



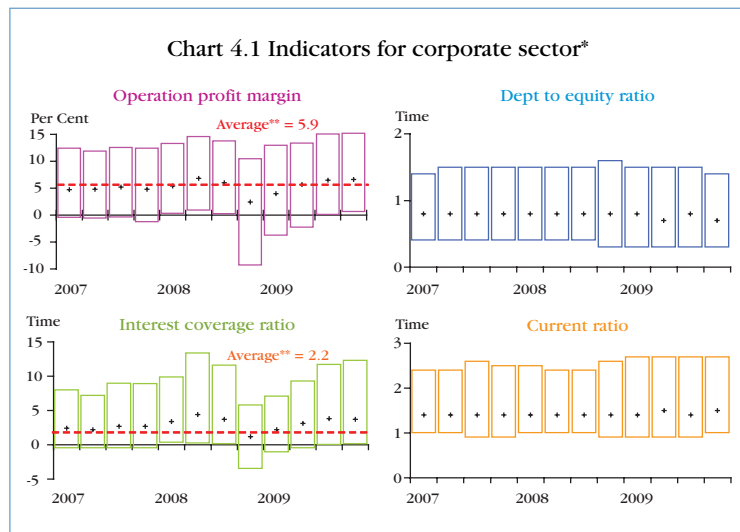
4. Financial Stability Conditions and Outlook

Thailand's financial stability conditions remain favourable, as reflected by improving corporate performance and household income in line with the pickup in the global economy and domestic demand as well as the strength of the financial institutions system. However, the MPC views the impacts from the domestic political unrest and the lingering uncertainties surrounding the global economic recovery as major risks to Thailand's financial stability in the period ahead.

Non-financial corporate sector

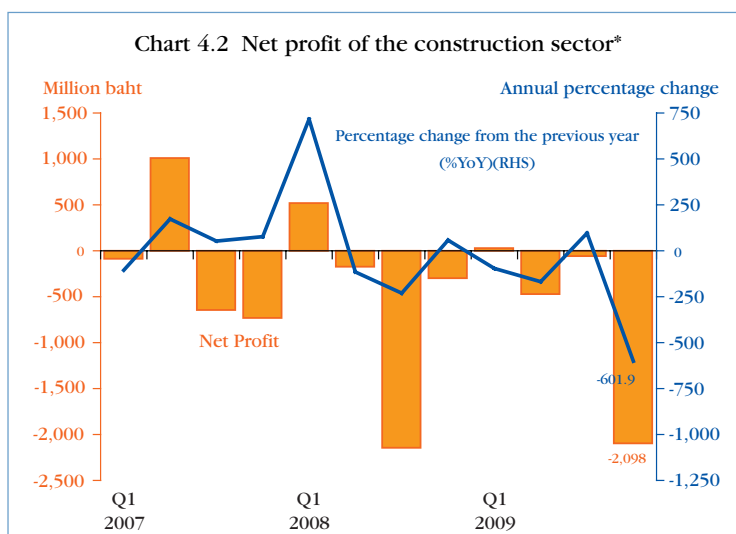
In 2009 Q4, the performance of most non-financial companies listed on the Stock Exchange of Thailand improved in line with the economic recovery. Corporate profitability and ability to service debt were sound, as reflected by the median estimates of operating profit margins and interest coverage ratios which stood higher than the pre-crisis levels at 6.6 and 3.7, respectively. Meanwhile, both current liquidity and the debt-to-equity ratio picked up slightly from the previous quarter.

In 2009 Q4, the performance of the corporate sector continued to improve from the previous quarter on the back of the economic recovery.

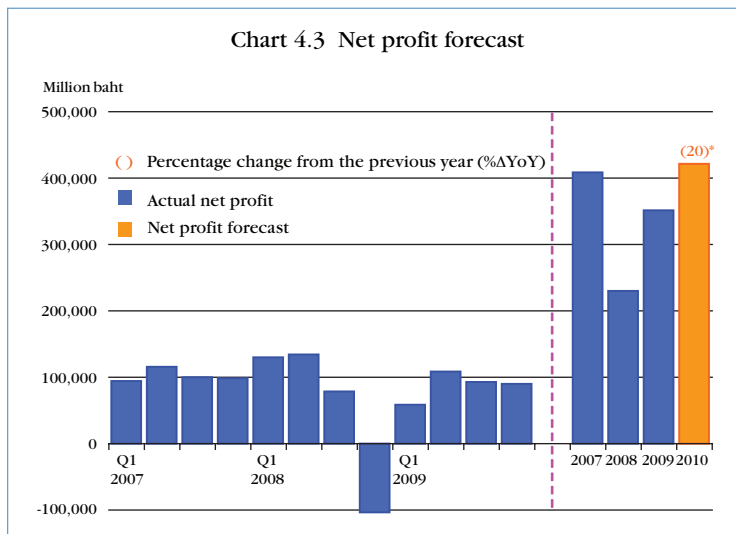


Note: * Each bar depicts an interquartile range, where upper and lower bounds represent the 25th and 75th percentiles, respectively. The symbol + indicates the median.
 **Average 2000 Q1 - 2007 Q4
 Source: Stock Exchange of Thailand, calculations by Bank of Thailand

Overall, most business sectors experienced continued profit improvement with the exception of the construction sector which suffered large losses. The difficulties in this sector were due partly to the suspension of several large-scale investment projects in the Map Ta Phut industrial area and the delayed implementation of the fiscal stimulus package, both of which warrant continued monitoring.



Note: *Sum of net profits of listed companies on the Stock Exchange of Thailand in the construction sector.
 Source: Stock Exchange of Thailand, calculations by Bank of Thailand



Note: *April 2010 estimates

Source: Stock Exchange of Thailand and Securities Analysis Association, calculations by Bank of Thailand

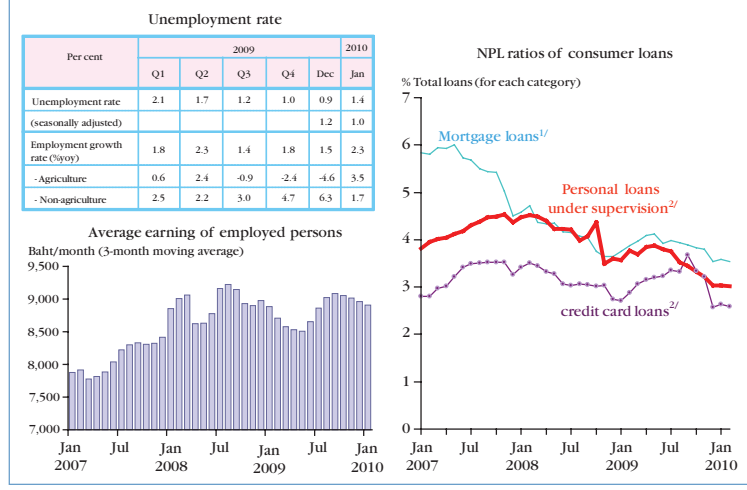
Going forward, the overall performance of the non-financial corporate sector is expected to improve further, as reflected by the Securities Analyst Association Consensus as of April 7, 2010, which showed an average net profit growth of non-financial listed companies in 2010 of 20 per cent from the previous year. Nevertheless, the political unrest that intensified in April, the overhanging Map Ta Phut problem, and the sustainability of the global economic recovery represent major risks to corporate-sector performance and stability in the period ahead.

Household sector

The recent rebound in the labour market effectively reduced risks to household income and employment and boosted households' ability to service debt. The latter was evidenced by the continuous decline in both the NPL and the delinquency (one to three months past due) ratios of mortgage and credit card loans in 2010 Q1.

Risk to household employment declined while household's ability to service debt improved.

Chart 4.4 Indicators for household sector



Source: National Statistical Office

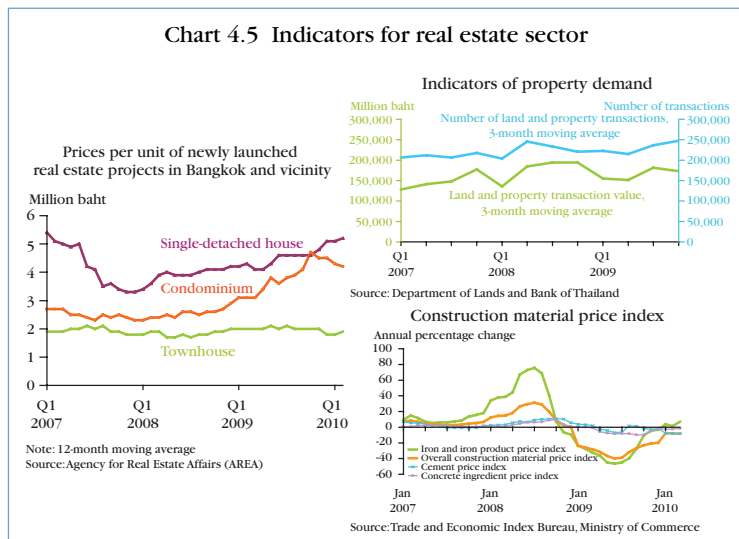
Note: ^{1/} Commercial banks' loans
^{2/} Total loans from commercial banks and non-banks
Source: Bank of Thailand

Going forward, the MPC regards the rising costs of living together with the draught that affects crop production as potential risks to future income and debt serviceability of households, particularly those in the agricultural sector.

Real estate sector

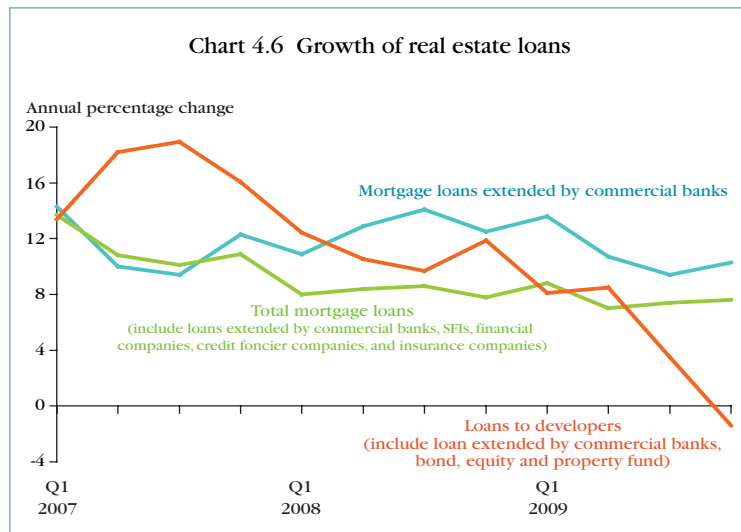
The ongoing economic recovery and the expiration of the government's measures to stimulate the real estate sector^{1/} resulted in an acceleration of residential property sales in 2010 Q1. However, correspondences^{2/} with property developers revealed that the increased housing demand was still driven by fundamentals, with limited speculation, if any.

^{1/} The reduction of fee and special business taxes expired in March 2010 while the tax reduction for home buyers will expire in May 2010.
^{2/} The Economic/Business Information Exchange Programme between the Bank of Thailand and the businesses sector.



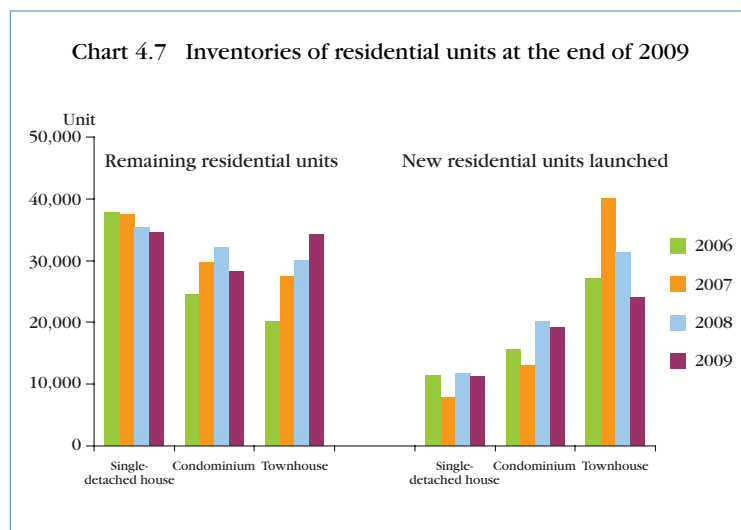
The MPC judges that the risk of a real estate bubble remains low. Despite trends of increasing land and construction material prices and higher operating costs of developers following the end of the government's real estate measures, residential property prices are expected to rise only moderately (except for new residential properties along the BTS skytrain routes where land prices are high). Keeping pressure on property prices are the large existing inventories and new supplies of low-income properties under BOI investment projects and the National Housing Authority's Eua-Arthorn housing projects for low-income residents.

Risk of a bubble in the real estate sector remains low.



Source: Bank of Thailand

Moreover, loans to real estate developers, which were a major factor fueling bubbles in the past, remained subdued. The continued moderation in funding for developers via bank loans and corporate debentures suggested that there would be limited amount of new supplies, particularly for projects with dependence on external financing, in the short term. Meanwhile, the economic recovery has improved home buyers' ability to service debt, as reflected by their lower delinquency ratios.



Source: Agency for Real Estate Affairs (AREA)

While there are not yet signs of bubbles in the real estate sector, the MPC notes the risk of an oversupply in the townhouse segment where continued increases in inventory may hamper the ability to service debt of developers going forward. Moreover, the protracted period of eased monetary condition and the economic upswing may increase the probability of the emergence of a property market bubble. For these reasons, the MPC will continue to monitor and assess these risks closely.

Financial institutions

In 2009 Q4, the banking sector remained healthy, as reflected by its BIS ratio which stood well above the minimum requirement of 8.5 per cent. Meanwhile, the sector's liquidity further improved and its profitability was close to the previous quarter despite the increase in non-interest expenses. All of these should help the Thai banking sector withstand various future shocks and support the ongoing economic recovery.

The commercial banking system's operating performance and capital position remained sound.

**Table 4.1 Thai Bank's Financial Soundness Indicators
(at the end of 2009 Q4^{1/})**

Key indicators (%)	2008		2009			
	Q3	Q4	Q1	Q2	Q3	Q4
1. Capital adequacy						
1.1 Regulatory capital to risk-weighted assets (8.50) ^{2/}	15.3	13.9	14.7	15.6	16.1	15.8
1.2 Regulatory tier 1 capital to risk-weighted assets (4.25) ^{2/}	11.9	10.7	11.1	11.5	12.1	11.7
2. Asset quality						
2.1 Non-performing loans to total loans	6.5	5.7	5.9	5.8	5.7	5.3
3. Earning and profitability						
3.1 Return on assets (ROA)	1.2	1.0	0.9	0.9	1.0	1.0
3.2 Interest margin ^{3/} to gross income ^{4/}	73.9	74.1	70.9	69.5	69.2	69.4
3.3 Non-interest expenses to gross income	53.5	55.2	58.0	55.8	55.5	56.8
4. Liquidity						
4.1 Liquid assets ^{5/} to total assets	18.7	17.9	18.9	19.3	18.6	19.4
4.2 Liquid assets to short-term liabilities ^{6/}	24.4	23.6	24.8	25.5	24.8	26.2
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

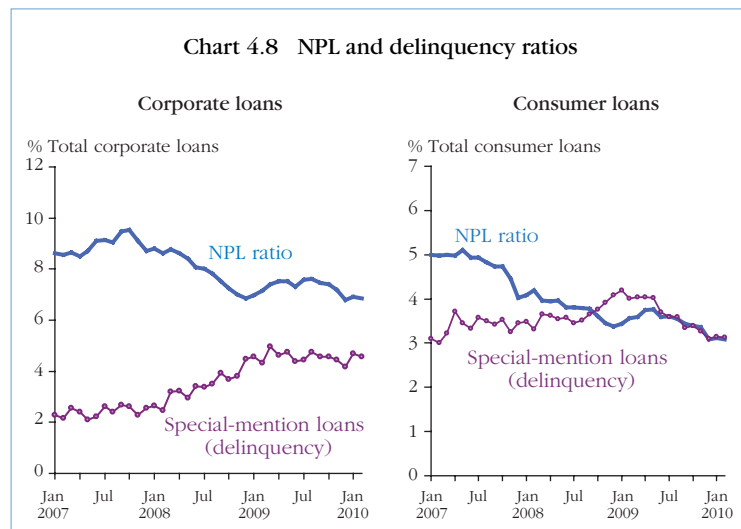
5/ Liquid assets = Cash and deposits + Securities purchased under resale agreements + Investment in securities (net)

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

Source: Bank of Thailand

Risk to credit quality decreased in line with the economic recovery.

Risk to credit quality of Thai banks, for both corporate and household loans, decreased during the past few months in accordance with the economic rebound. The NPL and the delinquency ratios stayed at low levels after a material decline in the earlier period. Nevertheless, the MPC will continue to pay close attention to the sustainability of the economic recovery which is the main risk to financial stability as well as to banks' credit standards which in certain areas may have become too loose.



Source: Bank of Thailand

External sector

External stability remained strong.

Thailand's external stability remained strong, as reflected by the continued current account surplus and a high level of international reserves. While the ratio of reserves to short-term debt experienced some decline, its level remains high. More importantly, most of the increases in short-term debt were mostly very short-term inter-company loans between foreign financial institutions and their parents for the purpose

of foreign currency swaps transactions, and hence were of little risk. Overall, the MPC judges that Thailand's strong external position should help cushion the heightened risk from possible increases in international capital flow volatility in the period ahead.



Source: Bank of Thailand

In summary, even though the Thai economy has shown resilience to the crisis which lent support to overall financial stability conditions, the MPC judges that the ongoing domestic uncertainties especially the political unrest that could undermine the private sector's confidence and the tourism sector, together with the still fragile global recovery, may weaken Thailand's financial stability in the period ahead. At the same time, the continued low interest rate environment may also lead to buildups of financial imbalances. The MPC will therefore continue to closely monitor these developments.

Thailand's Financial Stress Index

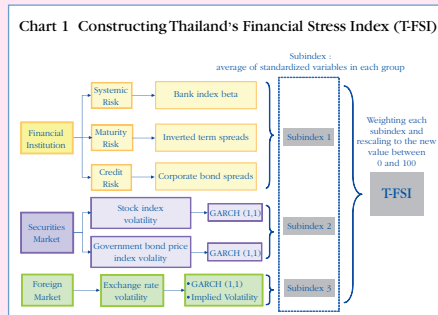
The recent global financial turmoil has prompted policy makers and economists around the world to pay closer attention to the linkages between financial system risks and the real economy. Against this backdrop, the Bank of Thailand has developed Thailand's Financial Stress Index (T-FSI) to monitor the risks in the Thai financial system and to gain a deeper understanding of the causes and consequences of these risks. The current T-FSI is an improvement of an earlier index that appeared in the October 2009 *Inflation Report* with coverage extended to before the 1997 crisis and with compositions that better reflect the structure of the Thai financial system.

Construction of the T-FSI

The T-FSI is calculated from monthly data series dated back to January 1996 that reflect the risk to the functioning of the financial system in six areas: (1) the bank index beta, (2) inverted term spreads, (3) corporate bond spreads, (4) stock index volatility, (5) volatility of the government bond price index, and (6) exchange rate volatility.

Data	Description	Meaning and Purpose
Bank index beta	Covariance between the banking stock index and the overall stock market index relative to overall market volatility	Volatility/risk in the banking sector relative to that in the overall market
Inverted term spreads	Difference between short-term (3-month) and long-term (10-year) yields on government issued securities	A proxy of banks' profitability given economic outlook and ability to issue short-term bonds or deposits for long-term investments or loans; Also a proxy of banks' maturity risk
Corporate bond spreads	Weighed average between AA and BBB corporate bond spreads	A proxy of banks' corporate-sector credit risk
Stock index volatility	Volatility derived from GARCH(1,1)	Financial market risk and uncertainty due to stock market volatility
Government bond price index volatility	Volatility derived from GARCH(1,1)	Financial market risk and uncertainty due to bond market volatility
Exchange rate volatility	Volatility derived from GARCH(1,1) and implied volatility	Financial market risk and uncertainty due to foreign exchange volatility

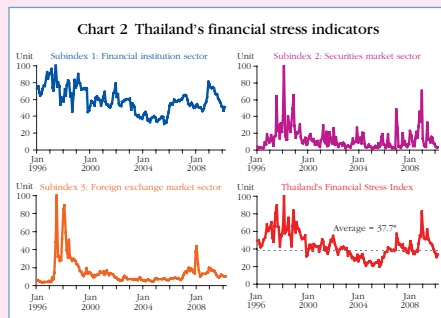
The construction of T-FSI starts with the standardization of each of the above components. In the second step, the standardized components are grouped into three categories - financial institutions, the securities market, and the foreign exchange market. A sub-index for each category is obtained by averaging the respective components. Next, a preliminary T-FSI is computed from a weighted sum of the three sub-indices, with the financial institutions sub-index receiving the largest weight followed by the securities market sub-index and the foreign exchange market sub-index. Finally, the preliminary index is re-scaled to range from 0 to 100, with a higher value indicating increasing stress level.



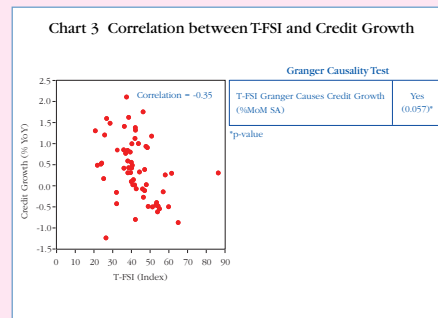
Using the T-FSI

Because each financial crisis may not have the same causes, the T-FSI, which is made up of several risk indicators that affect the functioning of the financial system, can help explain the causes of each crisis in a comprehensive manner. At the same time, the T-FSI may be used to identify the risks to the intermediary role of financial institutions. Indeed, statistical tests show that the T-FSI has significant negative correlation with as well as Granger causes commercial banks' credit growth. Therefore the acceleration of the T-FSI both reflects increasing risks in the financial system and is consistent with a reduction in bank lending.

An examination of the movements of the T-FSI from January 1996 to present shows that the eruption of the global financial crisis in 2008 caused Thailand's financial system stress to increase noticeably from October to December 2008 when the T-FSI peaked at 82.3. Nevertheless, compared with the levels seen during the 1997 crisis, the escalating stress was milder. Since then, Thailand's financial system stress has come down in tandem with the economic recovery and lower uncertainty. At 34.1, the index has now returned to its normal level, standing close to its pre-crisis average of 37.7 between 2000 and 2007.



Note: Average January 2000 - December 2009
Source: Calculations by Bank of Thailand



Source: Calculations by Bank of Thailand

An analysis of the T-FSI sub-indices finds that the impact of the global financial crisis concentrated on the financial institutions system and the securities market. While there were some signs of stress in the foreign exchange market, the impact was very mild which stood in sharp contrast to 1997 when the foreign exchange market was severely affected. In addition, this time the stress occurred first in the securities market before spreading to the financial institutions, which was the exact opposite of the 1997 crisis.

In summary, the T-FSI is a useful tool for measuring financial stress that may disrupt the provision of financial intermediation services by the financial system. In addition, analysis of its sub-indices helps understanding of the causes of financial crises that occur at different times.