements of Basel III, which are: (1) capital requirement; (2) forward-looking provision; (3) capital conservation buffer; and (4) countercyclical buffer. The first three element are commonly related to capital standards and provisioning, yet with the anticipation that stretches over
business cycle. Particularly, the capital conservation buffer that asks for additional core capital of 2.5% of risk weighted assets on top of the minima, otherwise subject to constraint on earning distributions, is to ensure sufficient level of capital can be used during stress and thus lower the transferred impact on the real sector.

The fourth and distinct element is the countercyclical buffer that is designed to achieve the broader macro-prudential goal. With the highlighted interactions between banking and the real sector, banks should take into account the macro-financial environment in which they operate. The notion is for the banking sector to build its capital defense in periods where the risk of system-wide stress is markedly growing. The primary aim is to protect the banking sector from the credit cycle, so it would still be well capitalised in any case and able to maintain the flow of credit in the economy without undermining its solvency. In addition, the measure may contribute to “lean against the wind” as a positive side effect in moderating the build-up phase of the credit cycle. That is because the cost of credit presumably increases with higher level of capital required, which being more expensive than other forms of funding, would dampen the demand.

Chart 2
Basel III’s Procyclicality Measures

1. Capital Requirement: improves the calculation of probability of default (PD) by using long-term data horizons to dampen any excess cyclical

2. Forward-Looking Provision: advocate a change in the accounting standards towards an expected loss (EL) approach

3. Capital Conservation Buffer: the build-up of adequate buffers above the minimum that can be drawn down in periods of stress

4. Countercyclical Buffer: for broader macro-prudential goal of protecting the banking sector from periods of excess credit growth.
In terms of operation, the relevant authority in each jurisdiction is expected to monitor the sustainability of credit growth in relation to the level of systemic-wide risk and to apply judgment whether and to what extent a countercyclical buffer requirement should be imposed. The aggregate private sector credit-to-GDP growth is recommended by BCBS as the common reference guide. Given that, authorities are free to apply any other variables and qualitative information that are best suited in their jurisdictions to gauge the build-up of system-wide risk. The key is to be able to clearly explain to all stakeholders the rationale underpinning the decisions, which information is used and how it has been considered in the process. Moreover, it is important that the buffer decisions have thoroughly accounted for possible implications in the conduct of monetary, fiscal, and other public policies.

Varying by their concern over system-wide risks, authorities would promptly require the buffer, which also demands the best capital form of common equity, within the range of zero to 2.5% of risk-weighted assets. For any increases in the countercyclical buffer, pre-announcement periods of 12 months are expected to give banks time to meet additional capital requirements before they take effect. Also, it is recommended that the authorities should advise and comfort the industry with estimated durations of the buffer releases. On the contrary, any decrease in the buffer would take effect immediately for the purpose of freeing the capital constraint on credit growth.

Furthermore, it is worth stressing that the range of zero to 2.5% is of BCBS’ design, binding with the international reciprocity provisions. In accordance with Basel III, each bank is subject to its own specific level of the buffer as the weighted average of the buffers imposed in jurisdictions to which it has a private credit exposure. That is, a specific bank’s buffer is the reflection of the geographic composition of its portfolio of credit exposures. The larger exposures to buoyant economies with high levels of the buffer being declared, the higher level of capital is required for that particular bank. Given that, it is still possible for authorities upon their discretions to apply the buffer in excess of 2.5%. However, the application is restricted only to domestically incorporated banks.

Along this line, the countercyclical buffer is developed to serve as the internationally harmonised macro-prudential measures at the disposal of authorities. With fair judgment on the calibration of booms and busts, the buffer should thus be deployed, possibly along with other macro-prudential tools, when excess credit growth is judged to be associated with a build up of system-wide risk. Distinctly, the buffer aims to ensure that the banking system has a sufficient level of capital to protect it against future potential losses, noting that other alternative tools,
such as LTV and DTI, tend to focus on addressing problems arising in specific sectors.

5. Macro-prudential Policy Choices: BOT’s Experience

Overseeing financial stability has been one of the main central banking roles of the BOT when it was established in 1942. Its mandate for macro-prudential policy, along with micro-prudential policy, was asserted in the Commercial Banking Act B.E. 2505 (1962). Nonetheless, policy implementation on its part had not been so rigorous in the past, especially during the long decades of fast-growing economic miracles. It was in fact due to the financial crisis of 1997 that the awareness of macro-financial linkage was seriously raised. Poor lending practices intertwined with heavy flow of short-term foreign borrowing had propelled the growth of speculative non-productive sectors and weakened the fundamentals that eventually triggered the crisis – job losses, economic contraction, and financial bailout as a consequence.

As a result of the lessons learned, the BOT has become more conscious of the intertwined financial stability, system risk, and macroeconomic development. The practice of macro-prudential policy was set in motion. A number of measures were initiated with the objective of limiting potential systemic risk and with the focus on the financial system as a whole, including the interactions between the financial and real sectors. In parallel, institutional and governance arrangements were established. The Bank of Thailand Act B.R. 2485 (1942) was amended and modernised in 2008 to formalise and support the routine operation of the macro-prudential approach. As a result, the financial stability committee was set up, together with an operational definition of macro-prudential policy, specifically,

"a policy used to mitigate and contain risks that the financial system could pose a systemic risk by exacerbating macroeconomic imbalances, vulnerabilities such as excess leverage, over indebtedness of household and corporate sector, as well as asset price bubble”.

In terms of policy coordination, it is worth noting that the BOT as the responsible agent for the conduct of macro-prudential policy is also in charge of monetary policy and the payment system. However, the capital market and insurance industry are subject to other agencies’ oversight, which are routinely engaged in the policy discussion through cross-directorship in the committee of each regulatory agency, i.e., the BOT, the Securities and Exchange Commission (SEC) and the Office of Insurance Commission (OIC). This helps facilitate
different views and feedbacks, contributing towards the joint aim of maintaining financial stability.

Accordingly, this section purposes to explain the policy formulation process – from identifying potential systemic risk to designing appropriate tools – and the effectiveness of various macro-prudential tools being applied in Thailand. In addition, the ongoing process of further developing the macro-prudential policy framework in Thailand is discussed with regard to the changing international financial environment after the global crisis.

5.1 Tightened Restrictions on Credit Card and Personal Loan: Addressing Sectoral Imbalance

Prior to early 2000s, the market for consumer loans was rather under-developed. Apart from the traditional housing loans, credit cards were restricted to only high-income earners, while personal loans barely existed in the regulated financial sector. Regarding the growth potential, a lot of resources thus went into this market, partly to help diversify banks from the burdensome industrial sector that was heavily hit in the 1997 crisis. Commercial advertisements were used to stimulate private consumptions, which however were largely unnecessary and exceeding the capacity to repay. Both bank and non-bank institutions were engaged in intense competition. The focus initially was on expanding credit card business to lower-income earners. Then, it extended to personal loans capturing a larger group of borrowers with and without (secured) jobs, as there was no restriction imposed on this segment at that time. As a result, household debt figures shot up, as is evident also of the increasing presence of loan sharks in the black markets, which could in effect undermine the stability of financial sector as a whole. This development reveals how systemic risk and vulnerability could arise from sectoral imbalance where overheating appears in specific sector(s).
In response to the rising concern, a series of measures were issued in a timely manner to moderate growth, ensure consumer protection, and promote borrowers’ credit discipline. Starting with the credit card business, a minimum income of at least 15,000 Baht (about US$500) per month was set as the main entry criterion. In addition, the credit line was capped at no greater than five times the average monthly income. This kind of debt-to-income (DTI) caps as a quantitative measure, along with other qualitative measures, is used to ensure that people could reasonably pay back their credit card debts or are less likely to default. Later, as the concern shifted towards personal loans luring low-income earners to overly spend, e.g. extension of loans for procurement of electronic appliances and other lavish items, and generating heavy fees and interest charges on the past due amount, the restrictions were then extended to certain types of personal loans. Note that personal loan under supervision refers to uncollateralised personal loans, hire purchases, and leasing loans on goods which the licensed lenders are usually not in the business of selling. For such personal loans, the credit line is also capped at no greater than five times the average monthly income, while there are other restrictions on fees and effective interest rate.

The tightening of the regulations on credit card and personal loans has been effective through the close collaboration between the BOT and the Ministry of Finance, as the authority covers not only banks but also non-bank credit card and personal loan companies in the scope of supervision. Consequently, these measures have curbed the growth of credit remarkably in the specific market segments, while maintaining financial discipline of people – not to be spoiled with easy credit and future money. This experience shows that macro-prudential
policy, when implemented properly, can tackle the sectoral imbalance directly rather than resorting to the use of conventional monetary tightening that might have broad-based effects, with unintentional, undesirable results on other economic sectors.

5.2 Loan-to-value (LTV) Ratios on Mortgage Loans: A Flexible Preemptive Tool

Likewise, another type of concern gave rise to the use of another sectoral-specific measure. The Loan-to-value (LTV) ratio is recognised for its effectiveness based on the empirical evidence of countries like Hong Kong and Singapore. The LTV ratio is also not new in Thailand. The BOT has started implementing the LTV policy as a means of moderating the growth of real estate sector since 2003. Drawn from experience, the use and adjustment of the LTV ratio demonstrates its preventive nature and, more importantly, the flexibility of its use to fine-tune the policy in response to changing economic circumstances.

Back in 2003, the real estate sector showed strong recovery with double-digit growth rate, especially on high-value residential properties, corresponding to the substantial surge in mortgage loans. With the lessons learned from the Asian financial crisis, the 70% LTV limit for mortgage with value of at least 10 million baht was thus introduced to preempt speculation in luxury real estate as well as quell the unsustainable real estate booms. Besides, other qualitative measures were imposed to strengthen the lending practices of banks, such as passing of feasibility studies for certain loan types. As a result, land and construction transactions calmed down.
Later, in 2009, as Thai economy was affected by the global downturn, the BOT made adjustment on the LTV ratio on the high-value mortgage in order to support activities in the real estate market. The 70% LTV limit was removed and instead replaced with a more risk-sensitive rule in line with the international supervisory standard. That is, the risk weight for calculation of capital charge is set at higher rate (75%) for mortgage with LTV above 80%, while it is only at 35% for less risky loans. Having seen its effectiveness, in late 2010 the BOT extended the LTV policy also to mortgage with value less than 10 million baht. This additional measure was precautionary in response to the significant rise in housing demand and the intense competition in bank lending to this sector that may pose a higher risk to the financial system, even though there was no obvious sign of asset price bubble.

In the design, the policy was divided into two phases for the two different housing types, vertically and horizontally. In comparison, the high-rise building segment, i.e. condominiums, is more prone to speculation than the low-rise building segment where most house buyers tend to buy for their own living. To first tackle the more risky market, a higher risk weight for high-rise building mortgage with LTV above 90% was imposed in January 2011. Supposedly, one year later in January 2012, a similar rule would then be applied for mortgage on low-rise building with LTV above 95%. However, due to the severe flooding in late 2011,
the implementation was postponed. Given that, the policy effectiveness is still quite apparent. The growth rate of mortgage loans for condominiums gradually slowed down, so did the proportion of mortgage loans with LTV ratio higher than 90%.

5.3 Tightened Loan-loss Provisioning: Leaning against the Wind

The last example of Thailand’s experience in macro-prudential policy implementation concerns the development of the loan-loss provisioning rule in the context of leaning against the build-up of vulnerabilities. Following the extended period of profitability in mid-2000s, the BOT decided to tighten the loan-loss provisioning rules in line with the International Accounting Standard 39 (IAS 39). That is, the impairment of asset quality is recognised in a more forward-looking basis, i.e. by taking into account the expected cash flows and other qualitative criteria, rather than waiting for the overdue figures to show up on the balance sheets. The timing of implementation was essential as the change would lead to a large one-time increase in the provisioning buffer. The period of strong profitability in the banking system was chosen to ensure that an adequate cushion was made in such a way that it would not distort economic activities. Afterwards, the banks’ provisioning gradually accumulated, as evidenced by the rising NPL coverage ratio.

Chart 5
Loan-loss Provisioning:
Another Type of Buffer to be Built up during Good Times

In light of the wider perspective in determining the loan-loss provision not simply based on static (point-in-time) estimates of probability of default that gear towards procyclicality, the BOT is currently in the process of developing
its own policy framework for provisioning. Broadly speaking, the notion is similar to the so-called “dynamic provisioning” policy of Spain (Saurina, 2009), that is, the level of provisioning is calibrated from historical data of impaired loans through the cycle. However, the calculation of asset impairment and provision requirement is somewhat different. The dynamic provisioning looks at the historical loss experiences of different types of lending across institutions. As a result, immediately when a certain type of loans, say, mortgage, is issued, the bank has to set aside a general provision based on the average likelihood of mortgage impairment regardless of the character of that specific loan.

For the BOT, the level of provision is tailor-made using bank-level data on probability of default and loss given default. Close collaboration with the Thai-registered banks is obtained via moral suasion to enlarge and refine the data coverage further. On purpose, this more granular approach, namely “conservative provisioning” is to be systemically used as extra cushion against the expected future losses as well as incurred losses. The attempt is not only to increase the banking resilience but also to smooth out economic cycles, similar to what Basel III’s countercyclical buffer is advocated for. In a way, the distinction is simply between elevating the loan-loss provision as the cushion for expected losses and strengthening the capital level as the backup for unexpected losses, while the line drawn between expected and unexpected losses becomes blurred.

6. BOT’s Reflection on Use of Countercyclical Buffer

The BOT recognises the Basel III’s countercyclical buffer as the first international attempt to put forward a standardised macro-prudential policy tool. It is deliberately intended to regulate banks to internalise the externalities incurred from their procyclical behaviour. That is, the need to raise extra capital is expected, once the economy seems to be overly boosted possibly by a highly leveraged banking sector. For the buffer to be well capitalised and able to be drawn down in periods of stress is conceptually prominent. In practical terms, its implementation is likely to be challenging.

The goal is to sustain the flow of credit in the economy and perhaps moderate the business cycle without hurting growth. How is this to be achieved? The calibration of booms and busts involves pervasive parameters of complex and dynamic macro-financial relationships that are hard to predict from policy feedbacks. The sequence of policy execution is crucial, which requires close collaboration and careful alignment with monetary policy and other macroeconomic policies. Yet even with the best foundation laid, the execution might remain skeptical in the politics of booms as well as of countries’
comparative advantages. The challenge is striking for bank-based economies with relatively less developed financial markets. Hence, it is still an open question whether and how the countercyclical buffer would evolve in an internationally harmonised way.

In an effort to prepare for the use of countercyclical buffer, the BOT made a preliminary study of the robustness of the aggregate private sector credit-to-GDP growth, as recommended by BCBS. The result shows that the recommended indicator is fairly reliable in triggering the buffer especially during the overheating period prior to the Asian financial crisis. However, its predictive power becomes somewhat weaker in recent years, while the lead-lag effects also vary. This induces further studies on the alternative indicators, of both quantitative and qualitative types, and their effectiveness.

Without doubt, much more resources and commitment are required not only to further refine the boom-bust prediction and the buffer calibration, but also to incorporate these novel measures to the institutional setting. Besides, the work entails skillful public communication in order to put the right messages across and not cause any unnecessary noises in the financial system. In this regard, the BOT has some experience in devising other macro-prudential tools, as described in Section 5.

Altogether, an inference can be drawn from the BOT’s experience. Given differences in the merits and practicalities of existing policy choices, it is very important for the authorities to appropriately select different tools for different circumstances. For sectoral imbalances or overheating in particular industrial sectors / loan types, measures such as LTV and DTI are well tailored to address specific issues with a rather simple process. Timely identification of sectoral concerns is thus essential to curb the build-up of system-wide risk. Yet, in the event that the expansionary pressure becomes pressing for the banking sector as a whole, it is preferred to assign extra loan-loss provisioning requirements to those lucrative banks in order to soothe the procyclicality and ensure the resilience of main financial intermediation. Lastly, where economic upsurges arise from the various financial channels bringing about system-wide risk, the use of countercyclical capital buffer would then be appropriate to protect the banking sector from the swing of business cycles. Accordingly, the introduction of Basel III’s countercyclical capital buffer is certainly not a replacement of other macro-prudential tools. It is up to national discretions to accommodate the old and the new and the pecking order of the different tool kits for best use in their respective economic contexts.
References


