

4. Financial Stability Conditions and Outlook

Impact from the global financial turmoil on Thailand's economic and financial stability started to become more pronounced. Although direct losses on financial institutions' balance sheets in the past periods were minimal, impacts from the global financial crisis which spilled over to the real economy had become more worrisome. This was reflected by a decline in profitability of the corporate sector, elevated risks regarding income and employment of the household sector, as well as subsequent deterioration in credit quality of financial institutions. Confidence and economic recovery were also undermined by domestic political conflicts, as was stability in the financial market, which became more volatile in 2008 Q4.

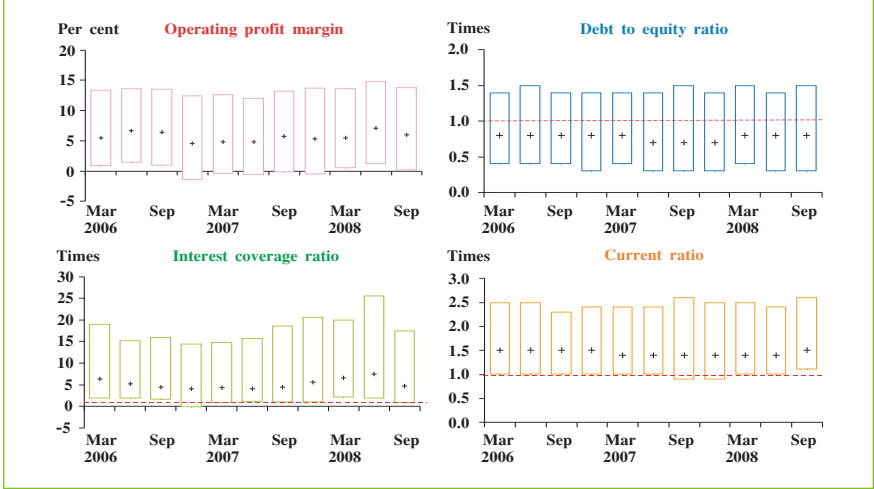
Non-financial corporate sector

In 2008 Q3, profitability of the corporate sector declined as a result of a slowdown in domestic demand and weakening confidence. It was also exacerbated by the acceleration in living costs during the previous periods which significantly dampened consumer purchasing power. Operating profit margins of most listed firms on the Stock Exchange of Thailand thus declined from the previous quarter. Moreover, the corporate sector was faced with rising financing costs. The increase was partly due to the hike in lending rates around mid-year, which was in line with the upward trend of the policy interest rate to deal with rising inflationary pressure at the time, as well as the increase in risk premium towards the end of the quarter due to the deepening of the financial turmoil. In the wake of the global credit crunch and high risk aversion, it was more difficult for firms to tap funds from abroad. Those that raised funds from domestic financial institutions and capital markets also experienced higher financing costs due to worsening economic prospects in Thailand, which became more apparent.

The increase in interest expenses together with the fall in profits reduced firms' ability to service debt, as reflected by the lower interest coverage ratio. Weaker financial health of the corporate sector translated into higher probability of default, calculated from the random-effect

In 2008 Q3, the corporate sector became increasingly vulnerable. This was attributed to lower profitability and higher financing costs.

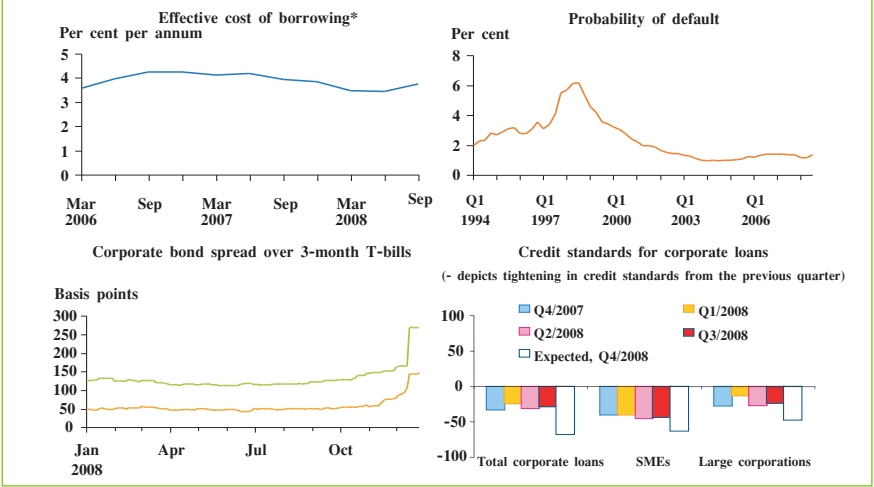
Chart 4.1 Financial soundness indicators of the corporate sector



Note: Each bar depicts an interquartile range, where upper and lower bounds represent the 25th and 75th percentile, respectively.
The symbol + indicates the median.

Source: Stock Exchange of Thailand, calculations by Bank of Thailand staff

Chart 4.2 Financial costs and risks of the corporate sector



Note: *Effective Cost of Borrowing = Interest expense / (total liability - trade credit) *400
Source: Stock Exchange of Thailand, calculations by Bank of Thailand staff, Thai Bond Market Association and the Report on Credit Conditions of Financial Institutions, Bank of Thailand

probit model^{1/}. This was in line with the latest credit condition survey which reported that banks perceived the corporate sector to be more risky due to the weaker economic outlook. As a result, financial institutions tightened their credit standards in recent periods.

^{1/} For calculation details see the “Corporate sector vulnerability analysis from probability of default” box in the October 2008 *Inflation Report*.

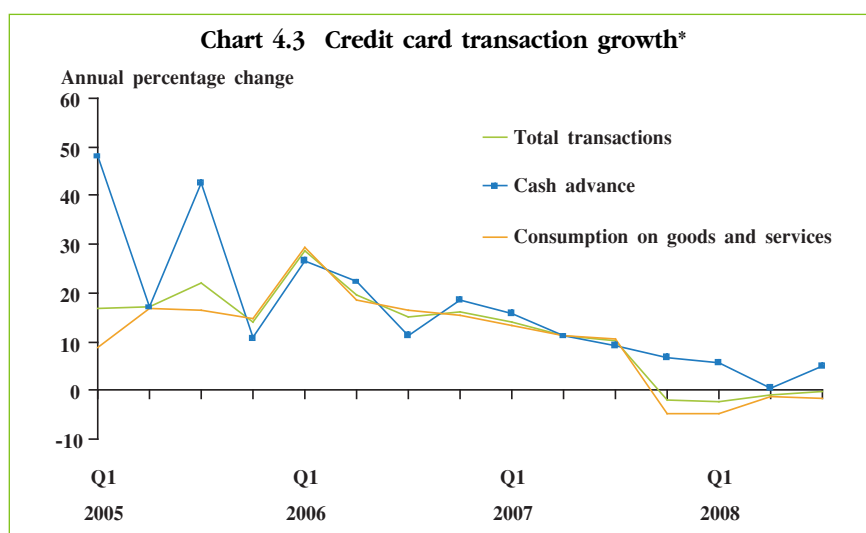
The MPC assessed that, going forward, risks to the corporate sector would increase, especially from the impact of the weak global economy on businesses related to exports and tourism. Latest data in November 2008 pointed to a marked contraction in the exports of Thai goods and services. Thus, the MPC deemed it important to monitor the impact of the global financial turmoil on corporate sector stability. Meanwhile, risks from the internal front should also be closely monitored. Although political unrest had begun to subside after the new government was formed, the corporate sector could still face tight liquidity conditions and high borrowing costs. This is because, despite ample liquidity in the banking system and accommodative monetary policy, financial institutions and money markets made the assessment that the probability of default could rise. As a result, credit lines of the corporate sector could be limited or more costly as financial institutions required higher risk premium to compensate for impaired loans.

Going forward, risks to stability in the corporate sector could rise significantly.

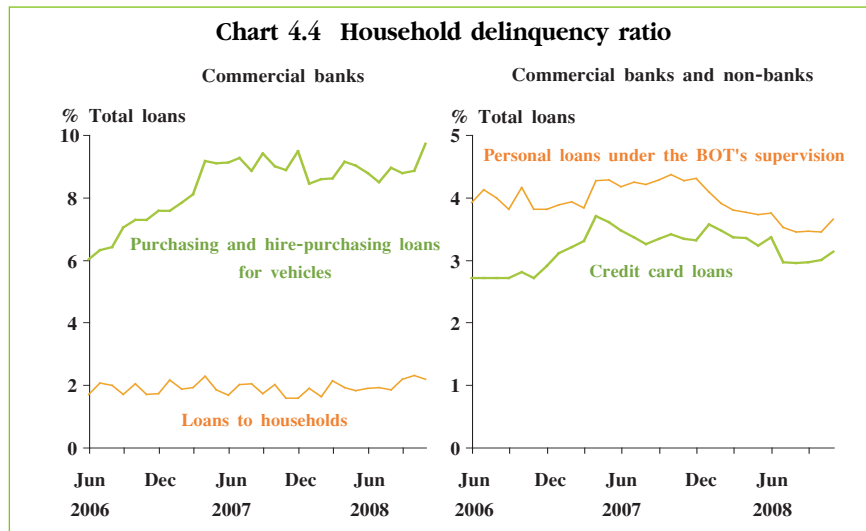
Household sector

In 2008 Q3, although costs of living had begun to decline and households had been more cautious in their spending behaviour, as reflected by ongoing contraction of credit card transactions for consumption of goods and services, the sluggish economy started to

The household sector began to show some signs of fragility, particularly in liquidity conditions and debt servicing ability which worsened.



Note: * Credit cards issued by banks and non-banks under the BOT's supervision
Source: Bank of Thailand



Source: Bank of Thailand

affect households' liquidity, as evidenced by a slight increase in cash-in-advance transactions. In addition, preliminary data in October and November 2008 signalled a worsening in debt servicing ability, as reflected by rising delinquencies - defined as loans past due between 1 to 3 months - on mortgage loans, auto leasing, credit card loans and personal loans under BOT's supervision.

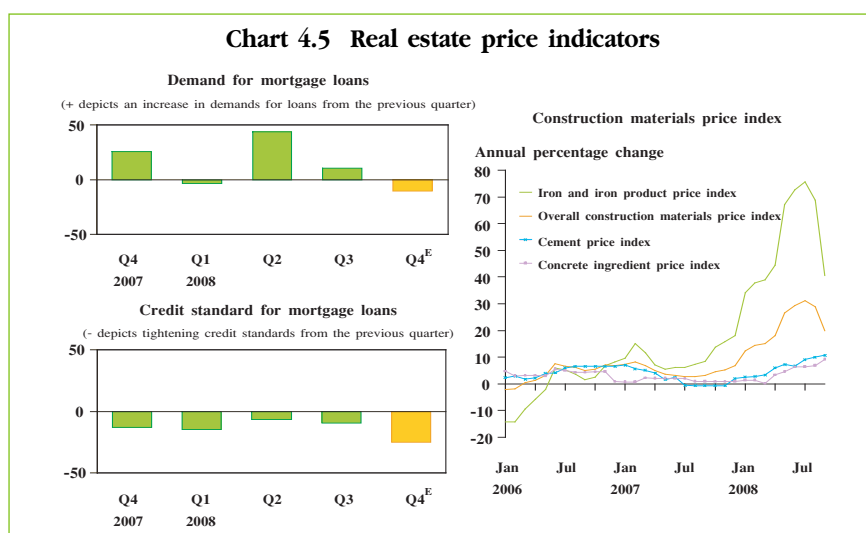
Going forward, higher risks to households' income and employment could further worsen their debt servicing ability.

Looking ahead, higher risks to the corporate sector would inevitably bring about substantial risks to household's income and employment conditions. Latest labour indicators showed that employment in the manufacturing sector declined continuously since May 2008, while employment growth in the services sector began to slow down. Meanwhile, the agricultural sector's ability to absorb labour was more restricted, given falling agricultural prices, which resulted in lower demand for labour in this sector. Although the build-up of vulnerability in the household sector was not yet severe, it could lead to deterioration in the household's debt servicing ability, thereby affecting financial institutions' credit quality going forward and hence, must be closely monitored.

Real estate sector

The MPC assessed that the probability of a real estate price bubble remained extremely low. Going forward, the growth rate of real estate prices should decelerate from the previous periods, owing largely to the slowdown in economic growth and consumer income. The tightening of mortgage lending by financial institutions^{2/} would also dampen housing demand despite the launch of the government's real estate stimulus package. In addition, construction material prices continued to fall in tandem with the decline in global commodity prices, which consequently lowered the pressure on real estate prices via construction costs. Nevertheless, real estate prices in some areas jumped noticeably, probably a result of urbanization and the extension of mass transit systems. This was evidenced by the significant increase in the latest land price valuation^{3/}.

The probability of a real estate price bubble remained low.



Note: E = Outlook for the next quarter
Source: The Report on Credit Conditions of Financial Institutions, as of 2008 Q3, Bank of Thailand

Source: Trade and Economic Index Bureau, Ministry of Commerce

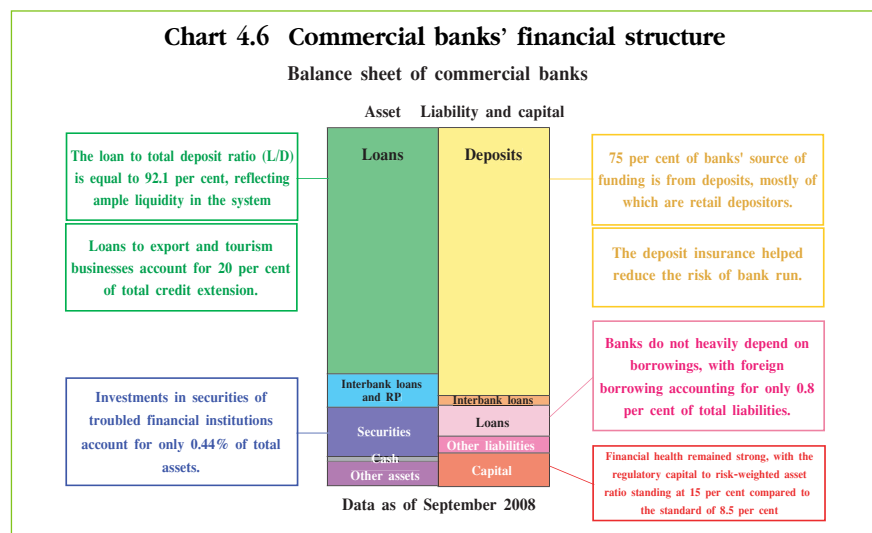
^{2/} From the Senior Loan Officer Survey conducted in 2008 Q3.

^{3/} The Bureau of Property Valuation, Treasury Department announced the improvement of new land price valuation of 9 districts in Bangkok and individual land price valuation in 52 provinces, effective as of 1 January 2009.

Financial institutions

Direct impacts of the global financial turmoil on Thai financial institutions' balance sheets were limited.

Direct impacts of the global financial turmoil on balance sheets of Thai financial institutions were limited as their exposure to assets of troubled financial institutions abroad were small, accounting for only 0.44 per cent of total assets. Moreover, provisions were already fully made for probable losses from investments in collateralized debt obligations (CDOs) related to US subprime mortgages. With regard to liquidity, the Thai banking system was not affected by the tightening of global liquidity, owing in part to less dependency on foreign capital markets; unlike the experience before the 1997 crisis or current experiences of other countries, for example South Korea. As a result, Thai financial institutions were not exposed to the severe deleveraging process. In addition, the blanket guarantee on deposits, which was implemented since 1997 and was recently extended for another 3 years until 2011, helped restore confidence of retail depositors, Thai banks' main source of funding. All in all, liquidity of Thai banks remained ample, reflected by fairly large amounts of deposits compared to those of loans. Thus, the MPC deemed that liquidity was not a constraint for banks to lend in the current situation, but rather heightening credit risks were, resulting from further weakening of the economic outlook.



Source: Bank of Thailand

The MPC, nonetheless, was concerned about the spill over effect of the global financial turmoil on the real economy, which could lead to deterioration in the quality of corporate and consumer loans. This was because the global recession would lead to a sharp fall in external demand and pose potential risks to the corporate sector, in particular those related to exports and tourism, which accounted for 20 per cent of total loans. In addition, weakening domestic demand from political uncertainty and fragile confidence could also adversely affect domestic-oriented firms. This could have repercussions on employment and thus undermine credit quality of consumer loans. The MPC therefore assessed that the probability of default of corporate and household sectors would increase going forward and consequently contribute to substantial risks to the financial system. Although the NPL ratio to total loans continued to decline, delinquencies appeared to rise.

The spill-over from the global financial turmoil onto the real sector would be the main risk to credit quality going forward.

Nevertheless, overall financial health as captured by regulatory capital and liquidity remained sound and should be able to help cushion

| Table 4.1 Thailand's Financial Soundness Indicators | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| (September 2008)^{1/} | | | | | | |
| Key indicators (%) | 2007 | | | 2008 | | |
| | Jun | Sep | Dec | Mar | Jun | Sep |
| 1. Capital adequacy | | | | | | |
| 1.1 Regulatory capital to risk-weighted assets (8.50) ^{2/} | 13.93 | 14.63 | 14.80 | 14.49 | 15.02 | 15.28 |
| 1.2 Regulatory tier 1 capital to risk-weighted assets (4.25) ^{2/} | 10.93 | 11.66 | 11.86 | 11.52 | 11.51 | 11.89 |
| 2. Asset quality | | | | | | |
| 2.1 Non-performing loans to total loans | 8.49 | 8.58 | 7.86 | 7.35 | 7.01 | 6.51 |
| 3. Earning and profitability | | | | | | |
| 3.1 Return on assets (ROA) | 0.20 | 0.29 | 0.12 | 1.30 | 1.18 | 1.51 |
| 3.2 Interest margin ^{3/} to gross income ^{4/} | 71.7 | 73.0 | 75.1 | 71.3 | 72.2 | 79.7 |
| 3.3 Non-interest expenses to gross income | 61.4 | 59.3 | 60.7 | 50.5 | 52.2 | 57.7 |
| 4. Liquidity | | | | | | |
| 4.1 Liquid assets ^{5/} to total assets | 27.1 | 27.1 | 24.7 | 20.3 | 20.4 | 18.7 |
| 4.2 Liquid assets to short-term liabilities ^{6/} | 34.4 | 33.9 | 31.9 | 25.7 | 27.4 | 24.4 |
| Number of banks | 14 | 14 | 14 | 14 | 14 | 14 |

Note: ^{1/}Based on "Peer Group" data

^{2/}Minimum regulatory capital to risk-weighted assets

^{3/}Interest margin = Interest income and dividend - Interest expenses

^{4/}Gross income = Interest margin + Non-interest income

^{5/}Liquid assets = Cash and deposits + Securities purchased under resale agreements + Investment in securities (net)

^{6/}Short-term liabilities = Deposits (Liability side)

Source: Bank of Thailand

against future shocks. Furthermore, the tightening in lending standards of financial institutions in the previous periods should help reduce risks of default. At the same time, it could lead to credit tightening and higher financing costs for firms. Thus, the MPC would monitor that lending standards would not be excessively tightened and impede operations of sound businesses and the recovery of the overall economy.

Financial markets

In 2008 Q4, Thai financial markets remained sensitive to both domestic and external developments, especially the stock market which became more volatile owing to severe risk aversion among foreign investors. In addition, political uncertainty also aggravated investor confidence.

Although volatility in Thai financial markets subsided somewhat towards the end of the quarter, the MPC assessed that investors were still highly sensitive to new information. Thus going forward, the global financial turmoil and political uncertainty could continue to affect stability in the financial markets.

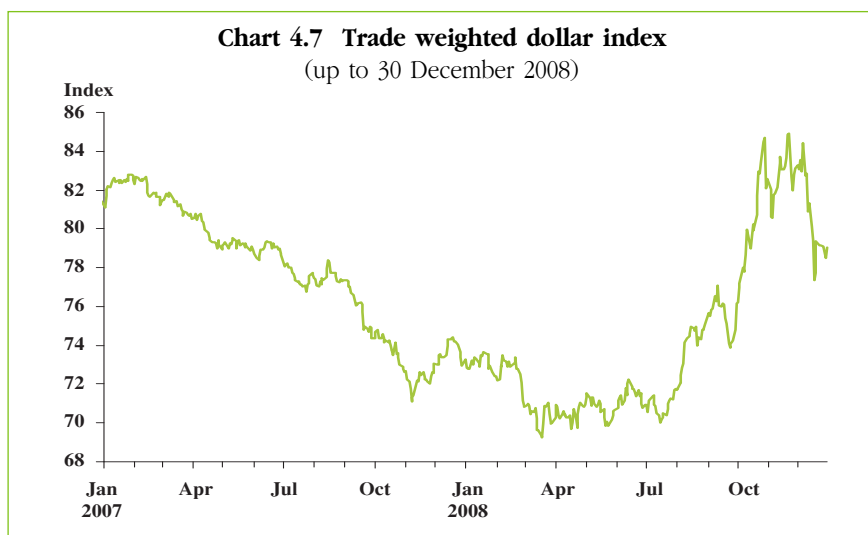
Foreign exchange market

Major currencies on the whole remained volatile.

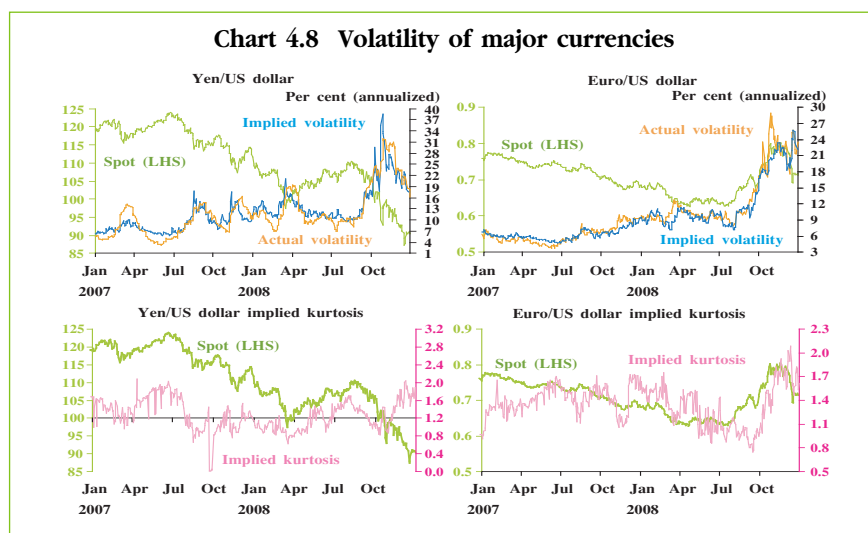
Major currencies, including the US dollar, euro and yen, remained volatile due to the increase in severity of risk aversion which led to abrupt deleveraging. Furthermore, owing to concerns over the global economic recession, investors unwound their carry trade transactions to minimize losses and transferred their investments to risk-free US government bonds, resulting in large fluctuations of the euro and yen. However, towards the end of the quarter, volatility of major currencies subsided somewhat due to the US economic recovery package, coupled with eased monetary policy stance conducted by central banks around the world. This volatility level, nonetheless, was higher than the norm, reflecting that investor sentiment remained highly fragile.

The probability of drastic movements in the euro vis-à-vis the US dollar measured by the implied kurtosis increased in 2008 Q4 owing to market concerns that economic problems in the euro area could be severe and persistent, while the implementation of fiscal policies to

stimulate the economy in the euro area could be limited. On the other hand, the easing trend of Japan's monetary policy stance, together with the previous unwinding of carry trades helped reduce the probability of drastic movements in the yen vis-à-vis the US dollar as reflected by the decline of the implied kurtosis.

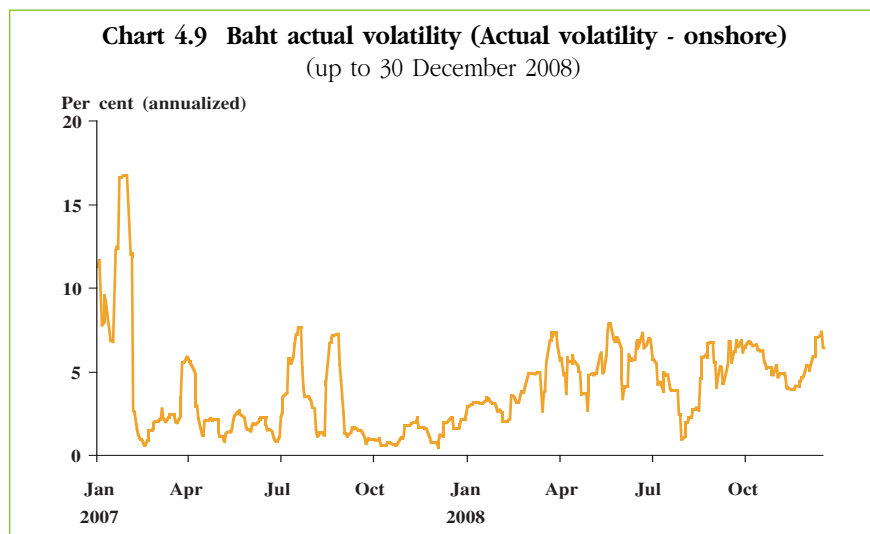


Source: Bloomberg



Source: Bloomberg

Major currencies' volatility contributed crucially to fluctuations in regional currencies, including the baht. Nevertheless, the baht was quite stable in comparison to other regional currencies such as the Indonesian rupiah and Korean won, which were harder hit by the global financial crisis. Nevertheless, domestic political uncertainty which became more severe in some periods, for example during the closure of the 2 international airports during the end of November and the beginning of December, caused the baht to become more volatile.



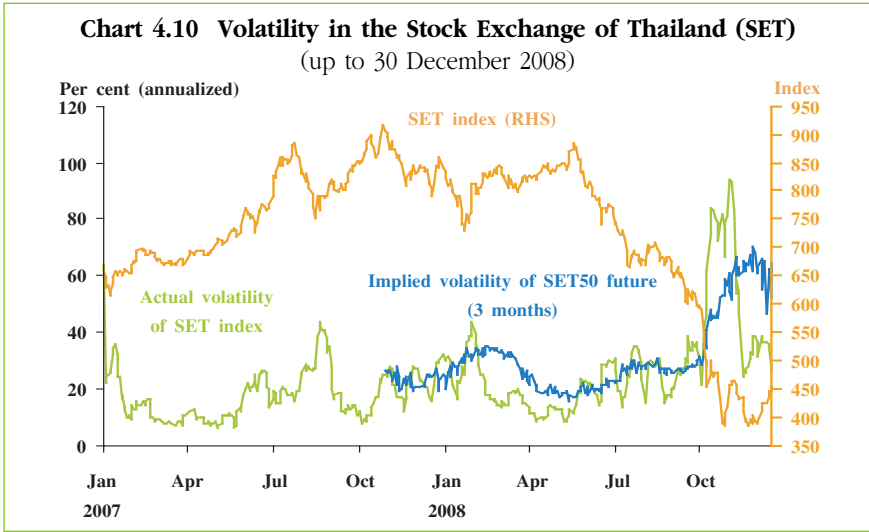
Source: Bloomberg

Thai equity market

The SET index was highly volatile as a result of risk aversion and political uncertainties.

The SET index was highly volatile over the quarter. The index declined sharply at the beginning of the quarter, before adjusting upwards slightly towards the end of the quarter.

At the beginning of the quarter, the SET index was influenced by several negative factors external and domestic, including the financial turmoil in the US and Europe which drove other countries' economies into recession, together with investors' concerns over domestic political uncertainty. Nonetheless, the easing of monetary policy stance around the globe, the US economic recovery package, coupled with alleviated domestic political conflicts caused the SET index to strengthen somewhat. Going forward, the SET index was expected to remain volatile as reflected by the implied volatility of SET50 for the next 3 months, which remained high.

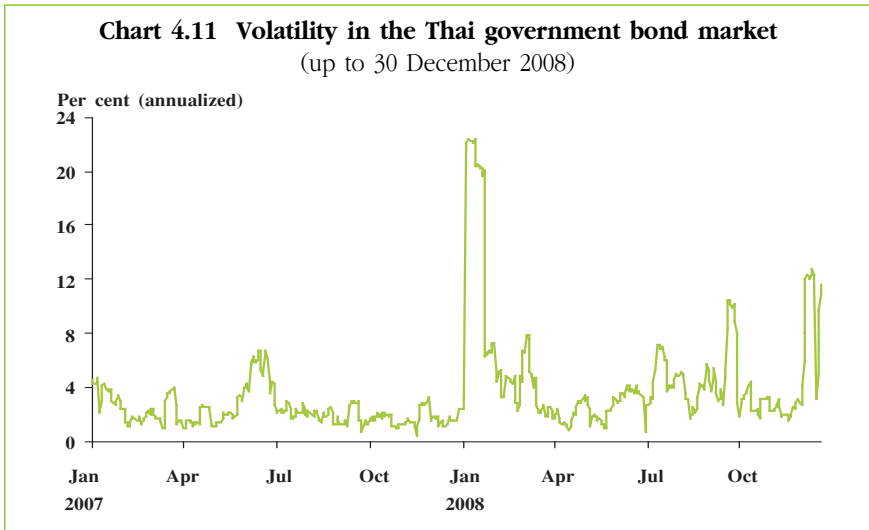


Source: Stock Exchange of Thailand, calculations by Bank of Thailand and Bloomberg

Thai government bond market

Thai government bond yields declined for all maturities in 2008 Q4. Early in the quarter, bond yields fluctuated at a normal level, but increased significantly towards the beginning of December due to the 1.00 per cent policy rate cut by the MPC on 3 December 2008, which was larger than 0.50 per cent anticipated by the market.

Thai government bond yields were highly volatile, partially due to the larger policy rate cut than expected by the market.



Source: Thai Bond Market Association, calculations by Bank of Thailand

Going forward, the MPC assessed that risks to Thailand's financial stability would remain high, especially from impacts of the global economic recession. Political uncertainty was also another risk factor that could aggravate the Thai economy by undermining the already weak confidence. These factors would not only weaken corporate profitability, but could also push up their financial costs via higher risk premium. In addition, the household sector could become more vulnerable, eventually affecting the stability of financial institutions. Developments of these risks and assessments of their impacts on Thailand's financial stability would be closely monitored to assist the MPC in making appropriate monetary policy decisions going forward.