BANK OF THAILAND

FINANCIAL STABILITY REPORT 2013

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Financial Stability Report 2013

Message from the Governor

Over the last decade, Thailand's financial system has developed and expanded rapidly to accommodate the needs of economic activities and support the country's development. Meanwhile, the Thai financial system has become more closely connected with the international financial systems through expansion in international trade and investment, financial innovation and advancement in technology and communication. Consequently, the financial system is rendered more susceptible to domestic factors and volatility in the global economic and financial systems. This poses a challenge for supervisory authorities and other parties concerned in maintaining financial stability and soundness at both micro and macro levels so as to enable the financial system to effectively promote business activities and economic growth going forward.

As a central bank, the Bank of Thailand (BOT) is entrusted with the mandate to oversee the economic and financial system. The task entails (1) maintenance of financial stability by ensuring price stability and preventing financial imbalance; and (2) safeguard of financial institutions and payment systems stability by means of regulation and supervision of financial institutions and payment service providers. Moreover, the BOT is responsible to promote and enhance efficiency and competitiveness of the financial system. In this regard, the BOT formulates strategic plans to continuously improve the capacity to safeguard financial stability through the development of surveillance tools and processes for monitoring and assessing systemic risk, as well as to encourage cooperation with other supervisory authorities, both domestic and overseas. These initiatives ensure that developments in the financial system are closely monitored to assess risks to financial stability so that appropriate measures are undertaken.

This Financial Stability Report is the first issue prepared by the BOT as a channel of communication to other organizations and the public regarding important developments in the Thai and international financial systems in the previous year, and their potential effects on financial stability. Hence, relevant organizations would be able to efficiently administer and manage risks, moving toward the common goal of maintaining financial stability and ultimately achieving sustainable growth of the Thai economy.

Prasarn Trairatvorakul

Mr. Prasarn Trairatvorakul

Governor

February 11, 2014

Content

Introduction : Thai Financial System

1. Thai Financial System Structure

A financial system plays an important role as an intermediary for capital mobilization and allocation of economic resources and as a provider of payment and settlement services. A well developed, efficient and stable financial system is thus the key to support sustainable economic development.

In general, a financial system comprises three key elements namely financial institutions, financial markets and payment systems.

1.1 Financial Institutions

According to the National Accounts System, there are three types of financial institutions in Thailand, including:

(1) Bank of Thailand (BOT);

(2)Depository corporations, for example, commercial banks, Specialized Financial Institutions (SFIs), finance companies, credit fonciers, saving cooperatives and credit unions, and money market mutual funds; and

(3) Non-depository corporations, for example, mutual funds, insurance companies, provident funds, credit companies, asset management companies, securities companies, and foreign exchange companies.

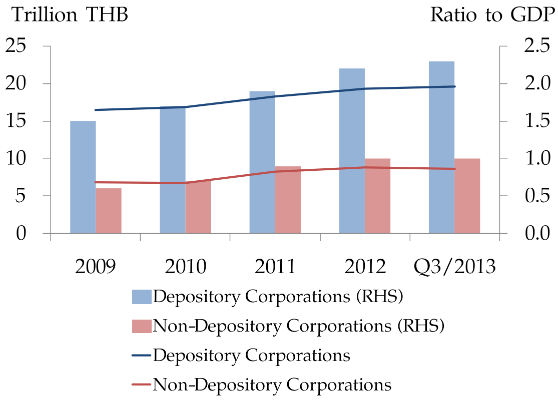
As of September 2013, total assets of financial institutions amounted to 40.9 trillion baht, 57 percent of which was held by depository corporations, while non-depository corporations and the BOT had the share of 28 and 15 percent, respectively (Table 1). In

Table 1 Number and Asset Size of Financial Institutions as of 2013 Q3

	Number	% of Total Assets of Financial Institutions
Bank of Thailand	1	15
Depository Corporations	1,936	57
Commercial Banks	30	39.3
Specialized Financial Institutions	6	12.0
Saving Cooperatives and Credit Unions	1,860	4.7
Money Market Mutual Funds	40	0.9
Non-Depository Corporations	8,206	28
Mutual Funds	1,239	7.1
Insurance Companies	67	5.8
Financial Institutions Development Fund	1	3.2
Credit Card and Personal Loan Companies	39	3.2
Holding Companies	912	2.5
Provident Funds	427	1.8
Government Pension Fund	1	1.6
Securities Companies	46	0.7
Leasing Companies	935	0.5
Agricultural Cooperatives	3,983	0.4
Pawn Shops	556	0.2

Source : Bank of Thailand

Chart 1 Assets of Financial Institutions



Source : Bank of Thailand

Table 2 Market Capitalization of Bond and Stock as of 2013 Q3

(Billion THB)

	Bond	Stock
Financial Institutions	3,903.0	2,340.1
Non-Financial Corporations	1,577.5	9,607.0
General Government	3,455.3	-
Non-Residents	124.2	-
Total	9,060.0	11,947.1

Source : Bank of Thailand

terms of asset size, depository corporations were more prominent than non-depository corporations (Chart 1).

The most important depository corporations were commercial banks and SFIs due to their extensive branch networks which allowed them to service businesses and consumers more widely than other types of financial institutions. At the end of 2013, commercial banks and SFIs together owned approximately 8,200 branches and 55,400 ATMs nation-wide

1.2 Financial Markets

Financial markets comprise (1) money market which offers short-term liquidity to financial institutions via interbank lending and repurchase market; (2) capital markets which offer medium-term and long-term capital mobilization through bond and stock markets; (3) foreign exchange market; and (4) derivatives market which offers financial instruments whose returns are based on a designated variable.

At the end of 2013 Q3, capital markets were important sources of finance for both the government and private sectors. The bond market had 9.1 trillion baht total bond outstanding, including short-term (< 1 year) and long-term (>1 year) bonds (Table 2). At the same time, stock market capitalization reached 11.9 trillion baht, with corporate as major players. For foreign exchange market, monthly value of transactions of authorized entities averaged at 5.5 trillion baht. Money market size reached 2.0 trillion baht with the majority of transactions conducted by financial institutions; whereas derivative market was not yet widely used where most transactions were for hedging among counter parties on the over-the-counter (OTC) market.

1.3 Payment Systems

Achievement of smooth and stable economic transactions depends greatly on having in place suitable payment systems infrastructure to support payment and settlement transactions between businesses and institutions. The BOT also plays the role in promoting efficient, stable and secured payment services. (Details in the Payment Systems Report http://www.bot.or.th)

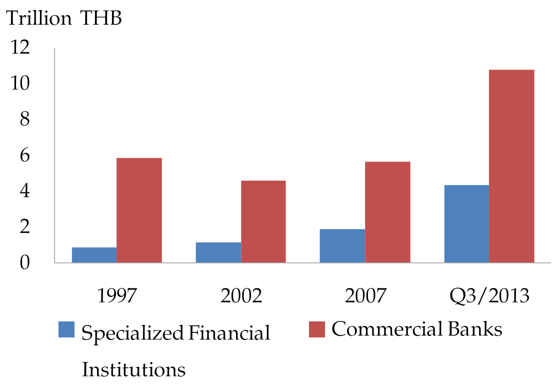
2. Financial System Development

Given that commercial banks were greatly affected by the 1997 financial crisis, SFIs had stepped up their role in supporting Thailand's economic and financial activities (Chart 2).

Thailand's bond and stock markets have developed and expanded continuously to support the economic and financial system as reflected by a steady increase in bond issuance to mobilize funds. Liquidity in both bond and stock markets had therefore increased, most of which was a result of new issuances of government bonds, an increase in the number of listed companies in the Stock Exchange of Thailand, and capital inflows to emerging market economies (Chart 3).

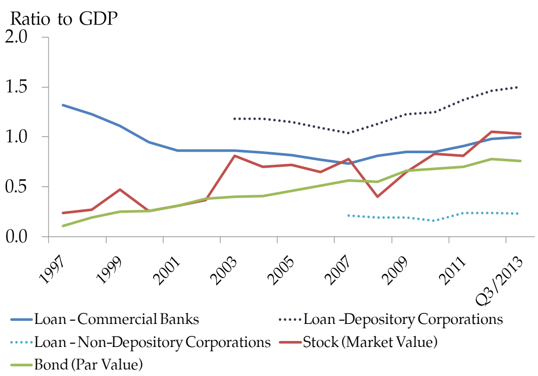
The household sector, comprising households and non-profit organizations, is considered the most important customer group of financial institutions because they are the largest source of saving, in other words, financial institutions' main creditors. Of the 12.6 trillion baht savings at financial institutions, 9.6 trillion baht was held at depository corporations, while 2.3 trillion baht was held in the form of long-term savings products with insurance companies,

Chart 2 Lending of Commercial Banks and Specialized Financial Institutions



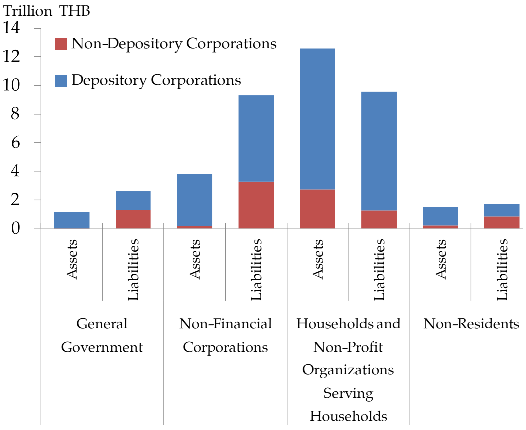
Source : Bank of Thailand

Chart 3 Comparison of Loan, Bond and Stock



Source : Bank of Thailand

Chart 4 Assets and Liabilities of Economic Sector with the Financial Institutions as of 2013 Q3



Source : Bank of Thailand

provident funds and mutual funds. At the same time, households are also debtors of financial institutions with total borrowing of 9.6 trillion baht (Chart 4).

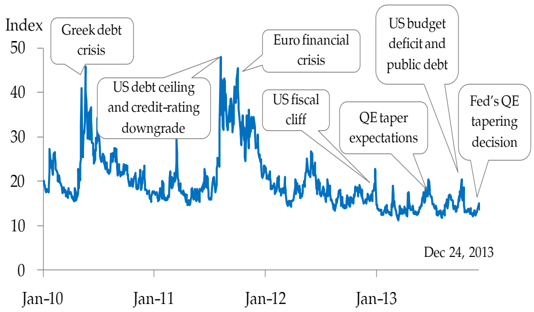
Chapter 1 Global Economic and Financial Developments

1.1 Global Financial Stability

Global financial stability improved during the first half of 2013 following various stimulus measures, monetary easing and liquidity assistance to financial institutions by advanced economies' governments and central banks. As a result, prospects of advanced economies began to improve, with the U.S. emerging from a recession and the Eurozone starting to reach agreement on debt crisis resolution in Greece and Spain. Meanwhile, the Japanese economy benefited from the new government's stimulus package known as "Abenomics" together with the Bank of Japan's additional quantitative easing, which also helped shore up confidence in the economy.

Nonetheless, the global financial markets became more volatile during the second half of the year largely as a result of the U.S. monetary and fiscal policies. Towards mid-year, volatility began to rise as markets expected that the Federal Reserve (Fed) would begin to wind down its asset repurchase program in the second half of the year[1] (Chart 1.1). Thus, liquidity in the global financial markets tightened whereby bond yields in both advanced and emerging market economies rose. Such development coupled with the slowdown in some Asian economies caused interest spreads between advanced and emerging market economies

Chart 1.1 Volatility Index (VIX Index)



Note : **VIX Index (Chicago Board Options Exchange Market Volatility Index)** reflects negative sentiment in the return of underlying assets held by investors. Such index is constructed by using the implied volatilities of S&P 500 index options, based on the notion that investors would use call or put options to hedge their investment positions during a time of uncertainty.

Source : Bank of Thailand

[1] Statement delivered by Chairman of the Federal Reserve to Congress on May 22, 2013, signaling a possibility of QE tapering in the next periods under a condition that recovery continues to firm up.

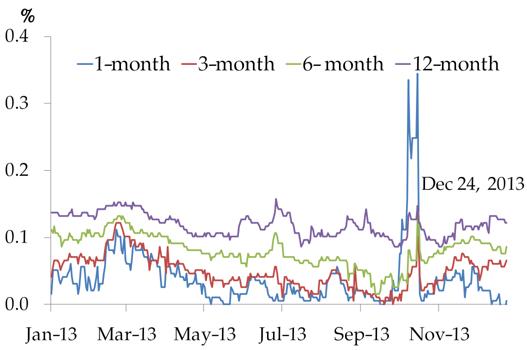
to narrow. Investors began to rebalance their portfolios away from emerging market economies as well as withdrew some investments from Asia, thereby affecting the regional financial markets.

Money market interest rates rose, asset prices such as government bond prices declined and regional exchange rates sharply weakened. Therefore, authorities in some affected economies, for example, Indonesia and India, implemented measures to safeguard financial and economic stability including foreign exchange measures and interest rate hikes *(Details in Box 1)*.

After the Fed announced that it would postpone QE tapering, contrary to market expectation, by citing weak economy, concerns over rapid tightening in liquidity condition that could affect economic recovery and uncertainties over budget and public debt, the global financial markets, particularly Asian markets, became volatile again. In this regard, investments returned to the region, causing rapid appreciation in regional exchange rates.

During October, volatility in the global financial markets resumed as a result of investors' concerns over the U.S. default risk which could heighten if Congress failed to agree to raise the ceiling of public debt. Moreover, there was a government shutdown whereby some government offices were temporarily closed after Congress could not pass the temporary 2013 Budget Bill. Thus, the U.S. treasury short-term yields soared (Chart 1.2). However, after the temporary Budget Bill was passed and the public debt ceiling was temporarily raised, reducing short-term default risk of the U.S. Government, yields of short-term U.S. treasuries therefore declined.

Chart 1.2 U.S. Treasury Yield



Source : Bloomberg

1.2 Global Economic Conditions

Outlook for advanced and emerging market economies improved in line with global financial conditions.

The U.S. economy gradually improved as a result of better fundamentals especially recovery in the housing sector along with domestic consumption. Meanwhile, recovery in the Eurozone became more broad-based though growth momentum continued to be slow as restructuring process took time.

Asian economies performed better in the latter half of 2013. The Japanese economy continued to expand in line with domestic demand thanks to the government's stimulus packages and improvement in exports. Domestic demand and exports played a key role in recovery of the Chinese economy. Asian economies continued to grow albeit at a slower pace as authorities focused on maintaining financial, fiscal and external stability amid uncertainties in the global financial markets.

1.3 Global Economic and Financial Stability Outlook

Looking ahead, risks to economic and financial outlook of many countries remained from the U.S. QE tapering and fiscal uncertainties which could return during the first part of 2014. The timing of QE tapering was expected to be early 2014, which could then affect economic and financial stability in many countries in the medium term. In particular, Asian economies would bear the cost of higher volatility in the exchange rates resulting from sudden reversal of capital flow. Nonetheless, it was expected that authorities would be able to maintain economic stability due to strong external positions coupled with sound economic outlook. Moreover, the impact on individual countries would depend on their chosen course of action.

It was deemed possible that the debt limit issue could still pose a risk to the U.S. economy[2] and result in resumption of volatility in the global financial markets if Congress could not reach a permanent solution to the problem. Moreover, economic and financial stability in the Eurozone could worsen from impact of political uncertainties in some countries, especially Italy, which could in turn slow down implementation of economic reform and fiscal stability in the long run.

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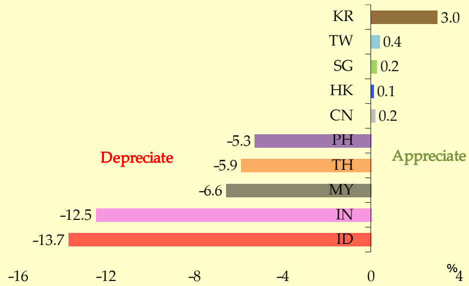
[2] On October 17, 2013, the U.S. government was able to agree to raise public debt ceiling temporarily until February 7, 2014. Government offices were also reopened after a 16-day Government Shutdown when the 2014 Budget Bill was passed.

Box 1: Measures to Curb Exchange Rate Imbalance in the Region

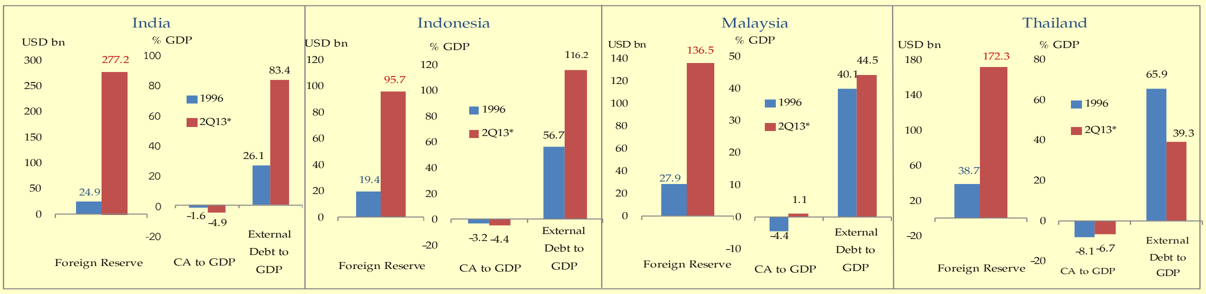
Since the U.S. Federal Reserve's signaling in May 2013 that it would begin to reduce its monthly asset purchase, known as QE tapering, together with a slowdown in regional economic outlook, financial market volatility rose in many emerging Asian countries. Investors decreased the proportion of emerging market assets in their portfolios, causing regional stock markets to decline by 5 – 25 percent. Exchange rates also weakened sharply as reflected by a decline in the regional exchange rate index (Asia excluding Japan) which dropped from 118.9 on May 8, 2013 to 114 on August 27, 2013. Some currencies depreciated markedly from the beginning of the year, especially Indonesia rupiah (13.7 percent), Indian rupee (12.5 percent), Malaysian ringgit (6.6 percent), and Thai baht (5.9 percent) (Chart 1). Current financial and external stability conditions in these countries have improved significantly from 1996 as their levels of international reserves have increased by more than five folds, implying greater ability to deal with external imbalances such as high external debt, compared to previous periods (Chart 2). However, when compared to other countries in the region, India, Indonesia, Malaysia and Thailand were assessed as relatively riskier due to a concurrent deficit in fiscal and current account balances, known as a twin deficit problem. In this connection, a chronic twin deficit problem could potentially lead to fiscal imbalance and financial instability. In the case of Malaysia, though the current account had remained in surplus, its level had come down significantly from a slow recovery in exports coupled with a sharp increase in imports. For Thailand, despite an ongoing twin deficit problem, external stability had been considered well maintained given that the current account deficit stemmed from a temporary factor, i.e. higher than usual net import of gold and profit and income repatriation.

Chart 1 Change in Regional Exchange Rate
(May 22– September 18, 2013)



Source : Bloomberg

Chart 2 External Stability



Note : * Foreign reserve data was as of the end of September 2013. Current account deficit to GDP and Debt to GDP were as of the second quarter 2013

Source : World Bank and CEIC

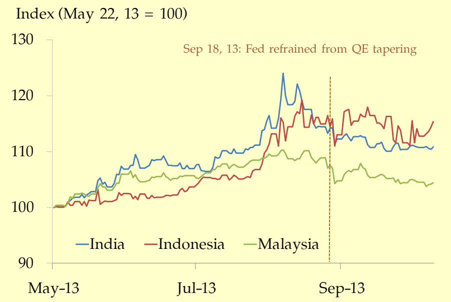
From reasons above, authorities in India, Indonesia and Malaysia introduced measures to safeguard economic stability, mitigate risk of sudden outflows and strengthen investors' confidence as follows.

(1) Measures to address fiscal deficit, including reduction of oil and food subsidies in Indonesia, Malaysia and India. These subsidies had been quite large, resulting in inefficient use of oil where the proportions of government expenditure on oil subsidies during 2012 – 2013 to total government expenditure in Indonesia, Malaysia and India reached 20, 7.2 and 4.3 percent, respectively. Abolishment of these subsidies would reduce government expenditure to GDP by approximately 2.7, 1.9, and 0.5 percent, respectively. Moreover, Malaysia had announced an end to its sugar subsidy as another way to alleviate a fiscal deficit problem.

(2) Measures to address chronic current account deficit, including (1) increase in import tax for gold imports from 6 to 10 percent in India to reduce its current account deficit which had largely stemmed from an increase in imports of gold from 38.4 billion U.S. dollars in 2010 to 52.8 billion U.S. dollars in 2012 and 32.1 billion U.S. dollars during the first half of 2013, following the locals' preference to keep savings in gold instead of cash due to high inflation; and (2) postponement of investment projects that required high imports of machineries and parts but were not highly associated with real economic activities in Malaysia. The decision resulted from the fact that Malaysia's current account surplus had deteriorated significantly partly due to infrastructural investment projects under the Economic Transformation Program (ETP).

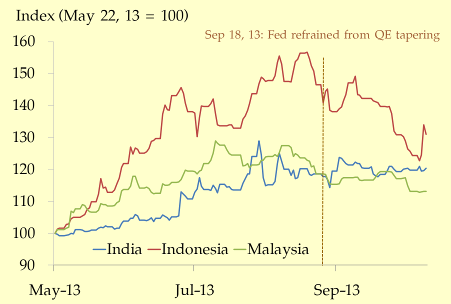
(3) Measures to safeguard financial stability and curb sudden outflows of capital, including increases in the policy interest rate by Bank Indonesia from 6.75 to 7.50 percent and by the Reserve Bank of India from 7.25 to 7.50 percent. In addition, both central banks had also renewed Bilateral Swap Agreements with other central banks, for example, Bank of Japan and People's Bank of China.

Chart 3 Foreign Exchange Rate



Source : Bloomberg

Chart 4 Government Bond Yield



Source : Bloomberg

Outcomes

1. On exchange rate: After implementation of these measures since the end of August 2013, the Indian rupee, Indonesian rupiah and Malaysian ringgit gradually regained stability as reflected by reduction in volatility of the three exchange rates following foreign investors' return to the markets. It should be noted, however, that the outcome would likely owe to implementation of financial stability measures as well as the Fed's announcement of a delay in QE tapering at the September 2013 meeting (Chart 3).

2. On bond yield: Long-term bond yields in Indonesia, India and Malaysia adjusted downwards, particularly in Malaysia where net investment in government bond returned to positive territory in September after a sell-off in August 2013 (Chart 4).

3. On twin deficit problem: Trade and fiscal deficits in all three countries improved continuously. India's imports declined while Indonesia's trade deficit in 2013 Q3 reduced. In addition, reductions in oil subsidies in Indonesia and Malaysia led to lower fiscal deficits.

Chapter 2 Domestic Economic and Financial Developments

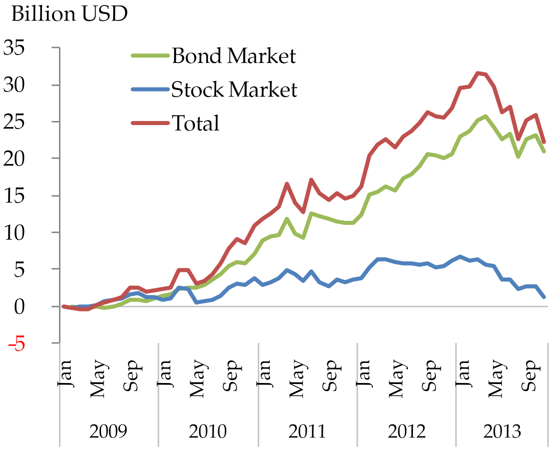
2.1 Financial Markets

Thai financial markets were volatile due to sudden shifts in the direction of capital flows that resulted from uncertainties in the global financial markets and risks from the Thai and regional economic outlook.

In 2013, Thai financial markets were affected by global financial volatility in the same manner as other regional markets. Furthermore, a slowdown in the economy during the second half of the year owing to export slowdown, sluggish domestic demand, and political uncertainties, affected investors' confidence and added to capital flow volatility.

During the first four months of 2013, there were consistent inflows into the Thai financial markets. The bond market received relatively higher interest from foreign investors compared to the stock market where profit-taking sell-offs were seen in some periods (Chart 2.1.1). In all, net inflows into the Thai securities market totaled 4.5 billion U.S. dollars. An important external driver of inflows was the high global liquidity resulting from monetary easing in advanced economies. Improvement in confidence after the U.S. government was able to avoid the fiscal cliff also prompted investors to return to emerging markets and risk assets in search of higher yields. Moreover, the fact that some countries in the region were either experiencing political uncertainties or some form of uncertainties in their domestic

Chart 2.1.1 Cumulative Flows into Stock and Bond Markets



Source : Bank of Thailand (data from Jan 2009 to Nov 2013) economies[3], placed Thailand in a relatively attractive position from investors' perspective. Domestic factors that attracted capital flows to Thailand included economic strength whereby the economy in 2012 Q4 not only surpassed expectation but was also set to continue expanding in line with planned public investment in large infrastructural projects. Moreover, the country's credit rating was also revised upward from BBB to BBB+ by Fitch Ratings.

However, from late April onwards, inflows began to slow and the financial markets became more volatile following investors' concern that Thailand would impose capital control measures to stem rapid appreciation of the baht. Moreover, possibility of sooner-than-expected U.S. QE tapering, current account deficit problems in some countries in the region, and weakening economic outlook of the region including Thailand, led foreign investors to reduce weighting of regional financial assets in their portfolios. For Thailand, this led to a total outflow from both the stock and bond markets of 8.6 billion U.S. dollars between May and August.

In September, after the U.S. did not commence QE tapering as previously expected, foreign investors returned to regional financial markets including Thailand. Nevertheless, there was another sell-off in the last quarter as investors became uncertain about the U.S. fiscal situation, the Thai political climate and economic outlook, as well as the announcement by the Fed in mid December to start reducing asset purchases in January 2014.

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[3] For example, tension between North and South Korea, pre-election uncertainties in Malaysia, current account deficit condition in Indonesia and uncertainties from fiscal reform in India.

2.1.1 Foreign Exchange Market

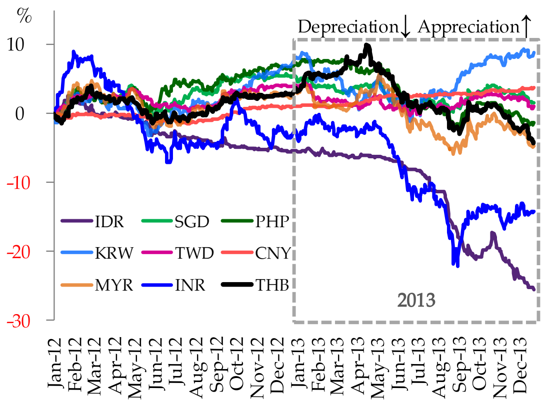
In 2013, volatility of the baht heightened as a result of sudden shifts in the directions of capital flows, especially around mid-year. Nonetheless, volatility began to decline from September onwards.

At the beginning of 2013, consistent inflows into both the Thai stock and bond markets were observed, resulting in strengthening of the baht relatively quickly in comparison to other regional currencies which had already appreciated in 2012 ahead of the Thai baht. The value of the baht peaked on April 19, at 28.61 baht per U.S. dollar, appreciating by 7.0 percent from 30.16 baht at the end of 2012. (Chart 2.1.2).

From around the end of April, the baht exhibited a weakening trend to reach 32.39 baht per U.S. dollar on September 6, 2013, depreciating by 13.5 percent from its peak in April. Although some rebounds were seen in September as investors returned to the Thai financial markets, these were short-lived. In the last quarter, the baht continued to depreciate, reaching the lowest level in four years at 32.88 baht per U.S. dollar on December 27, 2013, and closing at 32.86 baht at the year-end, 6.9 percent weaker than the end of 2012. The depreciation largely owed to the stronger U.S. dollar following the Fed's confirmation of QE tapering in 2014 and Thailand's political situation.

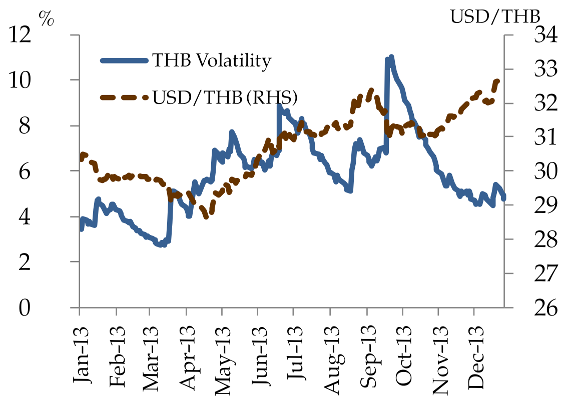
The 1-year annualized volatility of the Thai baht - U.S. dollar exchange rate[4] (Chart 2.1.3) moved within a wide range, with the lowest level of 2.7 percent in mid-March and the highest level of 11.0 percent in mid-September before gradually trended

Chart 2.1.2 Volatility in Regional Currencies



Source : Reuters

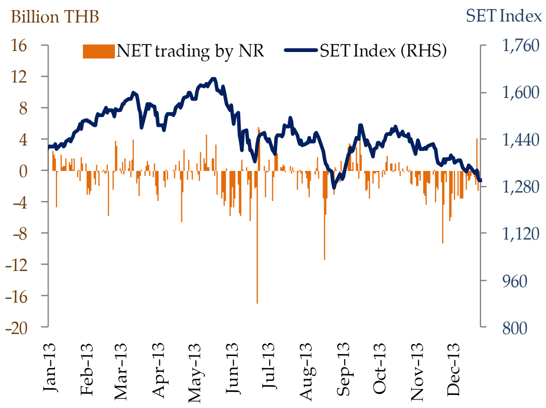
Chart 2.1.3 USD/THB 1-year Annualized Volatility



Source : Reuters and Bloomberg; calculated by the BOT

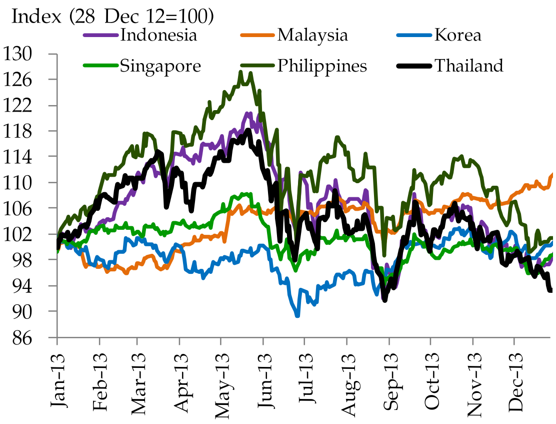
[4] 1-year annualized volatility calculated by the BOT using decay factor formula

Chart 2.1.4 Net Trading by Non-Residents and SET Index



Source : The Stock Exchange of Thailand (SET)

Chart 2.1.5 Volatility of Regional Stock Markets



Source : Bloomberg

down to settle at 4.8 percent at the end of the year in line with the more stabilizing baht. The volatility for 2013 averaged at 5.9 percent.

2.1.2 Stock Market

Throughout 2013, the Stock Exchange of Thailand (SET) Index was volatile in line with directions of foreign flows, although domestic investors played a crucial role during the first half of the year.

During the first five months, the SET Index continued its rising trend to reach the highest close at 1,643.43 points on May 21, 2013, or an increase of 18.1 percent from 1,391.93 points at the end of 2012 (Chart 2.1.4). The Price to Earnings (PE) ratio over the first five months averaged at 17.7, higher than 15.0 recorded over the same period in the previous year.

Strong activities in the stock market during the first half of the year stemmed mainly from domestic investors, particularly retail investors whose interest in stock market investments had been growing continuously. In this connection, the authorities namely, the Stock Exchange of Thailand and the Securities and Exchange Commission, spotting signs of speculating activities in small cap stocks which could lead to a buildup of stock market bubble, implemented measures to curb such activities.

Nonetheless, from May onwards, foreign investors began to reduce investment holding in the region as well as Thai stocks, (Chart 2.1.5) resulting in a sharp drop in the SET Index by 17.0 percent to 1,364.1 points in June and reaching the lowest point of 2013 in August at 1,275.8 before a correction took place. In the final quarter, the market continued to be pressured by risks from both external and internal factors, in particular the domestic political situation[5]. As a result, the market closed at 1,298.71 points at the end of 2013, declining by 6.7 percent from 2012, with a PE ratio of 14.5.

2.1.3 Bond Market

Movement in medium to long-term government bond yields became volatile from April onwards, in line with the U.S. treasuries, while short-term government bond yields edged down in line with the trend in policy interest rate.

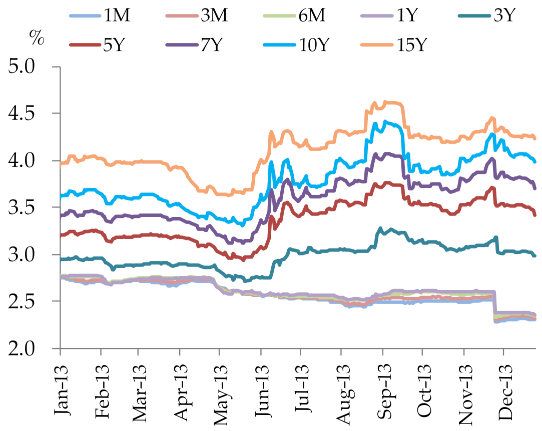
During the first quarter, government bond yields were quite stable despite continuous inflows of foreign investment into the bond market (Chart 2.1.6).

During the second and third quarters, short-term government bond yields decreased, while medium to long-term government bond yields were subject to global financial market factors and moved in line with yields of the U.S. treasuries (Chart 2.1.7). A decline in short-term government bond yields was consistent with expectation of policy interest rate cut. Meanwhile, a reduction in foreign investors' regional asset allocation around mid-year led to an increase in medium to long-term government bond yields, with approximately 90 basis points increase in the 10-year tenor, from 3.5 percent in May to 4.4 percent in September.

However, towards the end of September, return of foreign inflows into the bond market along with the Ministry of Finance's smaller-than-expected

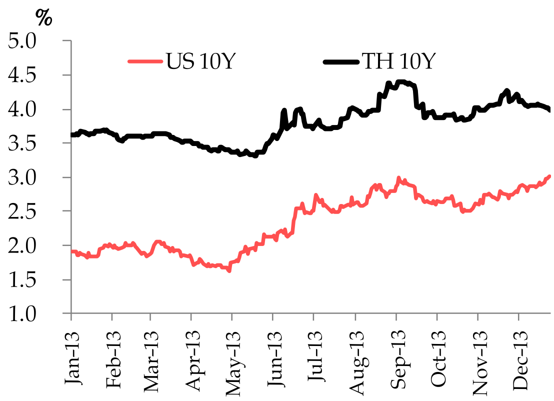
[5] Including submission of the Amnesty Bill (November 3 – 4, 2013), the International Court of Justice's decision on Temple of Preah Vihear case (November 11, 2013), ongoing political demonstrations and the dissolution of Parliament on December 9, 2013

Chart 2.1.6 Government Bond Yield by Maturity



Source : The Thai Bond Market Association (ThaiBMA)

Chart 2.1.7 10-year Government Bond Yield



Source : Reuters

bond auction announcement for the final quarter and zero auction in October led to a decline of 9-46 basis points in long-term government bond yields. Despite some upward adjustments thereafter owing to investors' anticipation of a sooner-than-expected QE tapering and concerns over domestic political situation, the Monetary Policy Committee's decision on November 27, 2013 to reduce the policy interest rate[6], rising political tension, as well as a deeper-than-expected economic slowdown towards the end of the year led investors to anticipate further rate cuts, thereby causing government bond yields to trend down further.

[6] On November 27, 2013, the MPC voted to reduce the policy interest rate by 25 basis points from 2.50 to 2.25 percent per annum.

2.1.4 Capital Flow Outlook

QE tapering and fiscal issues in the U.S. continued to be important risk factors for global capital flows going forward.

An important risk factor to foreign capital flows was the timing and size of the Fed's QE tapering which would depend on the U.S. economic outlook as well as upcoming decision regarding the public debt ceiling.

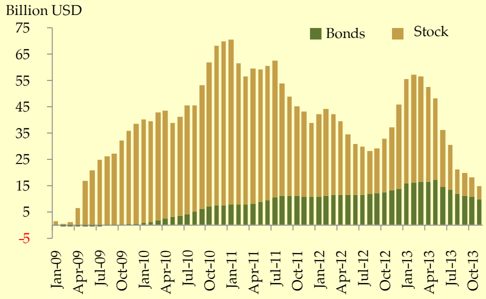
For Thai financial markets, additional domestic risk factors that would warrant close monitoring included the economic outlook and political uncertainties which could affect investors' sentiment and domestic investment climate.

Nonetheless, Thai financial markets were expected to gradually adjust and withstand potential volatility associated with capital outflows, thanks to strong external position including high international reserves, a more flexible exchange rate regime than in the past, and financial institutions' good risk management practice. Implementation of appropriate macroeconomic policies could further enhance Thailand's credibility and foreign investors' confidence as well as help lessen capital flow volatility *(Details in Box 2).*

Box 2 : QE Tapering and Capital Flows in the Thai Financial Markets

Since the end of 2008, many central banks of the Developed Markets' (DM) have implemented near zero interest rate policies together with unconventional monetary policies by injecting liquidity directly to the financial systems to stimulate their respective economies out of recession resulted from the latest global financial crisis. Subsequently, an increase in liquidity and a decline in yields in DM had resulted in massive capital flows into Emerging Markets (EM). Since end-2008 up till present, the Fed alone conducted three rounds of Quantitative Easing (QE) measures through purchases of agency mortgage-backed securities, agency debts and U.S. treasuries, amounting to 3.5 trillion U.S. dollars[1]. These liquidity injections led to declines in yields in DM. As a result, investors reallocated their portfolios towards EM assets which provided relatively higher returns.

Chart 1 Cumulative Fund Flows into EM



Source : EPFR Global

Given that economic recoveries in DM had yet to gain traction while fundamentals in EM economies had been relatively stronger, capital continuously flooded into EM, particularly Asia and Latin America (Chart 1). Subsequently, local currencies appreciated while stock markets and asset prices soared. As for Thailand, from the beginning of 2009 to April 2013, net capital inflows amounted to 31 billion U.S. dollars[2] partly owing to the country's strong economic fundamentals.

Expectation that the Fed would begin QE tapering in the near-term led to concerns over its impact on both DM and EM economic and financial systems, particularly in terms of sudden outflows from EM. Around mid 2013, the Fed signaled that it might begin to gradually wind-down its asset repurchase program under QE3, should clear and sustainable improvement in employment and inflation be witnessed[3]. As a result, investors became concerned about a reduction in global liquidity and its impact on economic recovery of other DM along with weakening economic prospect in some EM. Yields in U.S. treasuries rose to the highest level in two years in line with expectation of QE tapering, while investors decreased holdings of EM assets, resulting in massive amount of outflows during 2013 Q3.

Thailand's financial markets had also experienced volatility resulting from capital outflows in the same manner as other regional economies. Volatility in the Thai financial markets increased significantly from uncertainties regarding the size and timing of QE tapering. Foreign investors began

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[1] QE1 (December 2008 – March 2010), QE2 (May 2010 – June 2011) and QE3 (September 2012 onwards). Moreover, the Fed has conducted Operation Twist between QE2 and QE3 by purchasing 667 billion U.S. dollars of long-term treasuries and concurrently selling short-term ones in the same amount to lower medium- to long-term interest rates so as to stimulate investment and consumption.

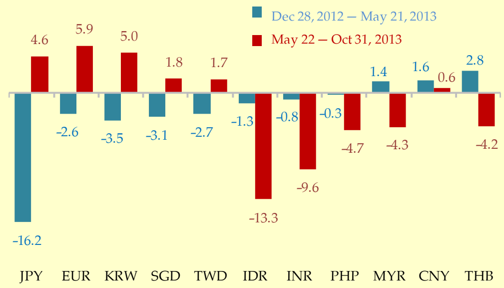
[2] Foreign investors' investment in stock and bond markets (excluding foreign direct investment, infrastructural funds etc.)

[3] Congressional testimony delivered by Chairman of the Fed on May 22, 2013

to sell Thai assets, causing large outflows, thereby suppressing both stock and bond prices, as well as causing Thai baht to depreciate. These impacts had also been experienced in regional financial markets although the extent would differ according to each country's economic fundamentals and measures implemented (Charts 2 and 3).

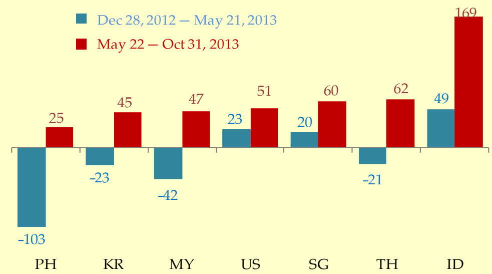
The Federal Open Market Committee (FOMC)'s announcement on December 18, 2013 to begin QE tapering in January 2014[4] had not led to significant volatility in Thailand's financial markets, partly because most investors had already priced in the FOMC's decision. Moreover, domestic political situation had also been weighing on investment climate since the middle of 2013 Q4, causing investors to reallocate their portfolios even before the FOMC's announcement. Looking ahead, however, there could be further outflows which could lead to weaker asset prices and Thai baht, as well as increase in volatility, should the timing and size of QE tapering deviate from investors' expectation. Nonetheless, it is assessed that Thailand's financial markets would be able to adjust and withstand the impact from capital outflows from QE tapering for three reasons. Firstly, Thailand's international reserves are at a high level and ample to cover short-term external debt. Secondly, the managed float exchange rate system has led to flexibility of the Thai baht, thereby enabling it to efficiently adjust to reflect economic fundamentals. Finally, good risk management practices are observed among the Thai financial institutions while the supervisory framework is in line with international standards

Chart 2 Change in Currencies in 2013 (%)



Source : Reuters

Chart 3 Change in 10-year Government Bond Yield in 2013 (bps)



Source : Reuters

Despite the above causes of capital flow movement, it should be noted that outflows would still be largely subject to domestic factor, for example, outlook for economic growth, credibility of macroeconomic policy, preservation of good investment climate, and continued infrastructural development, as these factors would contribute to investors' confidence. As a result, maintaining positive domestic factors would be key to help lessen capital outflows and alleviate impact on the Thai financial markets.

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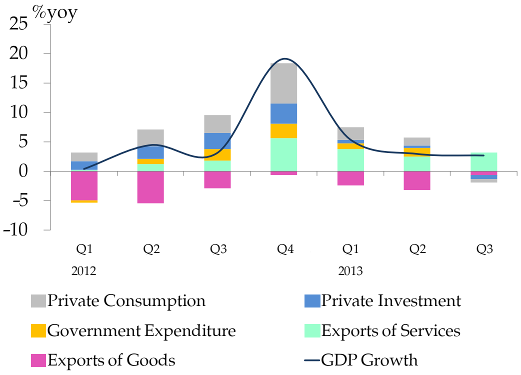
[4] At the FOMC meeting on December 18, 2013, it was decided that the asset purchase program would be reduced by 10 billion U.S. dollars from 85 to 75 billion U.S. dollars per month. In this regard, purchases of U.S. treasuries and agency mortgage-backed securities would be reduced by 5 billion U.S. dollars each, beginning in January 2014. The FOMC assessed that there was significant improvement in employment, household consumption and private investment while recovery in the housing market slowed somewhat in recent months. Meanwhile, inflation below the 2 percent target continued to pose a risk to recovery. Thus, if the economic conditions continued to improve as expected, the FOMC would likely reduce the pace of asset purchases in further measured steps at future meetings.

2.2 Domestic Economy

Chart 2.2.1 Contribution to Economic Growth



Source : Office of The National Economic and Social Development Board (NESDB)

The Thai economy gradually slowed down since the beginning of 2013 after accelerating in the previous year due to completion of the 2011 flood's related repairs and constructions together with ending government stimulus. Meanwhile, a slowly recovering external demand did not boost Thai exports by much, partly due to scarcity of raw material for manufacturing, loss in price competitiveness of rice exports and Thailand's export structure which was not sufficiently responsive to technological change to meet the global demand (Chart 2.2.1).

Private consumption moderated in line with stabilizing spending on durable goods, especially automobiles, after an accelerated growth that owed to the government's first car tax rebate scheme. Higher household debt as a consequence of this scheme also made households more cautious in their spending and financial institutions more stringent in credit approval. However, spending on non-durable goods still expanded well, supported by high employment together with an increase in non-farm income after the minimum wage hike to 300 baht nation-wide.

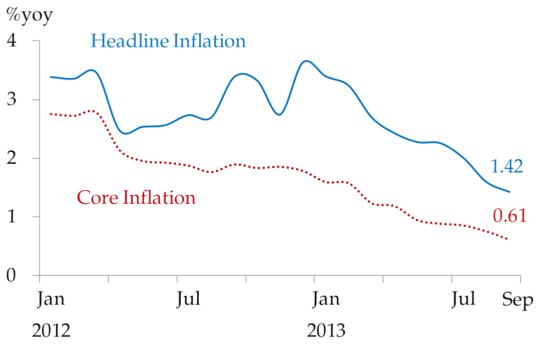
A slowly recovering external demand and a moderating domestic demand led to contraction in manufacturing, and postponement of some private investment since there was no immediate need to increase production capacity. Nonetheless, there was still demand for investment to enhance productivity and replace labor which is in shortage. Exports of services remained buoyant and continued to increase in line with increases in the number of foreign tourists from almost every region, particularly China and Russia.

Stability of the overall economy was well maintained. Inflation remained low (Chart 2.2.2) thanks to dissipating demand pressure and low cost pressure. The nation-wide minimum wage hike at the beginning of the year did not affect overall employment due to tight labor market conditions, as reflected by a low unemployment rate (Chart 2.2.3).

External stability remained sound as a result of high international reserve compared to import value and short-term external debt. At this level, international reserve was deemed adequate to withstand capital flow volatility despite uncertainties in the global economic outlook and advanced economies' monetary policy direction since the beginning of the year.

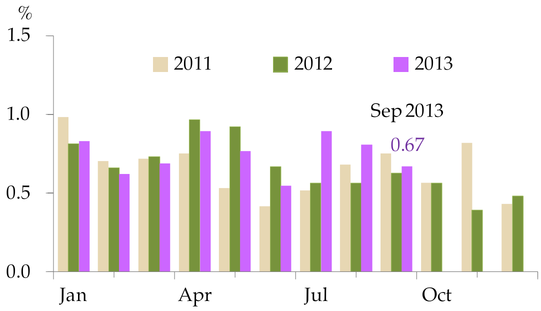
Looking ahead, the Thai economy was expected to expand higher due to a comeback of exports as an engine of growth for the economy and growing private consumption as the stalling effect of a slow-down in car purchases started to wane. Moreover, high employment and income together with accommodative fiscal and monetary policies would help support private spending. Nonetheless, downside risks to the economy that would need to be closely monitored included both domestic and external factors. The former entailed a delay in government spending and political uncertainties that could affect private confidence, consumption, and investment going forward. The latter covered fragilities in the global economy and volatility in capital flows and exchange rates that could affect private confidence and economic recovery.

Chart 2.2.2 Inflation



Source : Ministry of Commerce

Chart 2.2.3 Unemployment Rate



Source : National Statistics Office

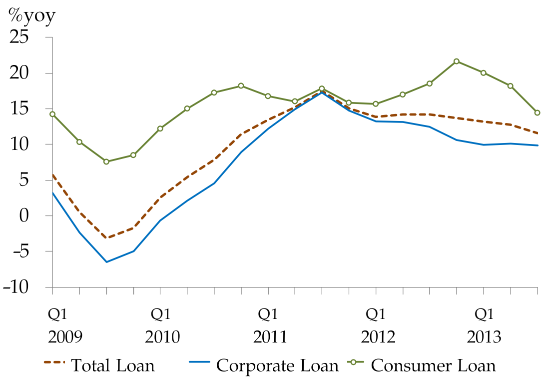
Table 2.3.1 Private Sector's Source of Fund

(Billion THB)

	2010	2011	2012	9 month 2013
Loan Outstanding	7,366	8,476	9,637	10,350
Bond Outstanding Increase	71.4	77.5	214.3	134.8
New Issuance of Stock	89.9	89.7	193.4	116.0

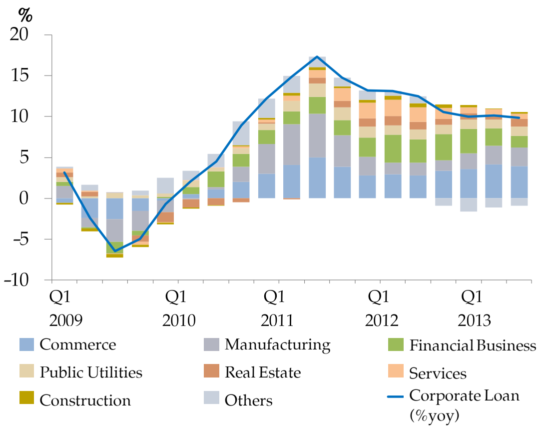
Source : Bank of Thailand

Chart 2.3.1 Commercial Bank's Loan Growth



Source : Bank of Thailand

Chart 2.3.2 Contribution to Corporate Loan Growth



Source : Bank of Thailand

2.3 Commercial Banks

Overall stability of commercial banks was well maintained. Continued profitability led to strong capital and provisioning, which helped strengthen commercial banks' ability to deal with future risks, particularly credit risk, which was the main risk of the Thai banking system, given a 70 percent share of loan in total asset.

The private sector's main source of funds continued to be commercial banks' loan despite a more prominent role of the bond and stock markets (Table 2.3.1). Commercial banks' loan expanded continuously mainly from consumer and SME loan. However, the economic slowdown and gradual ending of the government stimulus led to a slowdown in loan growth in the first 9 months of 2013. In 2013 Q3, banks' loan expanded by 11.6 percent from the previous year, slowing from a period of strong acceleration during 2010 – 2011, with the peak of 17.4 percent in 2011 Q3 (Chart 2.3.1).

Corporate loan, which constituted approximately 70 percent of total loan, continued to slow down to 9.9 percent from the previous year, particularly in the financial, construction, and services sectors (Chart 2.3.2), attributing to moderating private consumption and investment in light of upcoming economic uncertainties.

A decelerated growth in corporate loan mainly stemmed from loan to large corporate, which grew by approximately 5.0 percent. Meanwhile, SME loan growth remained firm at 14.6 percent. SME loan over the past 2-3 years had been expanding markedly as a result of commercial banks' shifting focus towards this group of customers after some large corporate turned to raise fund from the capital markets.

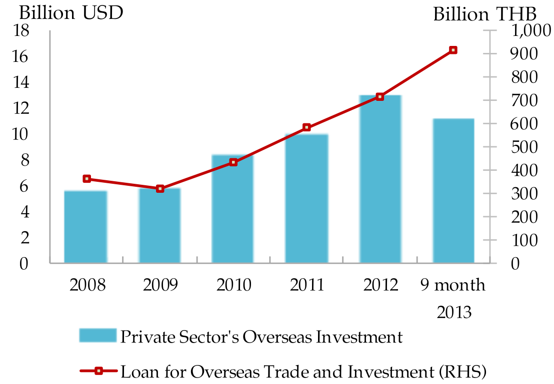
Commercial banks also took greater interest in supporting the private sector's overseas investment given an expansion in international trade and investment, and liberalization of outward investment. In 2013 Q3, commercial banks' lending for the purpose of international trade and investment totaled 913 billion baht[7], more than doubling from 2008 (Chart 2.3.3), though such lending still amounted to only 8.8 percent of total loan.

Growth in consumer loan continued to be high, though it had decelerated significantly to 15.7 percent (Chart 2.3.4) in all loan categories. This decelerated growth was in tandem with a slowdown in private consumption and commercial banks' more stringent underwriting standard, after household debt had markedly increased as a result of the government's stimulus measures in previous periods.

In this regard, auto loan slowed down significantly since February 2013 in line with a drop in sales of automobiles after the government's first car tax rebate scheme expired. Personal loan decelerated due to completion of post-flood repairs and reconstructions together with consumers' more cautious behavior on debt accumulation. Meanwhile, housing loan continued to expand at about the same rate as last year accredited to more aggressive marketing efforts by both developers and commercial banks to close accounts at the end of year.

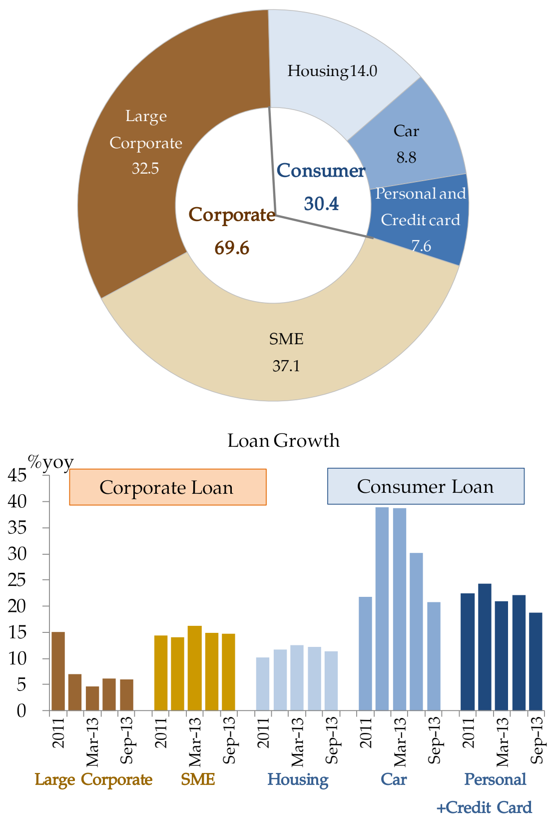
The overall loan quality remained sound, with sign of slight deterioration in consumer loan.

Chart 2.3.3 Private Sector's Overseas Investment and Related Loan



Source : Bank of Thailand

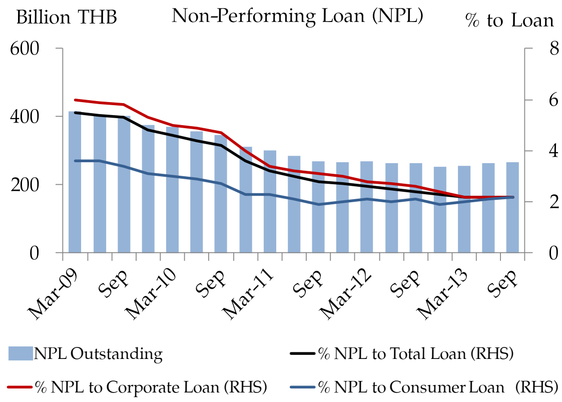
Chart 2.3.4 Loan Portfolio and Loan growth as of 2013 Q3

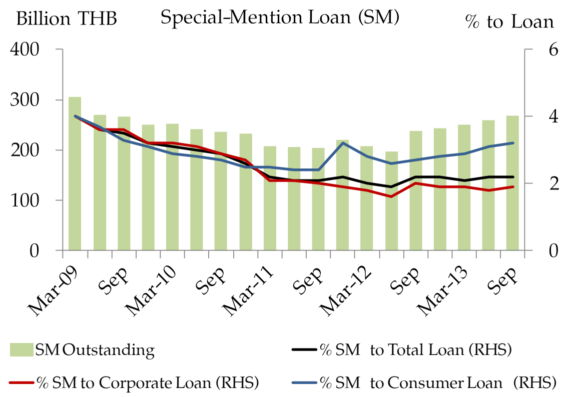


Source : Bank of Thailand

[7] Excluding lending in Thai baht to Thai businesses for the purpose of investment abroad and trade finance

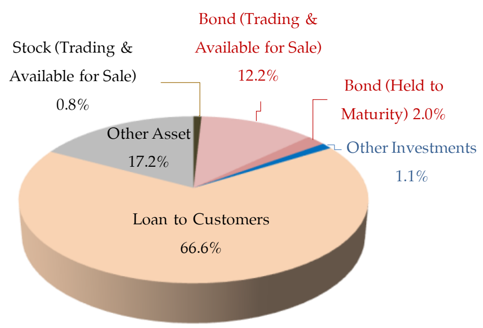
Chart 2.3.5 Loan Quality





Source : Bank of Thailand

Chart 2.3.6 Investment Portfolio



Source : Bank of Thailand

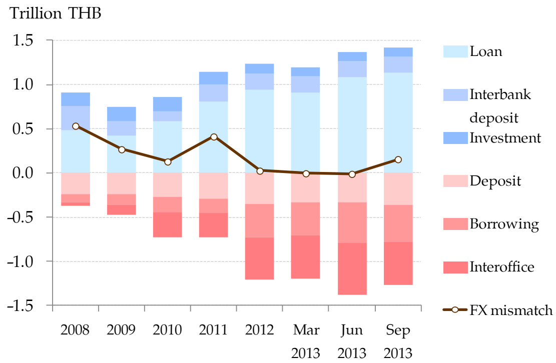
The overall loan quality remained sound thanks to commercial banks' continued efforts in risk management, as reflected by the NPL ratio which declined to 2.2 percent and the SM ratio which stabilized at 2.2 percent in 2013 Q3 (Chart 2.3.5). Corporate loan quality continued to improve, where both the NPL and SM ratios declined continuously to reach 2.2 and 1.9 percent, respectively. Loan quality of large corporate was better than that of SME (with the NPL ratio of 1.2 compared with 3.4 percent). Moreover, the NPL ratio of SME was trended upward, particularly in manufacturing and commerce due to higher labor cost and a slowdown in the economy. Consumer loan quality began to deteriorate, with rising NPL and SM ratios for auto loan, credit card loan, and personal loan. Subsequently, the NPL and SM ratios of consumer loan at 2013 Q3 stood at 2.2 and 3.2 percent, respectively.

Financial market volatilities' impact on commercial banks was marginal.

During 2013, financial market volatilities in the bond, stock, and foreign exchange markets affected commercial banks only marginally (Chart 2.3.6). Commercial banks' investment in both trading and available for sale securities totaled 13 percent of total assets. Moreover, the BOT closely supervised commercial banks' securities investment both in terms of maintenance of capital for market risk and their assessment of interest rate risk in the banking book under the Supervisory Review Process.

For impact from the foreign exchange market, all commercial banks' net foreign exchange exposures, both on and off balance sheet, complied with the BOT's prescribed regulations.[8] In addition, Thai commercial banks' operations are mainly domestic, with foreign currency denominated loan of 7.3 percent of total asset and foreign currency denominated liabilities of 8.1 percent (Chart 2.3.7), resulting in relatively low foreign exchange liquidity need. Moreover, most foreign currency transactions of Thai commercial banks were largely for exporters' hedging and international trade and investment.

Chart 2.3.7 Foreign Currency Assets and Liabilities

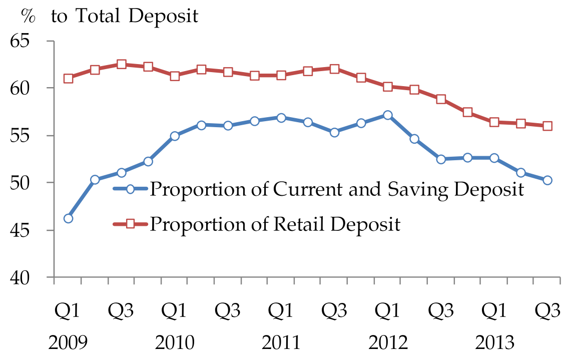


Source : Bank of Thailand

Deposit continued to be the main source of fund, despite some change in the funding structure recently.

Deposit continued to be the main source of fund of commercial banks, constituting 68.4 percent of total funding. Nevertheless, in the past 2 years, the deposit structure had shifted whereby the proportion of retail, current, and savings deposit had declined. (Chart 2.3.8). In 2013, a slowdown in deposit was comparatively greater than in loan which resulted in a continuous increase in the ratio of loan to deposit and B/E (Chart 2.3.9).

Chart 2.3.8 Proportion of Retail, Current and Saving Deposit

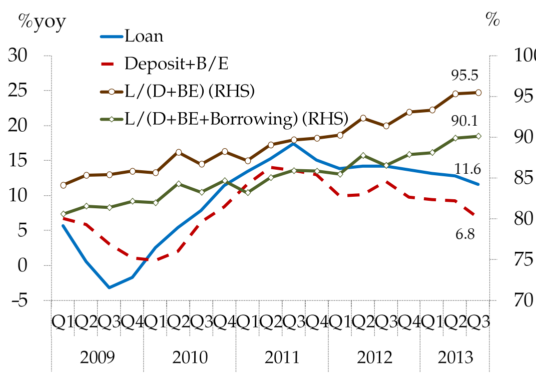


Source : Bank of Thailand

Commercial banks were well prepared to cope with risks and volatilities in the next periods.

Commercial banks' main source of income, or 65 percent of total income, was still interest income though fee income increased, representing 20 percent of total income, partly due to risk diversification from economic uncertainties along with more aggressive competition on interest rate offering.

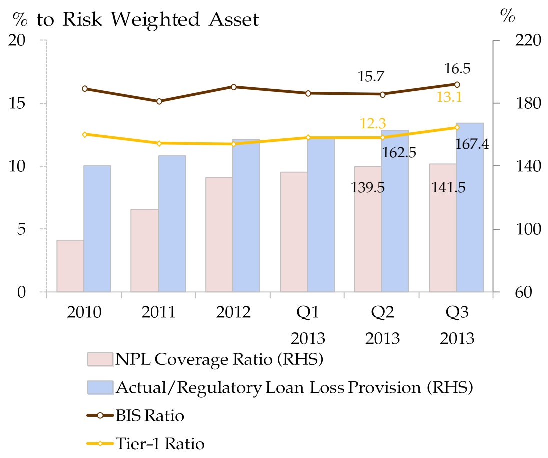
Chart 2.3.9 Loan, Deposit and Borrowing



Source : Bank of Thailand

[8] The BOT issued regulations on commercial banks' foreign exchange exposures (Notification No. Sor. Nor. Sor. 74/2008) whereby the dollar equivalent ceiling for net exposure of each foreign currency at the end of each day as a ratio of capital is 15 percent and the dollar equivalent ceiling for net exposure of all currencies as a ratio of capital is 20 percent.

Chart 2.3.10 Capital and Provision



Note : Basel III implementation started in 2013

Source : Bank of Thailand

Continued strong income generating ability of commercial banks allowed them to make high provisioning to cover potential economic uncertainties in the future. At the end of 2013 Q3, the ratio of actual loan loss provision to regulatory provision stood at 167.4 percent. Moreover, capital continued to be on an upward trend where the capital adequacy ratio (BIS ratio) stood at 16.5 percent with Tier 1 ratio of 13.1 percent (Chart 2.3.10).

Risk Outlook

Overall, commercial banks' loan was expected to decelerate in tandem with the domestic economy, uncertainties surrounding trading partners' economic outlook, as well as more cautious behavior of households and commercial banks after household debt had risen significantly.

Although overall loan quality was well maintained, risks to be monitored included (1) consumer loan quality, given its previously high loan growth and rising NPL and SM ratios. Moreover, an accommodative monetary policy stance and increased competition in consumer lending called for close monitoring of loan underwriting standard; and (2) SME loan quality, particularly small businesses which were sensitive to both domestic and external risks, for example, foreign exchange volatility and trading partners' economic outlook.

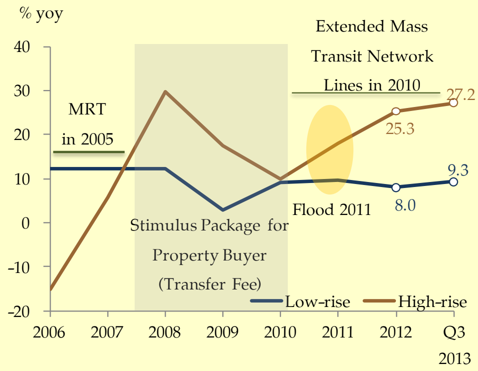
Box 3 : Real Estate Loan of the Banking System

During the past few years, high-rise residential properties had risen rather significantly in areas close to mass transit network lines in Bangkok and in large provincial cities. Low-rise residential properties had also registered some growth after a considerable slowdown due to the flood. As a result, the real estate market continued to expand, with commercial banks and SFIs as major lenders in the market with 68 and 32 percent market share, respectively.

Commercial Banks' Real Estate Loan

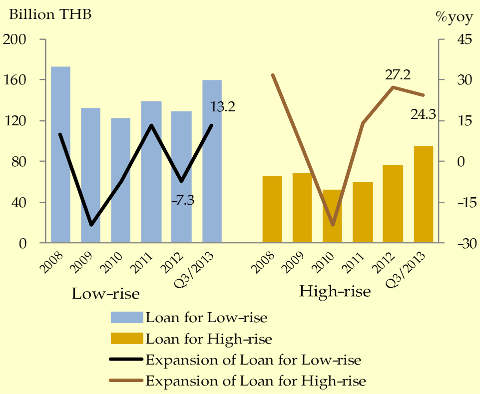
There are 2 types of real estate loan extended by commercial banks, namely 1) loan to developers (Pre-finance) and 2) loan to consumers (Post-finance). Both types of loan had experienced continuously strong growth, especially for high-rise residential properties which had been expanding rapidly due to an increase in demand for condominiums in areas close to mass transit network lines, partly as a result of the growing working-age population, change in consumers' behavior and preference towards single-person families, as well as the effect from the flood in 2011 (Chart 1). In addition, there was investment in condominium projects in large provincial cities in anticipation of future business expansion from the upcoming establishment of the Asian Economic Community in 2015.

Chart 1 Pre- and Post-Finance Loan



Source : Bank of Thailand

Chart 2 Pre-Finance Loan



Source : Bank of Thailand

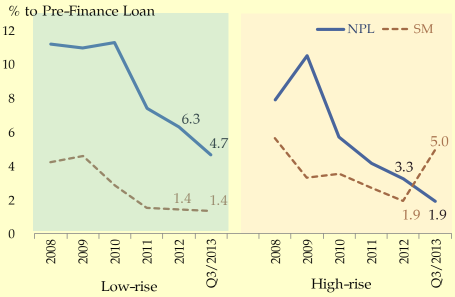
1. Pre-Finance Loan

Since 2011, most pre-finance loan was geared towards condominium projects. The growth rate of pre-finance loan (0.9 percent of total loan) continued to be high at 24.3 percent despite a slowdown from the previous year (Chart 2). The main focus of developers had been on condominium projects along the Bangkok Mass Transit System (BTS) lines in response to consumer demand. Meanwhile, pre-finance loan for low-rise residential projects (1.5 percent of total loan) had accelerated since the beginning of 2013 where it had now returned to the level before the 2011 flood. Major players in pre-finance loan with more than 60 percent market share were large commercial banks.

For large developers, it had been found that their main source of fund was owners' equity, constituting around 45 percent of total sources of fund. Issuance of debentures had been rising in the last 3-4 years, from 12 percent of total sources of fund in 2009 to 19 percent. Even though commercial banks were not developers' main source of finance, they remained important, constituting approximately 20 percent of total sources of fund.

Credit quality of pre-finance loan was high whereby the NPL ratios of low-rise and high-rise residential properties consistently declined to 4.7 percent and 1.9 percent, respectively, despite increased signs of delinquency (Special Mentioned loans – SM) in the latter. (Chart 3) Should physical demand for high-rise residential housing prove to be overstated or decrease due to an economic slowdown, credit quality could be affected.

Chart 3 NPL and SM of Pre-Finance Loan

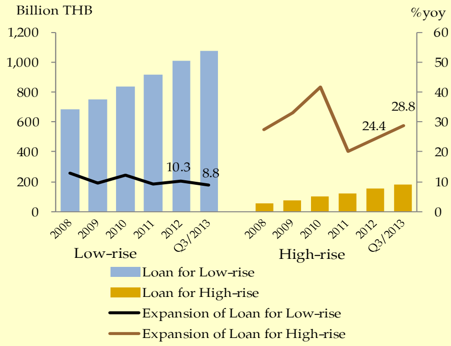


Source : Bank of Thailand

2. Post-Finance Loan

Post-finance loan continued to recover after the 2011 flood, particularly for condominium purchases (1.8 percent of total loan) which had been growing consistently, averaging more than 20 percent per year since 2011. (Chart 4) Main causes of this trend included changes in the population's demography and consumers' behavior along with an increase in demand for high-rise residential properties after the flood. At the same time, post-finance loan growth for low-rise residential properties (10.4 percent of total loans) had been stabilizing at approximately 9.4 percent since 2011. Large commercial banks were major players in post-finance loan with more than 50 percent market share.

Chart 4 Post-Finance Loan

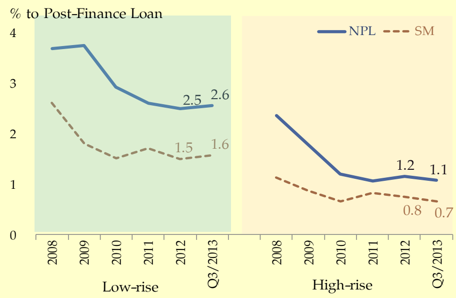


Source : Bank of Thailand

Concerning credit standards for post-finance loan, the BOT implemented a Loan to Value (LTV) ratio for high-rise residential properties since January 1, 2011 and for low-rise residential properties since January 1, 2013. Subsequently, it was found that the average LTV ratio of new post-finance loan decreased slightly. Nonetheless, strong competition in real estate post-financing began to raise the average LTV ratio for high-rise residential properties. In this respect, the BOT had been closely monitoring and assessing credit standards for these loans, and communicating with commercial banks to exercise greater caution in credit approval and to publish effective interest rates for the entire loan contract to help guide consumers' decision.

Credit quality of post-finance loan was high whereby NPL and SM ratios for high-rise residential properties declined to 1.1 and 0.7 percent, respectively. NPL and SM ratios for low-rise residential properties increased marginally to 2.6 percent and 1.6 percent, respectively (Chart 5).

Chart 5 NPL and SM of Post-Finance Loan



Source : Bank of Thailand

Box 4 : Development of Auto Loan during 2012 – 2013

Recently, continued increase in consumer loan growth had been observed. Such expansion was in tandem with auto loan which rose significantly in 2012, driven by the government's first car tax rebate scheme[1]. Nonetheless, auto loan began to revert to its long-term trend after the end of the scheme.

1. Car sales almost doubled in 2012

Before 2012, car sales averaged around 800,000 cars per year. However, since the introduction of the government's stimulus measures, car sales in 2012 almost doubled, reaching as high as 1.4 million cars. During the first nine months of 2013, another 1 million new cars were sold as a result of back orders from the previous year.

Year	Number of Car Sales	Increase in Amount of Auto Loan (Million THB)
2010	800,357	108,508
2011	794,081	146,049
2012	1,436,335	343,345
Up to 2013 Q3	1,034,287	154,628

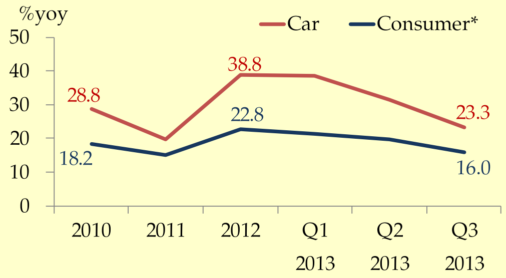
Source : Toyota Motors Thailand

2. Auto loan jumped in line with car sales

A significant growth in car sales during 2012 – September 2013 led to a high jump in auto loan extended by commercial banks and their subsidiaries. Auto loan grew by 38.8 percent in 2012 and reached a peak of 42.5 percent in January 2013 in line with trend in deliveries (Chart 1). As of September 2013, auto loan outstanding reached 1.38 trillion baht whereby the proportion of auto loan to total loan climbed from 10 percent as of December 2011 to 13 percent. Disaggregation of auto loan revealed the ratio of new cars: first cars: used cars: car for cash[2] of 49 : 17 : 25 : 9 (Chart 2).

However, since February 2013, auto loan growth moderated as a result of front loading in deliveries in previous periods, reflecting that the market has begun to revert towards its long-term trend.

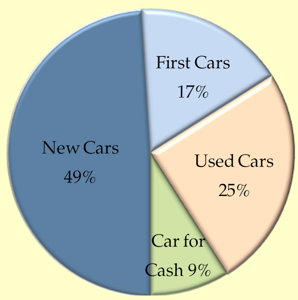
Chart 1 Growth Rate of Auto Loan Extended by Commercial Banks and their Subsidiaries



Note : * include Loan for Residential Properties, Cars and others

Source : Bank of Thailand

Chart 2 Structure of Auto Loan as of 2013 Q3



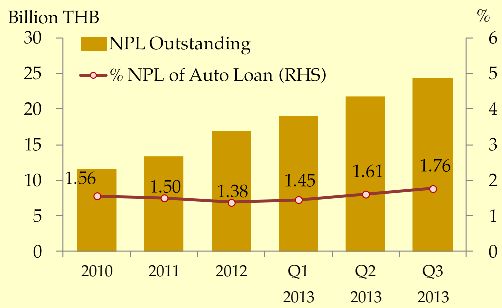
[1] Condition for first car tax rebate scheme is that buyer must be at least 21 years of age with no prior record of car purchase. The scheme only covers new cars with prices of no more than 1,000,000 baht. Engine size must be no larger than 1,500 cc for a sedan and there is no restriction for a utility car. Registration must be submitted during September 16, 2011 – December 31, 2012 and buyers must retain the car for at least 5 years where the tax rebate is paid after one year possession (starting from October 2012, onwards).

[2] Secured consumer loan using cars as collateral

3. Credit quality remained sound but required close monitoring

During the first nine months of 2013, NPL of auto loan registered at 1.76 percent (Chart 3) compared with 2.15 percent observed for consumer loan. The BOT's examination revealed that commercial banks continued to be vigilant in their credit approval process during periods of high growth in auto loan. In addition, an efficient debt recovery and resolution process had been put in place.

Chart 3 NPL of Auto Loan



Source : Bank of Thailand

In terms of credit quality of auto loan for first car purchases, NPL ratio had been very low at a mere 0.3 percent, partly reflecting the fact that the scheme requires buyers to retain the car for at least 1 year to qualify for tax rebate pay-out, which helps prevent default. Prior records have shown that most defaults would likely occur during the first year of ownership. In addition, commercial banks have required a down payment of approximately 20 percent which implies that after one year, 36 percent of loan amount would have been repaid and the tax rebate received can then be used to make loan repayments during the second year, after which total repayment would reach 50 percent of loan amount. As a result, the probability of default is slim. However, default risk remains in a case where down payment is waived by leasing companies.

Despite a low NPL ratio, the BOT continues to closely monitor development in auto loan, especially the loan for used cars and the loan for first cars after tax rebate disbursement.

4. Loan to dealers remained low with sound credit quality

Although the first car tax rebate scheme led to an increase in car orders, approximately 140,000 buyers or 12 percent of buyers had made cancellation[3] because some had placed orders with more than one dealer while others failed credit assessment. Nevertheless, impact of cancellation was trivial given that dealers continued to introduce new promotions to stimulate sales. In terms of impact to financial institutions, it was found that loan to dealers remained low with outstanding amount of 0.26 trillion baht, equivalent to 2.4 percent of total loan. Credit quality also remained sound where the NPL ratio stabilized at 1.72 percent.

5. Auto loan forecast for 2013 Q4 revealed a reversion towards long-term trend

The automobile market in 2013 Q4 was projected to moderate towards its long-term trend. Annual car sale was expected to reach 1.3 million cars, declining by almost 10 percent from the previous year (data from Toyota Motors Thailand Co. Ltd.). Moreover, growth in auto loan was projected to be around 17 percent, close to the level before the introduction of the first car tax rebate scheme.

[3] Data from the Excise Tax Department on the first car tax rebate scheme as of December 16, 2013, revealed that there were 1,250,208 registered users in the scheme, equivalent to 91,561 million baht. Of this, there were 144,610 unclaimed cars, equivalent to 11.6 percent of all registered users.

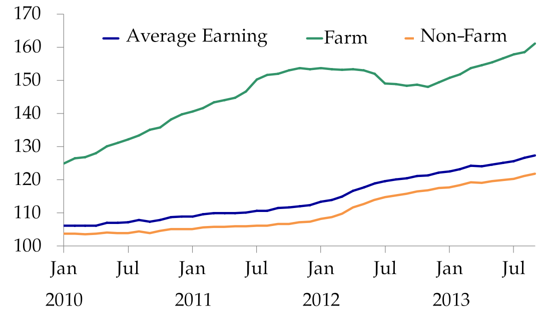
Chapter 3 Sectoral Economy

3.1 Household

Overall stability in the household sector in 2013 improved thanks to a slowdown in household debt and more cautious spending and accumulation of new debt. This trend was well supported by high income and employment as reflected by average earning in both farm and non-farm sectors that continued to increase. (Chart 3.1.1), and low unemployment rate. However, growth in household debt which remained elevated along with high debt burden could potentially affect stability in the household sector, especially given a slowdown in the Thai economy that could affect income and debt servicing ability of households, going forward.

Over the past two years, growth in household debt became exceptionally high compared to previous periods. During 2011 – 2012, household debt (lending to households by financial institutions) expanded by 16.8 percent on average, accelerating from 10.2 percent during 2008 – 2010. In 2013 Q3, outstanding household debt stood at 9.5 trillion baht[9] (Chart 3.1.2) and growth began to slow from a high 18.3 percent at the end of 2012 to 15.7 and 14.0 percent in 2013 Q2 and Q3, respectively. A slowdown in household debt could be partly attributed to an expiry of the government's first car

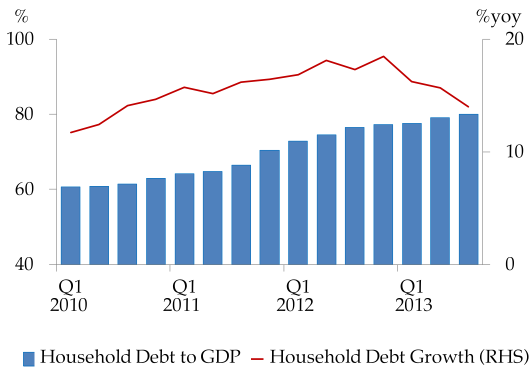
Chart 3.1.1 Household Income*



Note : * Seasonally adjusted, real income (12-month moving average)

Source : Office of Agricultural Economics, National Statistics Office. Calculations by Bank of Thailand

Chart 3.1.2 Household Debt*

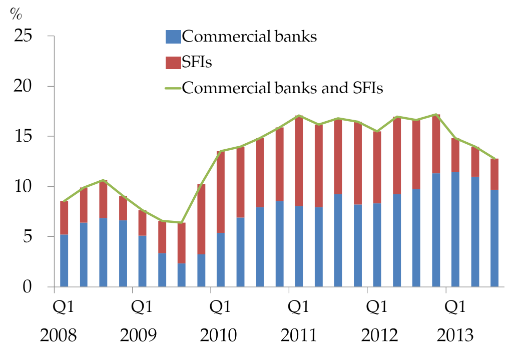


Note : * Loan to Households from Financial Institutions

Source : Bank of Thailand

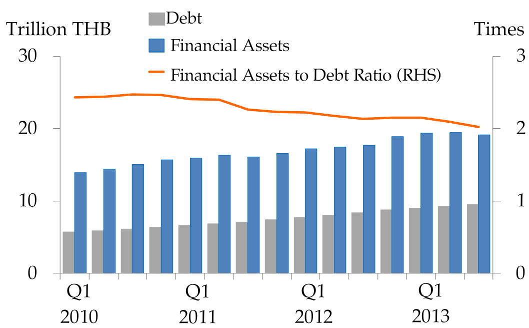
[9] Most of which were loan by commercial banks and SFIs, constituting 42 and 30 percent of total consumer loan, respectively. Meanwhile, lending by credit cooperatives, finance companies and credit fonciers represented 15 percent of total consumer loan. The rest were credits extended by other financial institutions, for example, credit card companies, insurance companies, securities companies, and pawn shops.

Chart 3.1.3 Contribution to Household Loan Growth



Source : Bank of Thailand

Chart 3.1.4 Financial Assets to Debt Ratio*



Note : * Loan to Households from Financial Institutions

Source : Bank of Thailand

tax rebate scheme, more cautious spending and debt accumulation by households in previous periods. Moreover, underwriting standard by financial institutions was more stringent as observed through an increase in the number of credit checks with the National Credit Bureau during the first three quarters of the year from the previous year, in line with the BOT's credit conditions survey which found that financial institutions' underwriting standard was more stringent in consumer loan in 2013 Q3, especially other personal loan (including auto-loan). The latest data revealed that loan to households extended by commercial banks and SFIs during the first three quarters of 2013 slowed down from the previous period (Chart 3.1.3).

Nonetheless, growth in household debt remained elevated and was much higher than that in GDP. Subsequently, the ratio of household debt to GDP continued to increase from 63 percent at the end of 2010 to 77.3 percent at the end of 2012 and 80.1 at the end of 2013 Q3. Such household debt acceleration resulted in lower household liquidity as reflected by a decline in the ratio of household financial asset to household debt from 2.5 at the end of the 2010 to 2.0 in 2013 Q3 (Chart 3.1.4). The trend in household liquidity was in line with data from the Household Socio-economic Survey conducted by the National Statistics Office (calculated by the BOT) which found that average debt service coverage ratio of households in 2013 Q1 rose to 33.8 percent from 28.6 and 29.6 percent in 2009 and 2011, respectively. High debt service could potentially affect household stability should an unexpected event and income shock occur. This would mostly affect low-income households which had higher debt service compared to other groups.

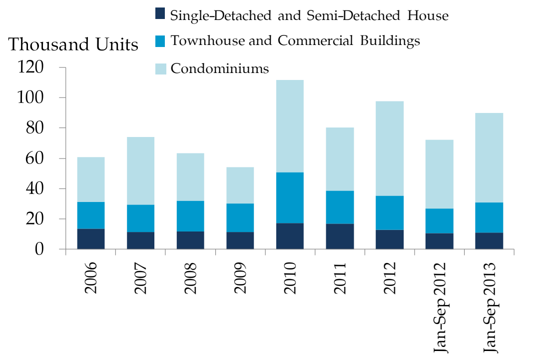
Looking ahead, an important risk to household stability included an economic slowdown which could affect income and debt servicing ability of households. This risk could be mitigated by promotion of financial literacy on the importance of saving and financial planning. The government should also refrain from implementing policies which would discourage households' saving behavior or lead to over-indebtedness.

3.2 Real Estate

Overall conditions in the real estate sector in 2013 improved from the previous year when there was concern on overheating during 2012 – early 2013. From 2013 Q2 onwards, demand for real estate slowed down while developers and financial institutions exercised greater caution.

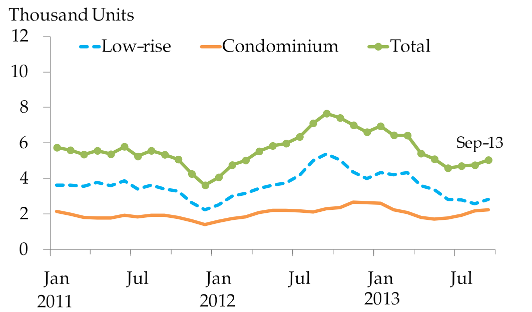
In 2013, there was an increase in supply from the previous year as reflected by new launches of condominiums in line with higher demand for this type of dwellings as opposed to single-detached homes. During the first nine months, new launches of condominiums increased by as much as 30.5 percent from the same period last year (Chart 3.2.1), partly reflecting a change in consumers' lifestyle where a trend towards smaller families led to greater demand for downtown condominiums coupled with structural changes, including development in mass transportation system and higher working-age population. Moreover, land prices in inner-Bangkok had increased by so much that real estate investment in single-detached home projects became unprofitable. Other potential locations for such projects, for example, Rangsit and Bang Bua Thong also became high risk areas for flood. As a result, new launches of single-detached homes grew

Chart 3.2.1 Number of New Launches in Bangkok and Its Vicinities



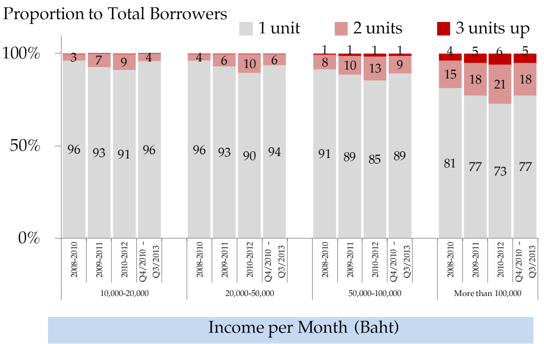
Source : Agency for Real Estate Affairs (AREA)

Chart 3.2.2 Number of New Mortgage Approvals by Commercial Banks in Bangkok and Its Vicinities



Note : * 3-month moving average
Source : Bank of Thailand

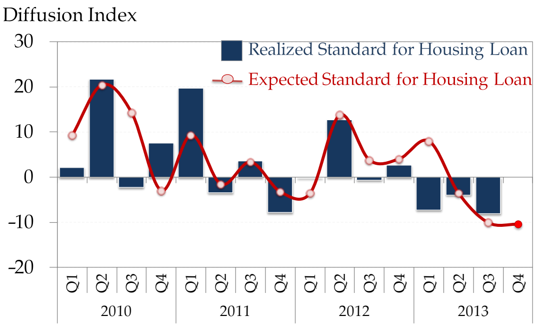
Chart 3.2.3 Volume of Approved Mortgages by Number of Housing Units Owned*



Note : * Data on Mortgages for new and pre-owned homes from January 2008 – September 2013 and calculations by 3 years rolling windows method

Source : Bank of Thailand

Chart 3.2.4 Credit Standard for Housing Loan



Diffusion Index (DI) :

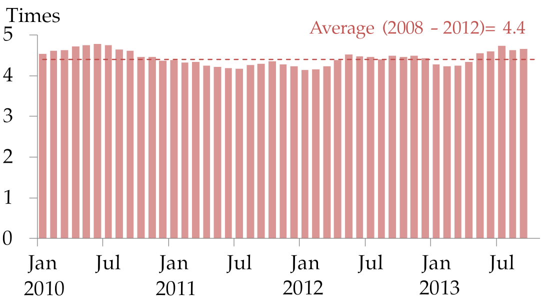
DI < 0 indicates tightening credit policy;

DI = 0 indicates unchanged credit policy;

DI > 0 indicates credit expansion or easing of credit policy.

Source : BOT's Survey on Credit Conditions, September 2013

Chart 3.2.5 Debt Service Coverage Ratio (DSCR)



Note : (1) DSCR = monthly income/monthly debt payment (principal and interest)

(2) Calculated from new mortgages in Bangkok and its vicinities

(3) 50th percentile (3-month moving average)

(4) Includes only debt services for new mortgages by commercial banks

Source : Bank of Thailand

marginally by 3.6 percent from the same period last year (Chart 3.2.2). Nonetheless, most new launches of condominiums were small units of less than 3 million baht, hence, growth in mortgage loan remained close to last year.

Factors contributing to high level of activities in the real estate market comprised (1) quicker decision to buy due to buyers' expectation of price increases in line with higher costs of labor and construction materials; (2) high competition among financial institutions; and (3) improved confidence as a result of upward adjustment of the stock market during the beginning of the year.

However, real estate market activities moderated somewhat, following a slowdown in demand after a significant increase last year. At the same time, risk taking behavior declined, as shown in (1) a decrease in investment and speculative activities on buyers' side as reflected by a drop in the proportion of second and third home mortgages (Chart 3.2.3); (2) risk prevention measures on developers' side such as an increase in down payment and introduction of a fee for name changes in reservation certificates; and (3) more rigorous loan underwriting standard on financial institutions' side starting from the second quarter of 2013 as reflected by the BOT's Credit Conditions Survey (Chart 3.2.4) due to an economic slowdown and the BOT's continuous signaling. In this regard, the 3-month moving average of Debt Service Coverage Ratio (DSCR) started to climb and became higher than the 5-year average level of 4.4 since May 2013 (Chart 3.2.5).

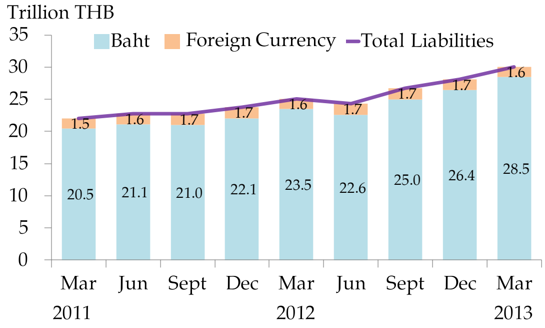
A cool down in real estate market activities during the latter part of the year led to lower risk of a real estate bubble. Nonetheless, going forward, important risks that could affect stability of the real estate sector included an economic slowdown that could affect household income and demand for real estate. Given that adjustment on the demand side usually outpaced the supply side, potential excess supply would need to be closely monitored as it could result in a sharp drop in prices and affect small to medium sized developers that had less ability to adjust compared with large ones.

3.3 Non-Financial Corporation[10]

Stability in the corporate sector during the first nine months of 2013 was well maintained. Nevertheless, closer sector-by-sector examination revealed higher risk in some sectors partly due to a slowdown in both the global and Thai economies. The Fed's QE tapering was expected to affect Thailand's corporate sector only marginally given its low level of exposures through foreign currency denominated borrowing (Chart 3.3.1).

Stability of the corporate sector during the first nine months of 2013 was well maintained, overall. A slight drop in profitability was noted as reflected by a decline in average Operating Profit Margin[11] from 6.5 percent last year to 6.1 percent during the first nine months of the year, mainly due to higher cost of production (Chart 3.3.2). Meanwhile, debt servicing ability continued to be at a level close to last year's average with an Interest Coverage Ratio[12] of 3.6. Overall financial conditions remained sound as Current Ratio and Debt-to-equity Ratio

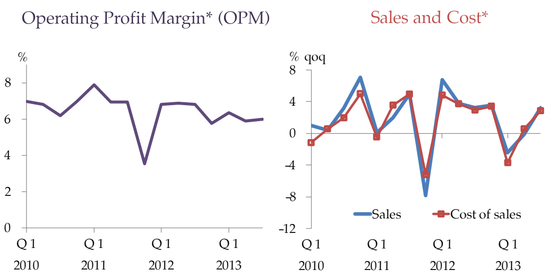
Chart 3.3.1 Liabilities of Non-Financial Corporation*



Note : * Exclude state-enterprises
Source : Bank of Thailand

Chart 3.3.2 Profitability of Corporate Sector

Chart 3.3.2 Profitability of Business Sector



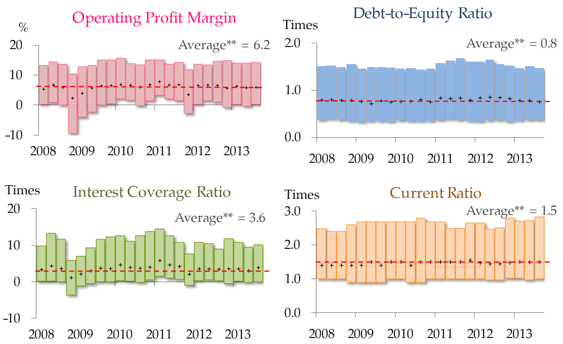
Note : * Median
Source : Bank of Thailand

[10] Including only companies listed on the Stock Exchange of Thailand

[11] Operating Profit Margin = (Revenue from sales – Cost of goods sold – Management cost) / Revenue from sales

[12] Interest Coverage Ratio = (Revenue from sales – Cost of goods sold – Management costs) / Interest expense

Chart 3.3.3 Vulnerability Index of Corporate Sector*



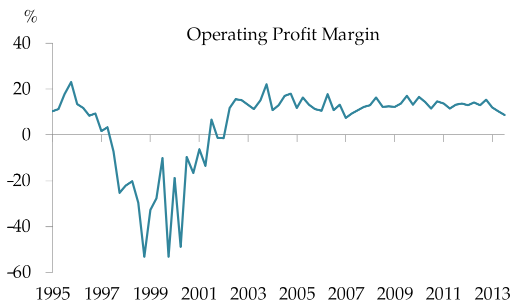
Note : * Bar chart represents interquartile range between 75^{th} and 25^{th} percentile.

(+) represents median,

** is the average value calculated from Q3/2010 to Q3/2013.

Source : Stock Exchange of Thailand and calculations by Bank of Thailand

Chart 3.3.4 Real Estate Sector Profitability*



Note : * Median

Source : Stock Exchange of Thailand and calculations by Bank of Thailand

stabilized at 1.5 and 0.8, respectively, close to their long-term average levels (2003 Q3 – 2013 Q3) (Chart 3.3.3).

However, closer sector-by-sector examination revealed higher risk in some sectors following deterioration in profitability from last year, including computers and parts and furniture, which were affected by the global economic slowdown coupled with changes in technology and global demand that led to a significant decrease in exports, in particular, that of Hard Disk Drive (HDD). Moreover, Thai exports of Integrated Circuits (IC) that recovered but slower than other countries in the region, especially South Korea and Taiwan, suggested loss of competitiveness. As such, global recovery may not benefit Thai exports as much. Moreover, risk in the real estate sector began to emerge in terms of lower operating efficiency and rising debt burden as a result of a continuous decline in profit since the beginning of the year due to higher construction cost following higher cost of materials and labor (Chart 3.3.4). In this regard, Operating Profit Margin moderated from 13.9 percent last year to 10.4 percent in the first nine months of the year, which was also lower than its long-term average of 13.4 percent.

The sector with relatively high profitability and stronger financial conditions this year was construction. Given a small number of firms in the sector due to high investment requirement coupled with continued high demand for condominiums and large infrastructural investment projects such as mass transportation system and expansion of Suvarnabhumi Airport phase 2, there was a marked increase in profitability in 2013. Still, important risks to watch for in this sector included debt accumulation to fund investment in machineries, equipments and labor which already led to a Debt-to-equity Ratio that continued to be high at 2.2 during the first nine months of the year compared with a long-term average level of 1.8. In spite of higher debt burden, liquidity was maintained close to its long-term average level of 1.2.

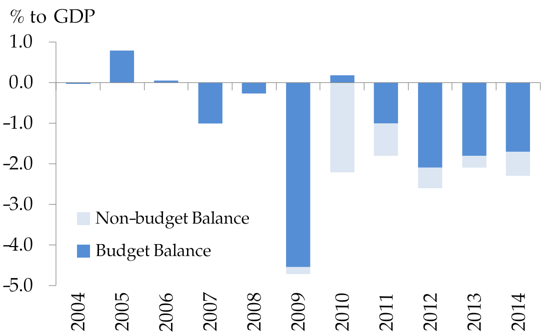
Looking ahead, important risks for the corporate sector included a slowdown in the Thai economy which could affect sales and revenue, particularly for wholesale and retail businesses and real estate firms, the Fed's QE tapering which could lead to higher long-term interest rates and cost of funds, and the ability to undertake structural adjustments in computer and parts manufacturing firms, especially HDD and IC firms.

3.4 Government

Stability in the government sector during fiscal year 2013 was intact. Fiscal balance, consisting of budget and non-budget balances, registered a smaller deficit compared to the previous fiscal year. The ratio of public debt to GDP as of September 2013 edged up from the beginning of the fiscal year but remained lower than the threshold for fiscal sustainability. The increase in public debt mostly stemmed from guarantees of SFIs, reflecting higher risk associated with an increase in quasi fiscal activities. In addition, domestic political uncertainty resulted in a potential delay in public investment on infrastructural projects and spending on water management projects.

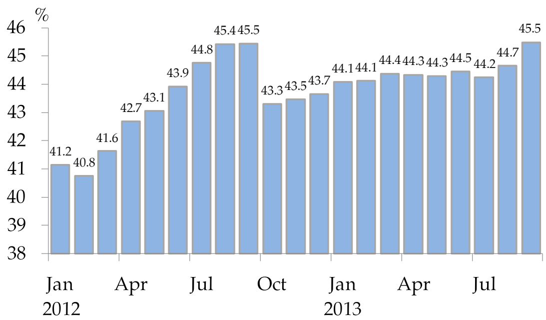
Over the past five years, the Thai economy faced great uncertainties from both the domestic and external environment, including political changes, which weakened momentum of the Thai economy, particularly through a contraction in exports. As a result, the government began to take a larger role in stimulating growth especially during periods of loss

Chart 3.4.1 Government Budget Balance



Source : Public Debt Management Office and Bureau of the Budget, calculations by Bank of Thailand.

Chart 3.4.2 Public Debt to GDP



Source : Public Debt Management Office

in momentum in order to help the economy regain footing. The government thus planned a large budget deficit in 2009 and continued operating under this policy until present time. Fiscal sector stability in fiscal year 2013, however, remained satisfactory. Fiscal deficit decreased from 2.6 percent of GDP in the previous fiscal year to 2.1 percent of GDP in 2013, of which on and off balance sheet deficits were 1.8 and 0.3 percent of GDP, respectively (Chart 3.4.1).

Latest examination of public debt revealed that the ratio of public debt to GDP stood at 45.5 at the end of fiscal year 2013, rising from the beginning of the fiscal year (Chart 3.4.2) but remaining lower than the threshold for fiscal sustainability of 60 percent of GDP. Outstanding public debt amounted to 5.4 trillion baht, increasing from the previous fiscal year by approximately 500 billion baht as a result of debt accumulation to finance the deficit, guarantees of SFIs' borrowing, particularly the Bank for Agriculture and Agricultural Cooperatives (BAAC)'s borrowing to fund the rice pledging scheme program.

Nevertheless, continuous acceleration in quasi fiscal activities and spending under populist policies led to a low proportion of public investment in total government spending (less than the 25 percent target). Moreover, domestic political uncertainty resulted in potential delay on public investment in infrastructural projects and spending on water management projects. Looking ahead, plans for the 2 trillion baht infrastructural investment and the 350 billion baht water management project and other spending under populist policies, particularly the rice pledging scheme program, could raise overall public debt further, which should be subject to continuous monitoring.

3.5 External Sector

In 2013, external stability remained sound overall. Though there was an increase in external debt, its proportion to GDP was close to last year's level. The ratio of international reserves to short-term external debt remained high despite a slight decline, reflecting that debt servicing ability and liquidity were intact. Meanwhile, the current account deficit neither implied overheating in the economy nor fundamental imbalance.

Outstanding external debt as of October 2013 stood at 141.7 billion U.S. dollars, rising from the end of 2012 by approximately 11 billion U.S. dollars mainly from (1) long-term borrowing by non-depository financial institutions the majority of which were leasing and hire-purchase companies in the amount of 3.8 billion U.S. dollars; (2) long-term borrowing by depository financial institutions to fund Thai businesses 2.4 billion U.S. dollars; and (3) investment in long-term government bonds by foreign investors 2.6 billion U.S. dollars after the Fed's decision to postpone QE tapering in September.

Moreover, there was early repayment of short-term debt by depository financial institutions, corporate, households and non-profit organizations during a period of Thai baht appreciation. This coupled with an increase in long-term foreign borrowing, resulted in a smaller proportion of short-term external debt to overall external debt from 44.5 percent at the end of 2012 to 43.8 percent at the end of October 2013 (Table 3.5.1).

Debt servicing ability and liquidity deteriorated somewhat in October 2013 compared to the end of 2012 though it remained much higher than international benchmark as reflected by the ratios of external debt to exports, international reserves to imports, and international reserves to short-term external debt (Table 3.5.2).

Table 3.5.1 External Debt Outstanding[1/]

(Billion USD)

	2012				2013[P]			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Oct[P]
1. Central Bank [2/]	8.4	8.0	9.7	8.5	11.6	7.6	7.6	7.9
2. General Government	12.2	13.8	16.4	17.8	20.7	20.8	20.3	21.1
3. Other Depository Corporations (ODC)	26.1	28.2	28.6	33.5	35.3	38.6	35.7	37.1
4. Other Sectors	66.7	66.7	69.1	70.9	71.0	74.1	75.5	75.6
4.1 Other Financial Corporations	9.4	9.4	10.2	10.9	11.4	12.8	13.7	13.8
4.2 Nonfinancial Corporations, Households, and NonProfit Organizations	57.3	57.3	58.9	60.0	59.6	61.3	61.8	61.8
Gross External Debt	113.4	116.7	123.8	130.7	138.6	141.1	139.1	141.7
Short-term (%)	47.8	48.0	44.6	44.5	43.5	45.8	44.2	43.8
Long-term (%)	52.2	52.0	55.4	55.5	56.5	54.2	55.8	56.2

Note : 1/ Including valuation changes

2/ Include central bank bonds since July 2005

P = Preliminary data

Source : Bank of Thailand

Table 3.5.2 Solvency Indicators of External Sector

	Benchmark	2012	2012				2013[P]			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Oct[P]
Solvency Indicators										
Curren Account[1/]/GDP(%)		-0.4	1.5	-4.6	-0.6	2.0	1.4	-6.7	-0.9	n.a.
Debt / GDP[2/] (%)	48-80[3/]	38.0	35.5	35.6	36.9	38.0	39.5	39.4	38.3	n.a.
Debt / XGS[1/ 2/] (%)	132-220[3/]	51.5	49.1	48.6	50.0	51.5	53.3	53.3	51.5	52.2
Debt Service Ratio (%)	< 20	4.2	4.6	4.0	4.4	4.0	4.9	3.4	4.9	n.a.
Liquidity Indicators										
Gross Reserves / ST Debt	> 1 time	3.1	3.3	3.1	3.3	3.1	3.0	2.6	2.8	2.8
Gross Reserves / Imports[4/]	> 3-4 times	9.9	10.4	9.8	10.4	9.9	9.5	9.1	9.3	9.3
ST Debt / Total Debt (%)		44.5	47.8	48.0	44.6	44.5	43.5	45.8	44.2	43.8

Note : 1/ Since October 2006, "Reinvested Earning" is recorded as part of direct investment in the financial account and its contra entry recorded as "Investment Income" in the current account.

2/ Using the average quarterly GDP for the last three years starting from the quarter considered

3/ Benchmark for middle income countries, i.e. with GDP per capita of 756 – 9,265 US dollars

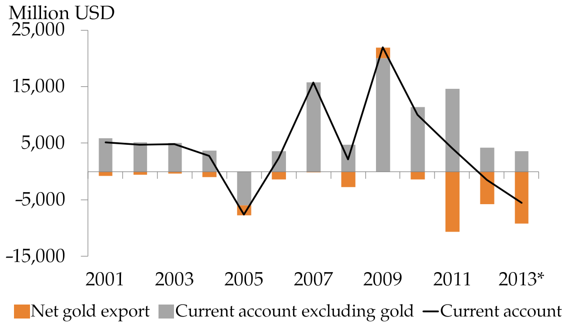
4/ Import amount is the monthly average of import in one year.

P = Preliminary

Source : Bank of Thailand

Thailand's current account deficit neither implied overheating in the economy nor fundamental imbalance. Special reasons that explained such deficit included (1) an increase in net gold imports in line with returns from gold investment (Chart 3.5.1), given a low interest rate environment and volatility in the stock market. Nonetheless, since gold is not associated with economic activities, for example, manufacturing and employment, assessment of economic stability from current account balance should exclude gold. As current account excluding gold remained in surplus, it could be concluded that competitiveness did not deteriorate by much; (2) higher than usual repatriated profit due to high corporate profitability in 2012 especially automobile related businesses owing to the government's first car tax rebate scheme; and (3) an increase in reinvested earnings by foreign corporate in line with last year's profitability. Although reinvested earnings were recorded as expenses in the income, service and transfer balance, such increase in expenses was not a concern and did not lead to a change in overall balance of payment. However, in the long term, a change in Thailand's current account dynamics is anticipated following a projection of smaller trade surplus or even trade deficit. Such outlook on trade balance was owing to a slower growth in exports in line with decelerating global trade along with loss in competitiveness of some industries, especially electronics, resulting in sluggish recovery of Thai exports compared with other countries in the region.

Chart 3.5.1 Gold Trade and Current Account



Note : * Updated data by October 2013
Source : Bank of Thailand

Chapter 4 Financial Stability Measures

4.1 Capital Flow Measures

Despite an increase in size and development, Thailand's financial markets were still regarded as small compared to the global markets. Volatility in the global financial markets thus impacted domestic financial markets significantly as reflected by the latest global financial crisis and advanced economies' implementation of monetary easing which led to sudden and highly volatile capital and exchange rate movements. Some business sectors may not be able to adjust in a timely manner and the overall economic and financial stability may be affected. Moreover, the upcoming establishment of the ASEAN Economic Community in 2015 would lead to freer flows of capital within the region. Hence, the BOT needed to put in place appropriate systems and tools to deal with greater volatility and laid down the foundation for the economy to undertake necessary adjustments. One of the tools that the BOT had since 1998 was a measure to curb speculation on the Thai baht by limiting non-residents' Thai baht transactions that were not supported by underlying trade or investment. The Exchange Control Act also required residents' foreign exchange transactions to be supported by underlying trade and investment. Together, these measures were designed to lessen volatility of the Thai baht and harness more balanced flows of capital.

Over the years, the Thai economy underwent continuous development. Financial institutions were stronger and better prepared while businesses and investors' financial literacy, particularly on investment, improved. Accordingly, in 2012, the BOT submitted the Capital Account Liberalization Master Plan to the Ministry of Finance for approval with the aim to continue liberalizing capital flows, which already started in 2007. Implementation of the Plan would enhance business and investment efficiency, reduce transaction costs as well as help diversify investment risks. Moreover, the Plan would lead to further development of the financial markets and promote more balanced flows of capital. In 2013, the BOT took the following steps in accordance with the Plan.

(1) Direct investment: In order to increase flexibility and opportunity for small and medium enterprises (SMEs) to expand business and production base and step up the country's competitiveness, individuals were allowed to invest abroad with no limit.

(2) Investment in foreign securities: In order to increase flexibility and promote investment risk diversification, institutional and retail investors were allowed to invest in foreign securities and derivatives with no limit, subject to the ceiling stipulated by relevant

supervisory authorities, for example, the Office of Securities and Exchange Commission and the Office of Insurance Commission.

(3) Foreign currency deposit account: To offer an alternative for exchange rate risk management, residents were allowed to open foreign currency deposit account with a domestic financial institution with no limit provided that the deposit is used for payment obligations to foreign entities.

In addition to implementation of the Plan regarding outflows, the BOT also proposed to the Ministry of Finance measures for capital inflow as policy options to curb highly volatile capital flow movement if necessary, due to continuous appreciation of the Thai baht during January – April. Accordingly, the Ministry of Finance issued the Notification of the Ministry of Finance No. 9 dated May 28, 2013, authorizing the BOT to impose capital control measures upon prior consent of the Ministry of Finance.

4.2 Supervision of Financial Institutions

In 2013, the BOT proceeded to promote soundness and prevent build-up of risks within the financial institutions system. Concerning **supervision and examination**, a proactive approach was introduced whereby internal and external risks that could affect financial institutions were thoroughly assessed. As for **regulation**, emphasis was given to capital adequacy and provisioning to absorb potential risks, prudence in corporate lending that could affect economic and financial stability, along with supervision of concentration risk from large exposures. Details were as follows.

Supervision and Examination

1. Thematic examination was introduced whereby important risks that could result in a system-wide impact were considered. Then, assessment of such risks and risk management practice at each financial institution was conducted. The new approach acted as a signal for financial institutions to raise awareness of risks as well as improve current practices in order to ensure that underwriting standards in lending and internal operations would not lead to problems of over-indebtedness and NPL, going forward. Examples included examination of real estate loan, auto loan, and large exposures.

2. Emphasis on greater soundness was promoted among financial institutions to prepare for economic and financial volatility. During times of good profitability, the BOT encouraged financial institutions to set aside some profit as countercyclical provision which could be used during a downturn in the economy. Provisioning was made for possible impaired loans as well as normal loans, using financial institutions' internal assessment data which could be higher than the legal requirements stipulated by the BOT. Subsequently, the ratio of loan loss provision to

NPL increased from 92.8 percent at the end of 2010 to 141.5 percent at the end of 2013 Q3.

3. Stress testing was conducted using a scenario of global economic volatility given that Thailand's economy and financial institutions system could be affected by various risks, for example, the Fed's QE tapering and a slowdown in Asian economies. In this connection, the BOT requested that commercial banks conduct stress tests using a predetermined set of scenarios in order to assess the impact on each individual institution and the overall financial institutions system. Various risks were assessed, including credit risk, market risk, interest rate risk on banking book and liquidity risk. The BOT then used the results to formulate appropriate supervisory measures, while commercial banks were prompted to acknowledge their risk exposures as well as continue to enhance their respective risk management systems.

Regulation

1. Capital was strengthened through revision of new capital requirements according to the Basel Committee on Banking Supervision's Basel III. The new regulation was in agreement with the BOT's principle in encouraging commercial banks to maintain high quality capital that would be able to absorb potential losses during both normal and crisis times. Implementation of the Basel III also demonstrated strength and ability of Thai commercial banks to meet internationally accepted standard. The new regulation prescribed requirements on both quantity and quality of capital, thereby enabling commercial banks to absorb potential losses better. Accordingly, commercial banks were required to maintain the Common Equity Tier 1 Ratio (CET1 Ratio), the Tier 1 Ratio, and the BIS Ratio of 4.5, 6 and 8.5 percent, respectively. The banking system was able to adopt these new requirements owing to the fact that their capital composition was already in line with Basel III. As of 2013 Q3, the banking system's BIS ratio stood at 16.5 percent, whereby Tier 1 Ratio and CET1 Ratio were 13.1 and 12.2 percent, respectively.

2. Risk management of large exposure was strengthened by requiring commercial banks to maintain additional capital for loan, investment, obligations or transactions that could be interpreted as loan to large corporate groups that exceeded the legal limit of 25 percent of total capital. Commercial banks were also required to conduct stress tests and publish information on additional capital to the public in 2015. These new requirements were aimed at enabling commercial banks to absorb risks associated with such lending, reduce concentration risk which could affect soundness and stability of the overall financial institutions system, as well as encourage commercial banks to take greater caution in conducting business. At the same time, in order to support economic growth and develop the ability of Thai corporate to compete and take advantage of upcoming liberalization under the ASEAN Economic Integration, the BOT may consider granting waiver to these regulations as deemed necessary.

Box 5 : Enhancement of the Financial Stability Framework and Process

Lessons from the Global Financial Crisis and Policy Implementation Abroad

The 2008 global financial crisis has highlighted challenges in maintaining financial stability in various countries, stemming from increased complexity and connectivity in economic and financial systems and weaknesses in policy framework and coordination between concerned supervisory authorities.

Since then, many countries including both crisis originating countries and crisis affected countries, have stepped up their efforts in enhancing efficiency of the financial stability framework. In this connection, popular trends included delegating power and responsibility in safeguarding financial stability to central banks as well as establishing mechanism to increase efficiency in coordination amongst concerned supervisory authorities. For example, the United Kingdom has returned financial institution supervisory responsibility to Bank of England and established a Financial Policy Committee to assess and monitor systemic risk as well as implement policies to maintain financial stability. The U.S. has enacted the Dodd-Frank Financial Regulatory Reform Bill to empower the Fed to take charge of financial stability responsibility in addition to its goals in maintaining price stability and full employment. Moreover, the U.S. has formed a Financial Stability Oversight Council as a mechanism for coordination between relevant supervisory authorities. In Malaysia, the government has passed the Central Bank of Malaysia Act (2009) to clearly stipulate the role, power and policy framework to maintain financial stability to Bank Negara Malaysia in order to allow for greater efficiency in carrying out this objective.

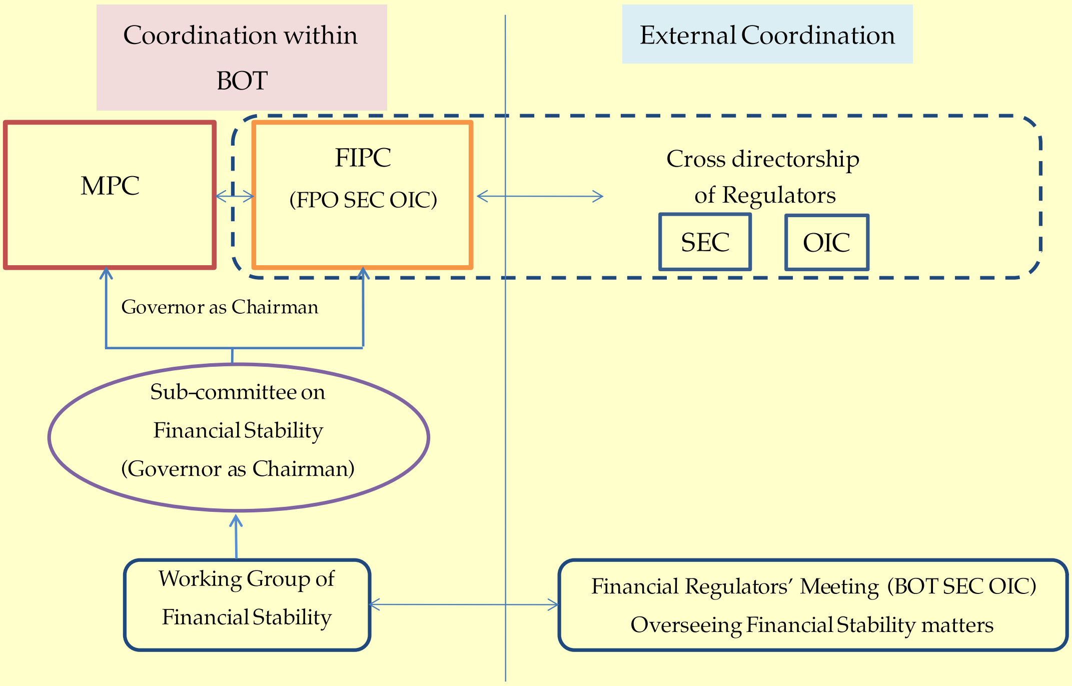
Steps Taken by the Bank of Thailand

After the 1997 financial crisis, Thailand's overall financial system has improved significantly thanks to implementation of various reform measures, for example, fiscal consolidation, financial institution supervision according to international standards and efficient risk management, implementation of macroprudential policies to contain build up of financial imbalances, and close coordination amongst supervisory authorities such as the Office of Securities and Exchange Commission Thailand (SEC), the Office of Insurance Commission (OIC), the Ministry of Finance and the Stock Exchange of Thailand (SET). It is expected that supervisory coordination would become even more important in safeguarding financial stability given greater connectivity in the Thai financial system and increased complexity of financial services either through the universal banking model whereby commercial banks' subsidiaries also have a presence in the securities and insurance markets, or inter-bank transactions.

Previously, coordination between different supervisory authorities in Thailand has been achieved through cross directorship. For example, the Governor of the Bank of Thailand is board member in the SEC and the OIC and the Secretary-Generals of the SEC and the OIC together with the Director General of the Fiscal Policy Office are members of the Financial Institutions Policy Committee. Coordination is also ensured through policy dialogue at both management and staff levels. These coordination mechanisms have proved effective in ensuring joint effort in the pursuit of overall financial stability.

Nonetheless, the BOT has recognized a crucial need to enhance the existing policy framework to prepare for greater complexity and connectivity in the financial system. Thus, the BOT has incorporated a plan to enhance the efficiency and capacity in safeguarding financial stability as one of the BOT's strategic plans where focus would be placed on improving the framework and internal processes for financial stability assessment and coordination with outside supervisory authorities. The plan contains three salient measures as follows.

Coordinated Framework with Other Supervision Authorities to Enhance the Efficiency in Safeguarding Financial Stability



1. Initiating Joint Meetings between the Monetary Policy Committee (MPC) and the Financial Institutions Policy Committee (FIPC)

In order to ensure stability in the financial system, enabling it to perform financial intermediation functions continuously and efficiently in support of sustainable economic growth, many important conditions must be met, for example, price stability, prevention of financial imbalances, resiliency of the financial system and financial institutions, and well aligned and efficient coordination of Monetary Policy, Financial Institutions Policy and other concerned policies.

Therefore, the BOT has initiated joint meetings between the MPC and the FIPC on a biannual basis, beginning in June 2012. These joint meetings provide a platform for coordination and policy discussion on potential threats to financial stability along with appropriate policy mix. Different knowledge, expertise and experience of the two Committees would allow for more balanced, comprehensive and efficient risk assessment and policy implementation. Nonetheless, policy execution remains under the responsibility of each Committee as stipulated in the laws. Should there be an urgent threat or a threat outside the legal mandate of the BOT, the BOT Governor could bring the issue to the attention of the Minister of Finance for further deliberation.

2. Reorganizing Risk Assessment Process and Internal Operation

Appropriate and efficient systemic risk assessment and financial stability policy consideration requires knowledge, analysis and experience of experts from various dimensions of the economic and financial system. Previously, the BOT has already attempted to gradually reorganize the framework for identification and analysis of systemic risk in order to enhance work process efficiency. In 2009, a Sub-Committee to oversee financial stability issues has been formed to be a platform for discussion on important risks between different line departments. The sub-Committee has now been officially named the Financial Stability Sub-Committee where the Governor acts as Chairman of the Committee and members include high-level management from relevant line departments. The Sub-Committee is tasked with the responsibility in assessing risks to overall financial stability and making policy recommendations to be presented to the MPC and the FIPC. The Financial Stability Sub-Committee meets on a quarterly basis or when need arises. Moreover, the BOT has established a Financial Stability Working Group, consisting of experts from concerned line departments to support the work of the Financial Stability Sub-Committee in continuously monitoring and assessing potential systemic risk.

3. Improving Coordination with Other Supervisory Authorities

Recently, the BOT has worked with the SEC, the SET and the OIC in strengthening coordination regarding financial stability matters. A Memorandum of Understanding has been signed to allow exchange of information and staff together with establishment of a Working Group on Financial Stability which comprises representatives from the BOT, the SEC and the OIC, to provide avenue for exchange of views and risk assessment in a consolidated manner. The Working Group meets on a quarterly basis. The aforementioned efforts have been a valuable supplement to the already existing coordination framework between the BOT and the Ministry of Finance on the supervision of Specialized Financial Institutions and non-banks.

The above steps taken to improve work process are expected to enhance the efficiency of the BOT's operation and coordination with other supervisory authorities in the pursuit of financial stability. The BOT would monitor and assess outcomes of these efforts continuously along with examining international experiences in this area in order to increase the suitability and efficiency of existing operational and policy framework further.

Chapter 5 Summary and Outlook

Looking ahead, overall stability of Thailand's financial system continues to be well maintained, though there are important risks from both domestic and external factors which require close monitoring. Outlook for the global economy improved thanks to the United State's gradually improving economy and recovery in regional economies since the latter half of 2013. Nonetheless, risks that could affect the financial markets through volatility of capital flows, asset prices, and exchange rates remained, particularly from uncertainties regarding the U.S. fiscal problem and QE tapering along with potential vulnerability in the economic and financial system of the Eurozone, which could stem from political instability.

The Thai economy which moderated in the second half of 2013 began to gain thrust from recovery in exports in tandem with the gradually improving global economy. At the same time, private consumption continued to expand modestly from high employment, income, and sound internal stability resulted from low inflation and unemployment. However, there remained risks to be closely monitored, especially domestic political uncertainty that could affect business sentiment, thereby subjecting the still fragile private consumption to downside risk, suppressing private investment, and delaying government expenditure. Nonetheless, stability in the corporate sector remained intact in spite of lower profitability in some manufacturing sectors, for example, computers and parts and furniture industries. Meanwhile, the household sector began to regain stability thanks to a slowdown in debt accumulation. Still, the level of household debt that remained elevated could make households vulnerable to downside risks that would deteriorate debt servicing ability, especially among low-income groups. The real estate sector cooled down slightly from the previous year, owing to a slowdown in demand after a significant acceleration in previous periods and greater caution on developers and financial institutions' sides. However, changes in urban residents' lifestyle and structural development such as mass transportation improvement and increase in working-age population still led to an increase in the number of new condominium projects. For the government sector, stability was also intact whereby fiscal deficit stood at 2.1 percent of GDP and the ratio of public debt to GDP measured at 45.5 percent, still lower than the threshold for fiscal sustainability. Nevertheless, going forward, plans for government investment that could be delayed along with a continuous increase in spending under populist policies could 1) reduce the proportion of public investment that would help enhance the country's potential growth; and 2) increase fiscal burden thereby causing public debt to rise. These risks warranted close monitoring. The ratio of international reserves to short-term external debt that continued to be high together with a low current account deficit led to well maintained stability in the external sector, overall.

Loan growth in the banking sector continues to support investment and consumption in the periods ahead despite having decelerated in tandem with the slowing economy and more cautious loan underwriting standard by commercial banks. Moreover, banking sector strength was well maintained as reflected by high BIS ratio and loan loss provisioning. As such, the banking sector was well-positioned to deal with risk and volatility in the periods ahead. At the same time, profitability continued to be strong.

Assessment of risks to overall financial stability outlook revealed three important factors to keep abreast, including:

1) Volatility in Capital Flows

The outlook for capital flows continued to be volatile from uncertainties regarding the Fed's QE tapering and the U.S. fiscal problem along with recovery in the global economy that remained fragile. Subsequently, capital flows would likely be volatile in some periods, thereby affecting liquidity, asset prices, exchange rate as well as private sentiment, going forward.

2) High Level of Household Debt

In spite of a slowdown in household debt following more cautious spending by households and tighter underwriting standard by commercial banks, the level of debt remained elevated as a result of high expansion in consumer loan during the last 2-3 years. As of 2013 Q3, the ratio of household debt to GDP stood at 80.1 percent whereby part of this debt was used to purchase real estate and fixed assets. Subsequently, household liquidity slightly declined in the short term and caused households, particularly low-income groups, to become more vulnerable to downside risks.

Since delinquency in consumer loan remained low, the increase in household debt did not affect stability of the banking sector. However, part of the increase in household debt over the last 2-3 years was a result of more aggressive lending by SFIs and credit cooperatives. It was also possible that some customers of SFIs and credit cooperatives also borrowed from commercial banks. Therefore, in order to improve household strength, especially in long-term savings discipline, it would be necessary to monitor and assess all incumbent risks in a comprehensive and timely manner. Credit standards between different institutions would need to be appropriately aligned. Financial knowledge regarding the importance of savings and uses of different financial products must be appropriately disseminated to households. Finally, assistance on debt servicing problem should also be given to ensure efficient and fair resolution.

3) Domestic Economic and Political Uncertainties

Although the economy which began to lose steam in the beginning of 2013 already started to gain traction thanks to recovery in the export sector, Thailand's domestic political uncertainty continued to be a major risk that could affect economic growth in the periods ahead. Should the situation intensify and drag on, there could be negative impact on private consumption and investment and delay in government spending. Meanwhile, volatility in capital flows and exchange rate together with higher cost of long-term financing due to the Fed's QE tapering, could affect private sector's confidence and cost of funds. These challenges required firms to adjust, particularly those in the wholesale and retail trading sector and export-oriented manufacturing sector, which also must adapt to fast-changing technology and global demand. Against the backdrop of an economic slowdown, commercial banks should continue to pay attention to credit underwriting standard and monitoring loan quality closely.

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