I. Overview

Taiwan's financial system remained stable

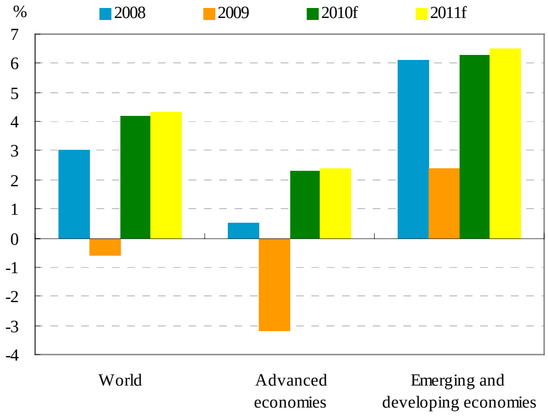
In 2009, the health of Taiwan's financial system was restored after experiencing the temporary effects of the global financial turmoil in the second half of 2008. Financial markets, particularly the stock market, improved. The profitability of domestic financial institutions bounced back sharply, while asset quality remained sound. The resilience of the financial sector against risks increased, supported by the fact that capital levels held by financial institutions, except for a few domestic banks and life insurance companies, were adequate and continued to rise. Throughout this period, payment and settlement systems operated smoothly. This, coupled with the introduction of a new mechanism in the securities settlement system for the stock exchange, contributed to reinforced safety and efficiency in settlements. The rebound in domestic and international economic activity, paving the way for a stabilizing global financial system, mitigated credit and market risks in Taiwan's financial system. Nevertheless, the new challenges emerging from easing restrictions on cross-strait banking activities and investments, together with the concentration of credit risks in the banking sector, warrant continued monitoring.

Global recovery has evolved better than expected and the financial system was stabilizing

Global recovery was stronger than expected, along with receded inflationary pressures

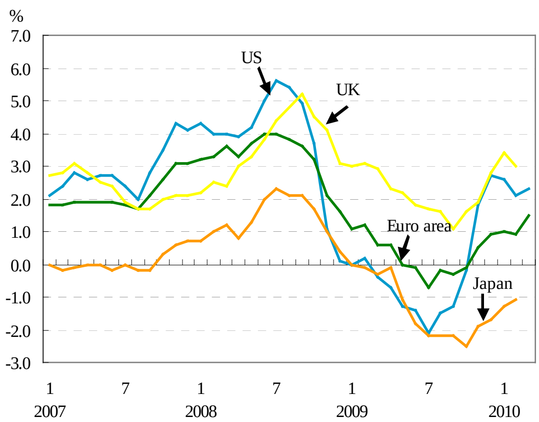
In the first half of 2009, global output suffered from a sustained downturn. In the second half of 2009, however, the declines in output for major economies moderated or even rebounded to positive growth, boosted by the emerging effects of expansionary fiscal policies and easy monetary policies. Reflecting this, the world economy gradually recovered at a stronger-than-expected pace. According to the International Monetary Fund (IMF), the growth rate of the world economy dropped sharply to -0.6% in 2009 from 3.0% a year earlier. In 2010, the global economy is projected to experience an ongoing recovery with a growth rate of 4.2% and further to expand by 4.3% in 2011.[1] The real economy has begun to rebound from a deep trough but the speed of recovery has varied from region to region. Economic activity in advanced economies has turned to a favorable condition, but the recovery is proceeding at a tepid speed. At the same time, economic growth has rebounded strongly in emerging and developing economies, where emerging Asia has been the most outstanding. This robust performance has mainly been underpinned by sharp growth in domestic demand and the normalization in global trade (Chart 1.1).

Chart 1.1 Global economic growth rates



Note: Figures for 2010 and 2011 are IMF estimates.
Source: IMF, "World Economic Outlook," April 2010.

Chart 1.2 Consumer price inflation rates in major economies



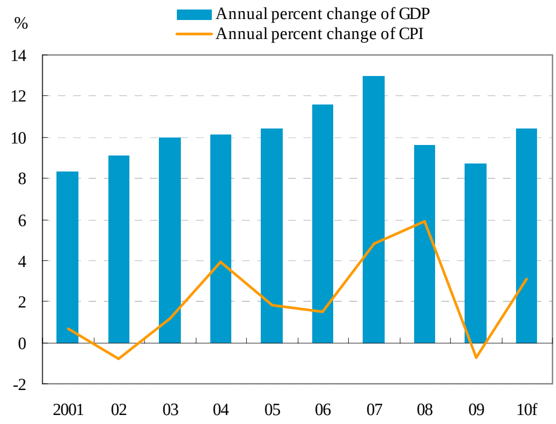
Note: Figures for the euro area are based on Harmonised Index of Consumer Prices (HICP) inflation rate. The others are based on consumer price index (CPI) inflation rate.
Sources: BLS and DataStream.

In the first three quarters of 2009, the headline inflation rates (consumer price index, CPI) in most economies tracked downwards. However, a surge in consumer prices with the global economic recovery encouraged the rebound of the CPI inflation rate in 2009 Q4 (Chart 1.2). The IMF forecasts the global CPI inflation rate is expected to bounce back to 3.67% in 2010, following an inflation rate of 2.45% in 2009. Moreover, many central banks stopped cutting policy rates from the second half of 2009 onwards. The reason behind this was that the credit crunch in global financial markets was relieved, a sustained global economic recovery was underway and historically low interest rates existed in many countries. Some central banks (such as those in Australia, Norway, Israel, Malaysia and India) even started to raise their policy rates in view of subdued downside risk.

[1] IMF, "World Economic Outlook," April 2010.

China's economic growth accelerates, while monetary policy turns to a tightening stance due to credit expansion and asset price boom

Chart 1.3 Economic growth rate and CPI inflation rate in China



Note: Using Global Insight projection for economic growth and IMF projection for CPI inflation rate in April 2010.
Sources: National Bureau of Statistics of China, Global Insight and IMF.

Underpinned by a series of economic stimulus measures, China, a country that in recent years has established increasingly closer economic and trade links with Taiwan, has experienced a rapidly accelerating economy from the second half of 2009 and registered an economic growth rate of 8.7% for the whole year. Global Insight projects China's economic growth will further move up to 10.4% in 2010. [2] Downward pressure occurred in the CPI inflation rate in the first three quarters of 2009 but has been relieved since November of the same year. According to IMF statistics, the CPI inflation rate in China is expected to bounce back to 3.1% in 2010 from -0.7% a year earlier[3] (Chart 1.3).

Following the People's Bank of China (PBC) initiating extremely easy monetary policies from September 2008 onwards, the surge in government public investments spurred expanding growth in bank credit. As a result, there was an acceleration of credit expansion. In addition, excessive surplus capital inflows to the stock market and the real estate market fueled a surge in equities and property prices, raising the attendant risk of asset price bubbles. Addressing the rapid expansion in credit, the Chinese government successively implemented measures to strengthen the monitoring of bank loans and to improve the soundness of risky assets from the second half of 2009. The PBC also substantially contracted market liquidity from January 2010 onwards through some policy actions, including: (1) raising the reserve requirement ratio for financial institutions, (2) conducting open market operations, and (3) raising the interest rate of issuance for central bank notes. These measures signal that monetary policies are shifting toward a tightening stance.

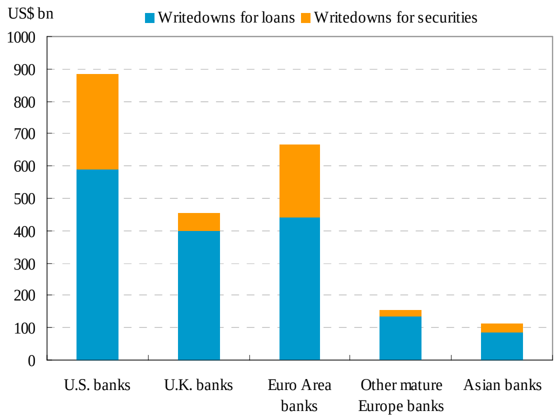
Surging sovereign risks could spread to the banking system, while the financial system has experienced a period of restoration

[2] Global Insight Estimate in April 2010.
[3] IMF, "World Economic Outlook," April 2010.

In 2009, with economic fundamentals improving and substantial public support remaining in place, the financial system resumed its resilience against risks as global financial markets rebounded sharply from deep troughs and overall systemic risks were mitigated.

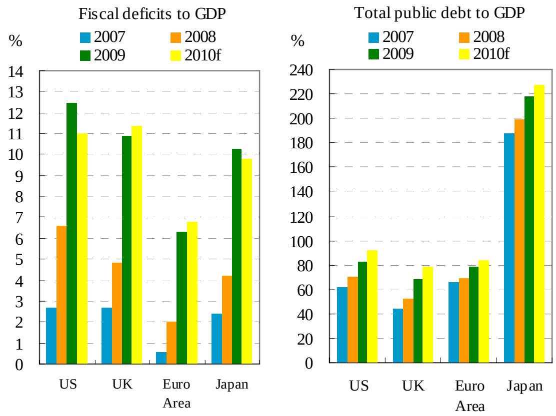
The health of most banks was restored and their capital conditions also improved markedly. In April 2010, the IMF revised downward its forecast for global asset writedowns to US$2.3 trillion or so.[4] In comparison, banks in the US, the UK and the euro area suffered larger losses than other areas (Chart 1.4). Moreover, many large banks may face refinancing pressures as their massive debt is due to mature in the coming three years. Concurrently, banks will also face the rising pressure of recapitalization under the revision of the new capital accord (namely Basel II) framework. Furthermore, credit supply to households and the corporate sector in the US and European countries remains constrained owing to still-tightened lending conditions and weak credit demand. Small and medium enterprises (SMEs), especially, have suffered more pronounced impacts. Supportive measures from national governments are warranted.

Chart 1.4 Estimates of global asset writedowns



Note: "Other mature Europe banks" includes banks in Denmark, Norway, Iceland, Sweden and Switzerland. "Asian banks" includes banks in Australia, Hong Kong, Japan, New Zealand and Singapore.
Source: IMF, "Global Financial Stability Report," April 2010.

Chart 1.5 Fiscal deficit and public debt in major economies



Note: Figures for 2010 are IMF estimates.
Source: IMF, "World Economic Outlook," April 2010.

During the recent financial crisis, advanced economies sharply expanded the scale of government expenditure and debt with a view to rescuing financial systems and revitalizing their economies. As a result, public debt has soared and fiscal imbalances have deteriorated (Chart 1.5). The mounting sovereign risks could be transmitted to banking systems and across borders, compromising global financial stability. Since 2009 Q2, the renewal of risk appetite

[4] IMF's previous estimate of global asset writedowns in October 2009 was about US$2.8 trillion.

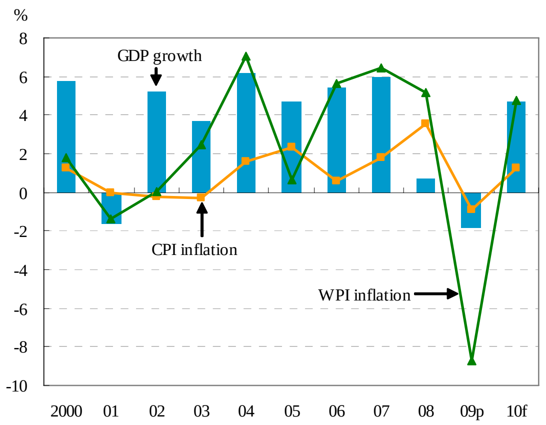
by global investors and low interest rates in advanced economies, together with better economic growth prospects for emerging markets, attracted massive capital flows into emerging economies for investing in securities. This not only results in the risks of inflation and asset price bubbles, but also increases appreciation pressures on specific currencies and fuels significant exchange rate volatility in some economies.

Domestic economy resumed growth alongside stable prices, and external debt servicing ability remained robust

The domestic economy dropped to a negative growth of -9.06% and -6.85% in 2009 Q1 and Q2, respectively. However, the downturn receded in Q3 and the growth rate turned positive in Q4. According to preliminary statistics released by the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan (DGBAS), annual economic growth registered -1.87% for 2009, 2.60 percentage points lower than the previous year. Looking ahead, the DGBAS predicts annual economic growth will increase to 4.72%[5] in 2010 (Chart 1.6). This is underpinned by the upward momentum in exports and private investment due to the sustained global economic recovery, as well as better growth prospects for private consumption.

With respect to prices, the falling international prices of crude oil and agricultural and industrial raw materials gradually rebounded as a result of the global economic recovery but still showed considerable falls when making year-on-year comparisons. The annual wholesale price index (WPI) dropped to -8.74% in 2009, far below 5.15% recorded a year earlier. Retail prices (such as domestic oil price) also reflected import costs, broadly trending downwards. This, along with slackness in effective demand, caused the CPI inflation rate to become negative for eleven consecutive months from February 2009. The annual CPI inflation rate in 2009 was -0.87%, lower than 3.53% registered a year earlier. It is expected that the prices of crude oil and agricultural and industrial raw materials will

Chart 1.6 Economic growth rate and inflation rate in Taiwan



Note: Figure for 2009 is preliminary, while figure for 2010 is DGBAS forecast.
Source: DGBAS.

[5] The figures are based on a DGBAS press release on 22 February 2010.

surge in 2010 given the ongoing economic recovery. The DGBAS projects the annual WPI and CPI inflation rates in 2010 to rise to 4.78% and 1.27%,[6] respectively (Chart 1.6).

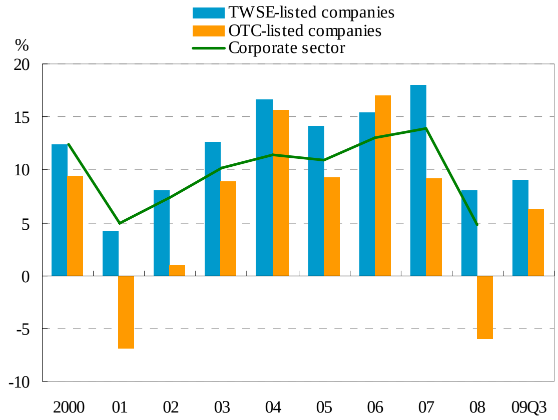
The balance of payments remained in surplus in 2009, fostering continued accumulation of foreign exchange reserves, which successively reached new highs. Foreign exchange reserves increased to US$355 billion at the end of March 2010, implying that Taiwan had a strong capacity to meet its payment obligations for imports and to service short-term external debt. Moreover, the ratio of external debt to annual GDP and to annual exports stood at 21.62% and 40.27%, respectively, at the end of 2009. This reflects that the external debt servicing capacity is sound. Nevertheless, fiscal deficits expanded substantially, driven by the implementation of measures aimed at revitalizing the economy and promoting consumption from September 2008. As a result, outstanding public debt had mounted.

Non-financial sectors

Corporate sector

In the first three quarters of 2009, the profitability for the Taiwan Stock Exchange (TWSE) listed and over-the-counter (OTC) listed companies rebounded (Chart 1.7), thanks to the ongoing global economic recovery. The average leverage ratio of both TWSE-listed and OTC-listed companies dropped due to contracting investments and decreasing liabilities. This reflects an improvement in their financial structures. Owing to diminished short-term liabilities and lower interest rates, a sound short-term debt servicing capacity is also reflected in the improved current ratio and interest coverage ratio.

Chart 1.7 Return on equity in corporate sector



Notes: 1. Return on equity = net income before interest and tax / average equity.
2. The data are on an annual basis as 2009 Q3 figures are annualized results.
3. Latest data for the corporate sector are as of the end of 2008, while that for TWSE-listed and OTC-listed companies are as of the end of 2009 Q3.
Sources: JCIC and TEJ.

The non-performing loan (NPL) ratio of corporate loans continued to decline, driven by two key measures: (1) the Bankers Association of the Republic of China launched the Debt Renegotiation Relief

[6] See Note 5.

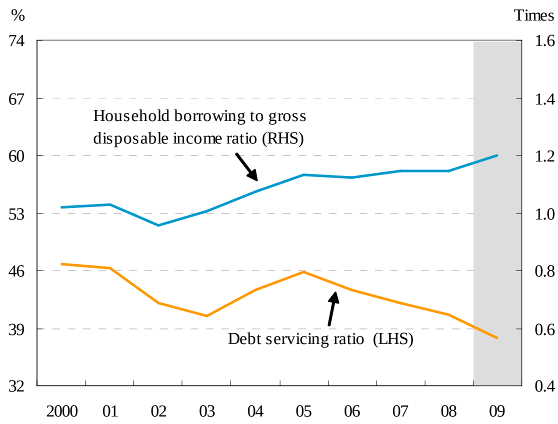
Program; and (2) the Small and Medium Enterprises Guarantee Fund offered more guarantee facilities to SMEs with difficulties in obtaining funding from financial institutions. In 2010, the continued implementation of these two measures, together with improved business conditions in the corporate sector on the back of a firmer global recovery, will help avert a sharp increase in the NPL ratio of corporate loans in the short run. Nevertheless, taking account of closer economic and trade relations between Taiwanese and Chinese corporations, operation risks arising from the following factors in China should bear close monitoring. These factors include: (1) tightening monetary policy; (2) increasing pressure for RMB appreciation; (3) adjustment in economic structures; and (4) shortage of labor supply.

Household sector

Household borrowing rebounded in 2009, supported by the bounce in the stock market and buoyant real estate market. The ratio of household borrowing to gross disposable income stood at 1.20 as of the end of 2009, up from 1.15 at the end of 2008, representing a heavier household debt burden. The main reason behind this was that household borrowing increased but gross disposable income contracted. Thanks to downward interest rates, household borrowing service and principal payments declined. This contributed to an improved short-term debt servicing capacity (Chart 1.8).

The NPL ratio for real estate purchases, the largest share of household borrowings, contracted in 2009, caused by a rebound in the real estate market. Reflecting this, the NPL ratio of household borrowings from banks kept falling and credit quality remained sound. The ongoing recovery in the domestic economy, along with the fact that regular earnings turned to positive growth from November 2009, favored to strengthen household debt servicing capacity. Nevertheless, the potential impacts on such capacity caused by a mounting unemployment rate and the possible reversal of interest rates warrant closer attention.

Chart 1.8 Household debt servicing ratio



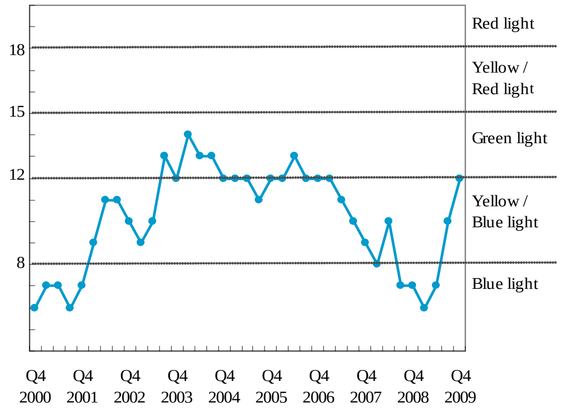
Notes: 1. Gross disposable income in shadow area is CBC estimate.
2. Debt servicing ratio = borrowing service and principal payment / gross disposable income.
Sources: CBC, JCIC and DGBAS.

Real estate market

Taiwan's real estate cycle indicators resumed under a green light, reflecting a stable market, in the second half of 2009 as the real estate market rebounded gradually (Chart 1.9). In 2009, transactions in the real estate market continued to expand and concentrated in Taipei City and Taipei County. Housing prices for existing buildings hit a new peak, while housing prices for new housing construction rebounded and nearly reached a historical high. Despite a contraction in the supply of new residential property, the number of vacant residential properties remained high.

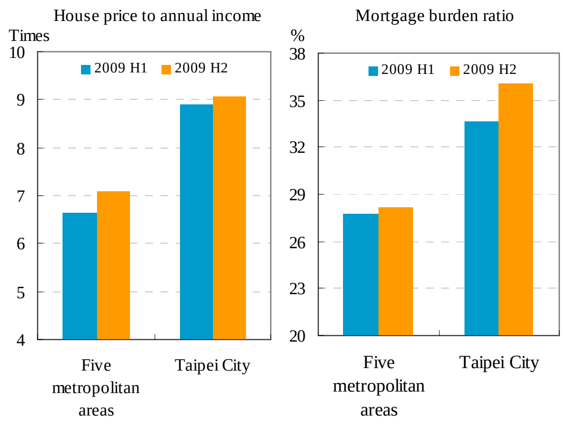
As a consequence of climbing housing prices and limited real income growth, the average house price to income ratio and the average mortgage burden ratio in five metropolitan areas have soared. The mortgage burden for homebuyers became heavier, particularly in Taipei City (Chart 1.10). Real estate-related loans resumed positive growth, while mortgage interest rates trended downwards but reversed to increase in February 2010.

Chart 1.9 Real estate cycle indicators



Source: "Quarterly Report of Taiwan Real Estate Cycle Indicators," Architecture and Building Research Institute, Ministry of the Interior (MOI).

Chart 1.10 House price to income ratio and mortgage burden ratio



Notes: 1. Mortgage burden ratio = monthly mortgage expenditure / household monthly income.
2. Five metropolitan areas refer to Taipei City, Taipei County, Taoyuan and Hsinchu City and County, Taichung City and County and Kaohsiung City and County.

Source: "Taiwan Housing Demand Survey Report," MOI.

Financial sectors

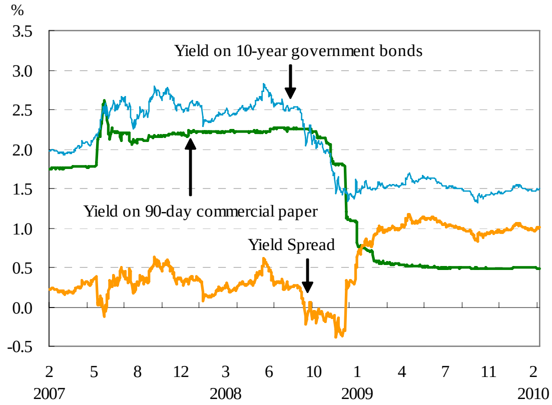
Financial market

Trading volume contracted in the bills market and the bond market, while yield spreads between long- and short-term rates stayed above 90 basis points

The outstanding amount of commercial paper issuance in 2009 contracted while some corporations decreased their needs of short-term financing and some turned to obtain their funds through short-term loans with low interest rates rather than issuing commercial paper.

Affected by this, the trading volume in the secondary bills market also shrank. In the bond market, outright transactions contracted notably and the trading amount of repo transactions also dwindled owing to diminishing bond holdings by dealers in bills finance companies and securities companies, as well as less demand for transactions from banks.

Chart 1.11 Yield spread



Note: Yield spread refers to yield on 10-year government bonds minus yield on 90-day commercial paper.
Source: Bloomberg.

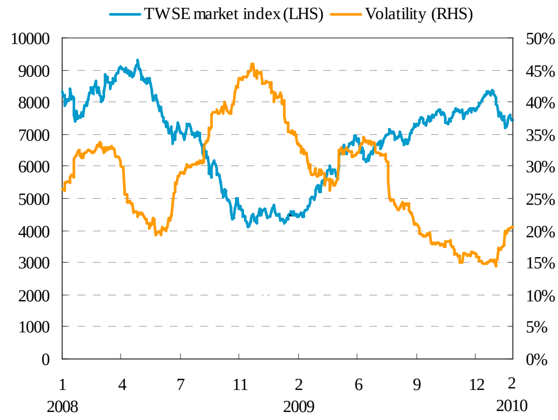
As for market interest rates, brought down by the Central Bank of the Republic of China (Taiwan) (CBC)'s successive rate cuts and the expansion in the scope of repo facility operations, short-term interest rates declined significantly. Meanwhile, bond yields remained fluctuating at a low range between 1.4% and 1.6%. As a result, yield spreads between long- and short-term rates reversed to positive and broadly stayed above 90 basis points (Chart 1.11). Financial institutions holding long bond positions may benefit from capital gains as a result of declining bond yields and widening spreads. However, if the trend of low interest rates is reversed, new bond holdings which financial institutions invested in during the period of low long-term interest rates will face higher interest rate risk.

Stock indices rebounded strongly, while trading value and turnover ratio increased dramatically

Underpinned by rising global stock markets, together with the emerging effects of easing restrictions on cross-strait securities investment and a massive net buying from foreign investors, the Taiwan Stock Exchange Weighted Index (TAIEX) of the Taiwan Stock Exchange (TWSE) market trended up from its lowest level on 20 January 2009 and stood at its highest level of 8,188 at the end of the year – a rise of 93%. This indicated that the domestic stock market outperformed most major stock markets around the world. The volatility in the TWSE market trended down substantially after hitting a new high in June 2009, revealing that risks in equity investments have mitigated. In January-February 2010, share prices in the TWSE market entered bearish territory with the slump in global stock markets. The TAIEX dropped by 9.18% in February 2010 from the end of 2009, whereas the volatility in the TWSE market reversed to an upward trend, illustrating how risks in equity investments have elevated somewhat (Chart 1.12).

As the TWSE market turned buoyant, fueled by a sharp rebound in share prices alongside the sustained net buying from foreign investors, the trading value in the TWSE market increased dramatically and its turnover ratio recorded a 5-year high. However, the turnover ratio and monthly trading value moved down in February 2010 since foreign investors turned to net selling and the stock market closed during the Chinese lunar new year holidays.

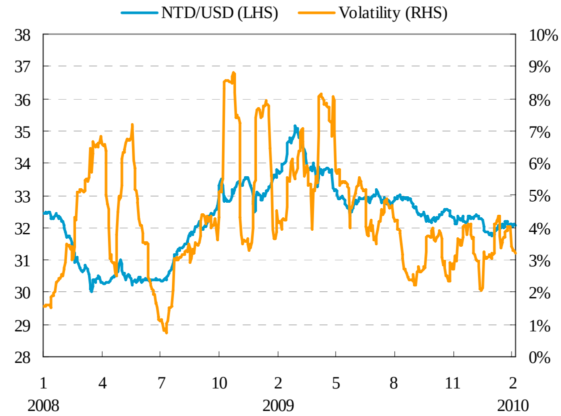
Chart 1.12 TWSE market index and volatility



Note: Volatility refers to the annualized standard deviation of 60-day daily index returns.
Sources: TWSE and CBC.

The NT dollar exchange rate reversed to appreciation but remained relatively stable compared to other currencies

Chart 1.13 Movements of NT dollar exchange rates against US dollar



Note: Volatility refers to the annualized standard deviation of 20-day daily returns.
Source: CBC.

Owing to shrinking exports and increasing hedging needs for US dollars, the NT dollar exchange rate against the US dollar showed a depreciating trend in 2009 Q1. Afterward, decreasing hedging needs for US dollars amid the revival of the global economy, coupled with capital inflows to emerging markets and high yield assets, caused the US dollar to weaken against most major currencies. This, along with the inflow of residents' overseas funds, resulted in an appreciation of the NT dollar, standing at 32.03 against the US dollar at the end of 2009, and appreciating slightly by 2.59% for the year as a whole. The NT dollar exchange rate kept appreciating until mid-January 2010 and then turned to a slight depreciation arising from stronger hedging needs for US dollars due to the unfolding sovereign debt crisis of some countries in the euro area, as well as capital outflows as a result of net selling of stocks by foreign investors (Chart 1.13).

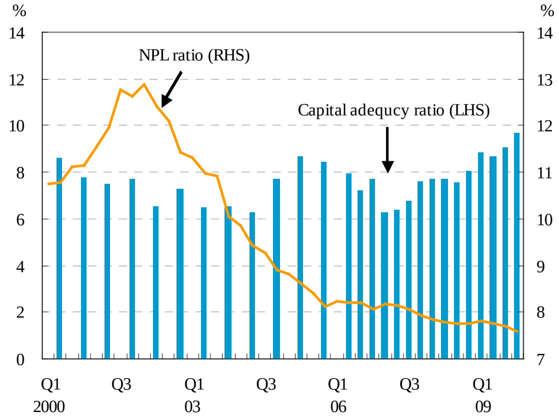
The fluctuation of the NT dollar exchange rate waned in the second half of 2009, while the annual average volatility stood at 4.56%. In January-February 2010, the volatility of the NT dollar exchange rate against the US dollar followed a more moderate trend and decreased further to 3.58% (Chart 1.13). The NT dollar exchange rate was relatively stable compared to other major currencies (such as the Japanese yen).

Financial institutions

Domestic banks

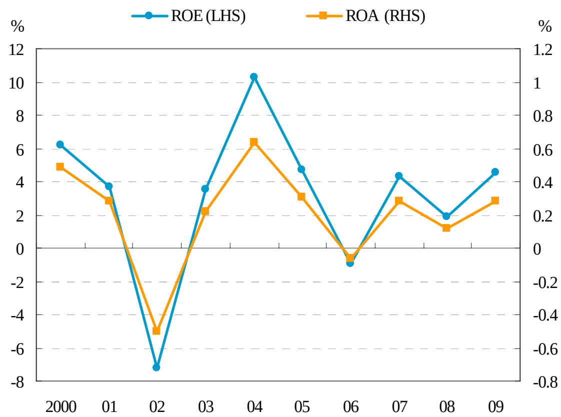
In 2009, the loans extended by domestic banks resumed positive growth. Credit risk in corporate loans decreased slightly, but credit risk concentration was still high. Although the NPL ratio kept declining to 1.15% at the end of 2009 (Chart 1.14), classified asset amounts and ratios were both higher than a year earlier due to a rise in “special mention loans” which are exempt from being reported as NPLs. This implies that asset quality declined somewhat.

Chart 1.14 NPL and Capital adequacy ratios of domestic banks



Note: The data for capital adequacy ratio are on a semiannual basis prior to June 2006 and on a quarterly basis beginning June 2006.
Source: CBC.

Chart 1.15 ROE & ROA of domestic banks



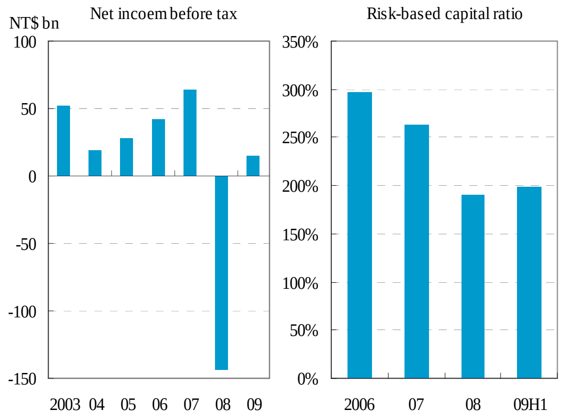
Note: ROE (return on equity) = net income before tax / average equity. ROA (return on assets) = net income before tax / average total assets.
Source: CBC.

The profitability of domestic banks rebounded significantly in 2009, while the average return on equity (ROE) resumed its level in 2007 before the financial crisis (Chart 1.15). Nevertheless, there are several factors that may impact their future profitability: (1) narrow interest rate spreads between deposits and loans; and (2) higher loan loss provision requirements in light of the revision of Taiwan’s Statement of Financial Accounting Standards (SFAS) No. 34. The overall liquidity risk for domestic banks was moderate against the backdrop of ample funds. Favorable financial market conditions contributed to the mitigation of market risks, whereas an ongoing rise in capital adequacy ratios increased the resilience of domestic banks against risks (Chart 1.14).

Life insurance companies

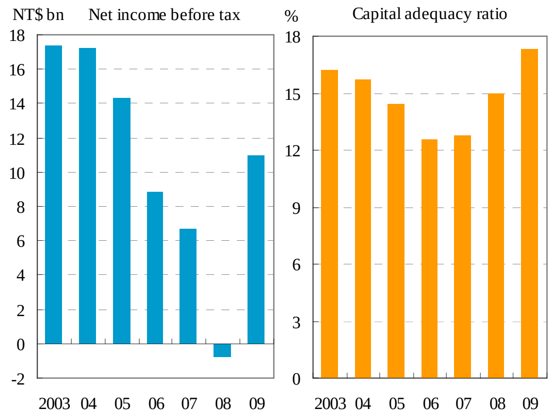
The profits of life insurance companies turned positive in 2009, revealing a marked improvement in operating performance. The average risk-based capital (RBC) ratio at the end of June 2009 ascended slightly, but still remained below the statutory minimum of 200%. Nevertheless, the overall capital adequacy is expected to improve, driven by a sharp increase in profitability in the second half of 2009 (Chart 1.16). The average investment return of insurance companies increased materially in 2009, thanks to improving international and domestic financial markets. However, it is hard for life insurance companies to promptly address the negative interest-rate spread problem given the prevailing global market condition of low interest rates. This, together with the fact that investment performance tends to be volatile due to the fluctuations in global financial markets, poses challenges to these companies.

Chart 1.16 Net income before tax and risk-based capital ratio of life insurance companies



Source: FSC.

Chart 1.17 Net income before tax and capital adequacy ratios of bills finance companies



Source: CBC.

Bills finance companies

In 2009, the total assets of bills finance companies continued to dwindle, mainly driven by the reduction of bonds and bills investments to alleviate the risk of interest rate reversals. Profitability saw a great improvement, supported by the significant reduction of funding costs on account of the CBC's rate cuts. Meanwhile, the average capital adequacy ratio of bills finance companies kept climbing (Chart 1.17) because of an obvious shrinkage in risky assets. The average debt to equity ratio continued to slide, reflecting an improvement in financial leverage. The credit quality of bills finance companies also remained sound.

From 2009 onwards, the liquidity risk of bills finance companies alleviated, but the maturity mismatch between their assets and liabilities still persisted along with a shrinking guarantee business. In order to reduce the liquidity risk of bills finance companies as well as prevent them from taking excessive credit risks, the Financial Supervisory Commission (FSC) successively amended related regulations aimed at reducing the ceiling on the ratio of main liabilities to net worth and the ratio of outstanding guarantees and endorsements to net worth. Against this backdrop, bills finance companies should search for new business niches for the sake of long-term performance.

Financial infrastructure

To reform financial regulation in Taiwan, a package of relevant policy actions has been launched since 2009. Except for the extension of the blanket deposit guarantee scheme to the end of 2010 that makes reference to other neighboring Asian countries or regions, there are two major areas of progress in financial regulatory development. One is the amendment of the regulations governing cross-strait financial activities and investments. The other is the signing of the Cross-strait Financial Supervisory Cooperation Memorandum of Understanding (MOU) between Taiwan and China. As Taiwan's financial institutions apply sound risk management and possess a leading edge in the field of financial innovation, coupled with the advantage of sharing the same language and culture with China, they could find niches for expanding business and creating revenues in the China market after the opening of cross-strait dealings relating to financial services. Nevertheless, those institutions should be vigilant regarding the potential risks that might emerge from accessing the China market and adopt appropriate business and risk management strategies to prevent the potentially unsafe and unsound operations that may exist in China from compromising the soundness of Taiwan's financial system. Furthermore, in response to the implementation of the amendment of Taiwan's Statement of Financial Accounting Standards (SFAS) No. 34 and the new SFAS No. 40, early planning and precautionary measures are warranted for Taiwan's financial institutions.

The implications of international financial reform for Taiwan

From the beginning of 2009, advanced countries (e.g. the US and the UK) and international organizations successively proposed a number of plans or recommendations on financial reform in hope of preventing future financial crises. Those recommendations not only focus on prevention of systemic risks and macro-prudential supervision, but also on the management of capital adequacy and liquidity risks.

The impact of the recent global financial crisis on Taiwan's financial system was moderate in comparison to other major economies. Nevertheless, the difference between Taiwan's current regulatory framework and the international proposals is under review in consideration of harmonizing with the future development of global financial reform and strengthening Taiwan's financial regulations. Among those differences, the following six issues seem to warrant continued improvement. These include:

- Enhancing macro-prudential supervision;
- Increasing the quality and level of capital requirements for financial institutions;
- Strengthening risk management in financial institutions;
- Reforming financial institutions' remuneration systems;
- Intensifying supervision and infrastructure for securitization and OTC derivatives; and
- Improving the surveillance and transparency of credit rating agencies.

The CBC and the FSC have deliberated on the above-mentioned recommendations and are considering the feasibility and alternatives of implementing them in Taiwan.