IV. Financial sectors

4.1 Financial markets

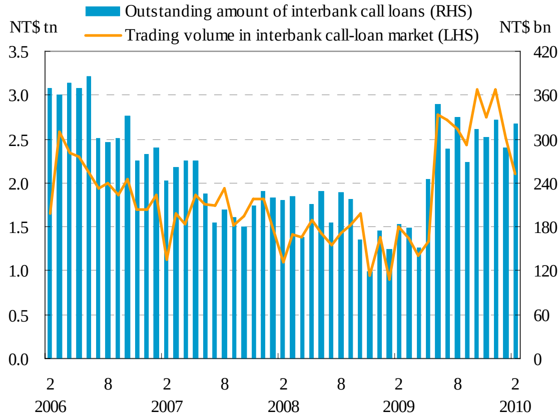
In 2009, the trading volume of interbank call loans increased materially; however, trading volumes contracted notably in the bond market and remained virtually unchanged in the bills market, while yield spreads between long-term and short-term rates swung between 90 and 117 basis points. As for the stock market, stock indices trended up from January 2009, with a marked increase in trading value and turnover. Nevertheless, the upward trend flattened out and stock indices fluctuated within a narrow range in January-February 2010. As for the foreign exchange market, the NT dollar exchange rate appreciated by 2.59% against the US dollar during 2009 and was relatively stable compared to the exchange rates of major currencies.

4.1.1 Money and bond markets

Trading volume picked up in interbank call loans but contracted notably in the bond market

The average monthly trading volume of interbank call loans in 2009 increased by 54.77% year on year. The average daily outstanding amount of interbank call loans in December 2009 also recorded an increase of 87.59% against same month of 2008, primarily because a large proportion of the funds remitted into Taiwan by foreign portfolio investors were channeled into interbank call loans from May 2009. In January-February 2010, the average trading volume and outstanding amount of interbank call loans remained at a high level, even though registering a slight decrease compared to

Chart 4.1 Interbank call-loan market



Note: Outstanding amount is the monthly average of daily data.
Source: CBC.

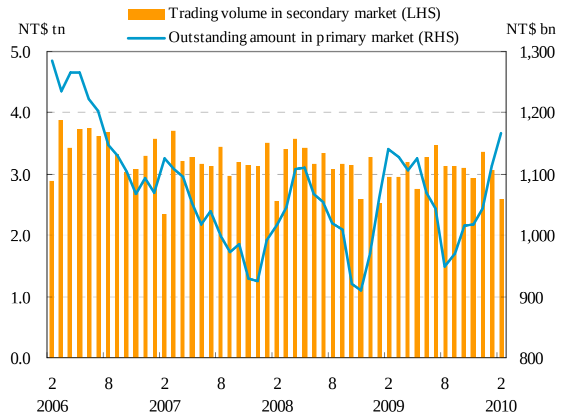
December 2009 (Chart 4.1).

In the primary bills market, the outstanding amount of bills issuance at the end of 2009 rose by 7.55% year on year, primarily because of an increase of NT$108.2 billion, or 101.3%, in the outstanding issuance of treasury bills. However, the outstanding amount of commercial paper issuance at the end of 2009 dropped by NT$39.8 billion, or 5.6%, compared to the end of 2008. The reasons behind this were that corporations decreased their needs of short-term financing and preferred obtaining loans from banks rather than issuing commercial paper due to the lower cost of bank loans.

As for the secondary bills market, its trading volume[40] was affected by a decrease in the issuance of commercial paper [41] and decreased by 3.86% year on year in 2009. In January-February 2010, driven by a rise in the outstanding issuance of commercial paper and treasury bills, the outstanding amount of bills issuance increased. Nevertheless, the trading volume of the secondary market remained at a low level (Chart 4.2).

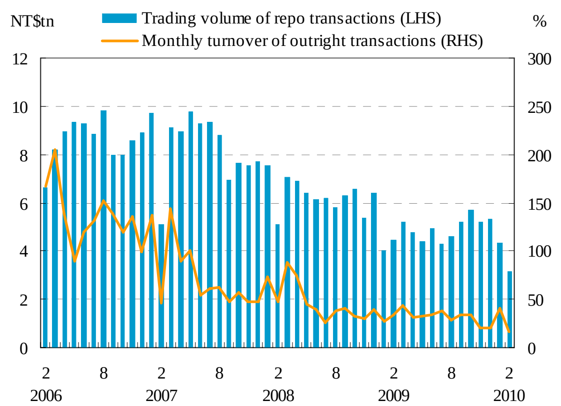
In the bond market, the trading volume for the year of 2009 decreased by 28.01% over 2008. Of the components, outright transactions and repo transactions decreased by 34.05% and 23.25%, respectively. Because of a diminishing investment willingness of bond dealers and less bonds being traded in the market as many financial institutions held large amounts of government bonds[42] and were reluctant to sell them into the market for the sake of effectively managing their idle funds, outright transactions dropped significantly and their monthly turnover ratio

Chart 4.2 Primary and secondary bills markets



Note: Excludes asset-backed commercial paper (ABCP).
Sources: CBC and FSC.

Chart 4.3 Bond transaction and turnover



Note: Monthly turnover = trading value in the month / average bonds issued outstanding.
Sources: CBC and FSC.

40 Source: Banking Bureau, Financial Supervisory Commission, Executive Yuan, R.O.C.
41 Although outstanding issuance of Treasury bills increased by 101.3%, the trading value of Treasury bills was less than 5% of the trading volume in the secondary market for bills. The effect of its change on the total trading volume is trivial.
42 The average ratio of holdings of central government bonds by banks in 2009 was 44.14%, an increase of 3.61 percentage points compared to the previous year.

fell to a trough of 20.51% in November 2009, a seven-year low. The trading volume of repo transactions in 2009 also slid owing to banks' lack of willingness to trade bonds due to ample funds and lower bond holdings of bills finance companies and securities firms. In January-February 2010, both the repo trading volume and outright turnover ratio in the bond market remained at a low level (Chart 4.3).

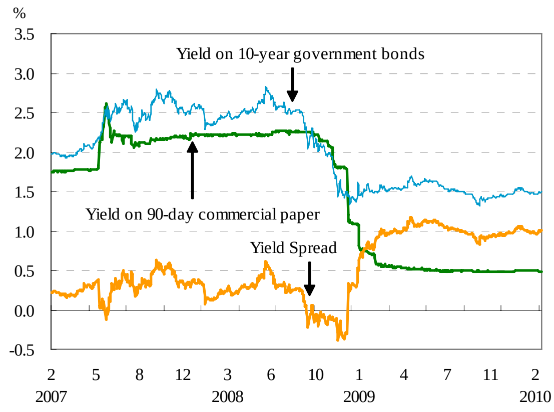
Yield spreads fluctuated between 90 and 117 basis points

In 2008 Q4, affected by the worsening financial crisis and slump in stock markets, investors sought a safe haven in bond markets, resulting in declining government bond yields. However, short-term rates remained at a high level during the same period. The outcome was the reversal of yield spreads between 10-year government bonds and 90-day commercial paper as the short-term rate became higher than long-term rate (Chart 4.4).

Entering into 2009, the CBC initiated interest rate cuts and expanded the scope of repo facility operations, resulting in a significant drop in short-term interest rates. However, bond yields continued fluctuating in a low range between 1.4% and 1.6%. As a result, yield spreads between short-term and long-term rates reversed to positive and stayed above 90 basis points, and hit a peak of 117 basis points in May 2009. In January-February 2010, due to the sluggish stock market, strong demand from insurance companies for long-term bonds and dealers' operations aimed at building up their bond positions, bond yields trended down and yield spreads between government bonds and commercial paper narrowed slightly (Chart 4.4).

Declining bond yields and a widening yield spread may generate capital gains for financial institutions holding long bond positions. However, if the trend of low interest rates is reversed, new bond holdings which financial institutions invested in during the period of low interest rates will face higher interest rate risk.

Chart 4.4 Yield spread



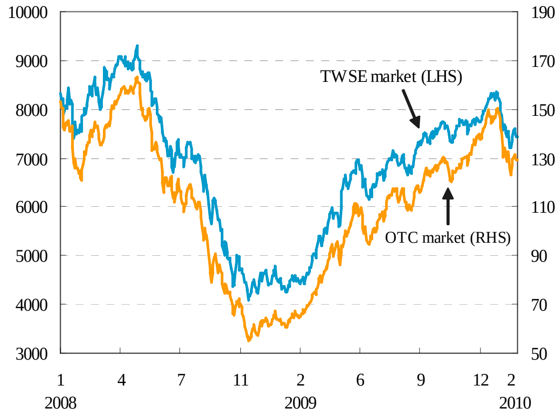
Note: Yield spread refers to yield on 10-year government bonds minus yield on 90-day commercial paper.
Source: Bloomberg.

4.1.2 Equity markets

Stock indices dropped after marked increases, while volatility rebounded slightly after sharp falls

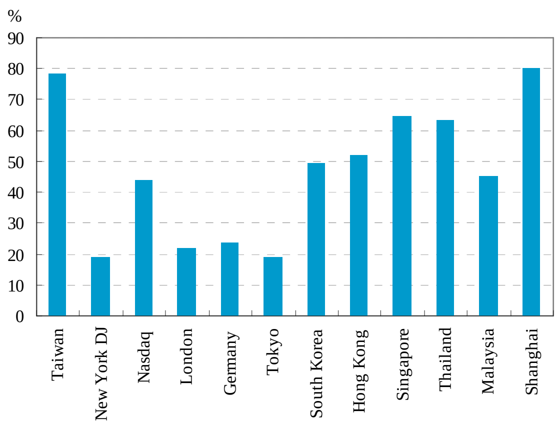
Amid the strengthening global financial and economic recoveries, the world's major stock markets began to trend up. Moreover, affected by the preliminary effects of easing restrictions on cross-strait securities investment and the signing of three Cross-strait Financial Supervisory Cooperation Memorandums of Understanding (MOUs), together with massive net buying from foreign investors, [43] the Taiwan Stock Exchange Weighted Index (TAIEX) of the Taiwan stock Exchange (TWSE) market climbed from its lowest point of 4,242 on 20 January 2009 to its highest point of 8,188 at the end of the same year, a rise of 93%. In January-February 2010, however, owing to the lower-than-expected economic growth in the US and the outbreak of the European sovereign debt crisis, the TAIEX index dropped to 7,436 at the end of February, a decrease of 9.18% compared to the high of last December. Meanwhile, Taiwan's GreTai Securities Market Index (GTSM Index) of the OTC market closely tracked the movements of the TAIEX, climbing to a peak of 150 at the end of 2009, an increase of 148.06%, after hitting a new low of 60 in January of the same year, and then falling to 129 at the end of February 2010, a decrease of 14% from the end of last December (Chart 4.5). Compared with major stock markets around the world, the Taiwan stock market increased by 78.34% in 2009, second only to the market in Shanghai (Chart 4.6).

Chart 4.5 Taiwan stock market indices



Sources: TWSE and GTSM.

Chart 4.6 Comparison of major stock market performances



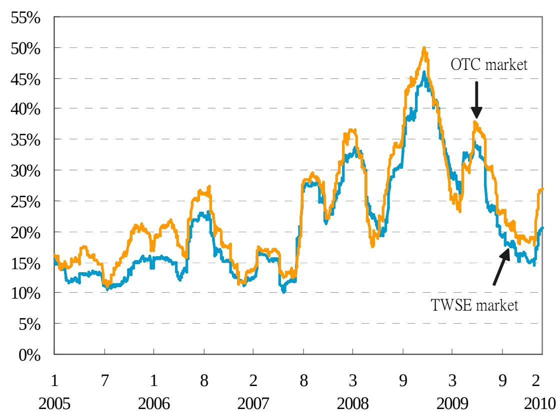
Notes: 1. Figures are for 2009.
2. Taiwan's data is for the TWSE market.
Source: TWSE.

[43] In 2009, foreign investors (foreign institutional investors, overseas Chinese, and foreign individual investors) were net buyers of NT$480.1 billion worth of securities in Taiwan, while net accumulated inward remittances of foreign investors increased by US$26.2 billion.

Broken down by sectors, most indices were in bullish territory in 2009 and half of them outperformed the TAIEX. The indices for the electronic products distribution sector and other electronics-related sector performed the best due to an increase in purchase orders, increasing by 161.02% and 149.51%, respectively, whereas the indices for the cement sector as well as the petroleum and gas sector experienced limited growth, increasing by more modest figures of 27.23% and 26.03%, respectively. In January-February 2010, most indices entered bearish territory following falls on international stock markets, while the indices for the plastic products sector and glass and ceramic sector performed well, with increases of 4.41% and 5.29%, respectively, at the end of February 2010 compared to the end of 2009. These two sectors resisted the downward trend due to soaring oil prices and the China government-funded project to expand construction materials demand in the country's vast rural areas.

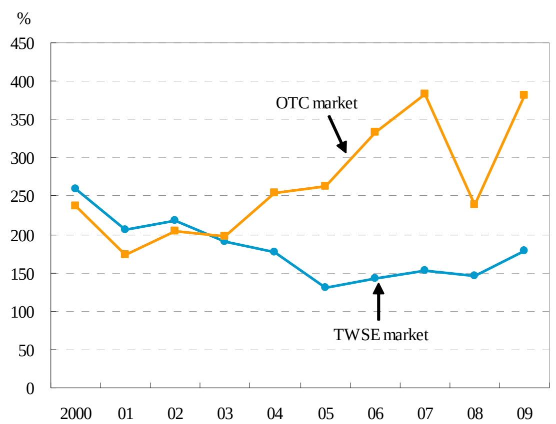
The volatility in the TWSE and OTC markets trended down and reached 14.86% and 18.24%, respectively, at the end of 2009, after hitting a new high in June 2009. This reflected the mitigation of risks in equity investments. However, as global stock markets got the jitters and slumped from the beginning of 2010, the volatility in the TWSE and OTC markets increased and stood at 20.50% and 26.95%, respectively, at the end of February 2010 (Chart 4.7), illustrating how risks in equity investments have increased somewhat.

Chart 4.7 Stock price volatility



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

Chart 4.8 Annual turnover ratio in Taiwan's stock markets

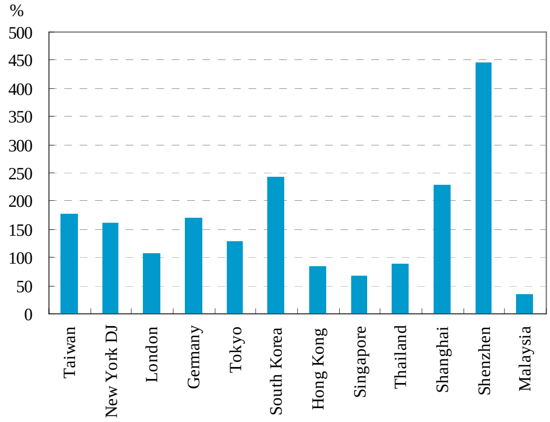


Sources: TWSE and GTSM.

Trading value and turnover ratio increased dramatically to hit 5-year high

The TWSE and OTC markets were active and saw significant increases in total trading values in 2009. The average monthly trading value on the TWSE market in 2009 was NT$2.47 trillion, an increase of 13.65% year on year, while its turnover ratio in terms of trading value in the same year increased and stood at 178.28%, touching a 5-year high (Chart 4.8). However, affected by foreign investors' net selling and Chinese lunar new year holidays, the turnover ratio and monthly trading value in the TWSE market in February 2010 moved in a downward direction. Furthermore, the trading value in the OTC market saw a significant increase in 2009. The trading value in the OTC market was NT$436.6 billion in 2009 and increased markedly by 59.46% year on year, resulting in a significant rise in the turnover ratio to 380.61%, which was much higher than the 238.71% posted last year (Chart 4.8).

Chart 4.9 Comparison of turnover ratios in major stock markets



Notes: 1. Figures refer to accumulated turnover ratios in 2009.
2. Taiwan's data is for the TWSE market.
Source: TWSE.

Compared to major stock markets around the world, the annual turnover ratio in the TWSE market in 2009 was lower than the neighboring stock markets in South Korea, Shanghai and Shenzhen, while approximately equal to those in New York's Dow Jones and Germany, but higher than those in London, Tokyo, Hong Kong, Singapore, Thailand and Malaysia (Chart 4.9).

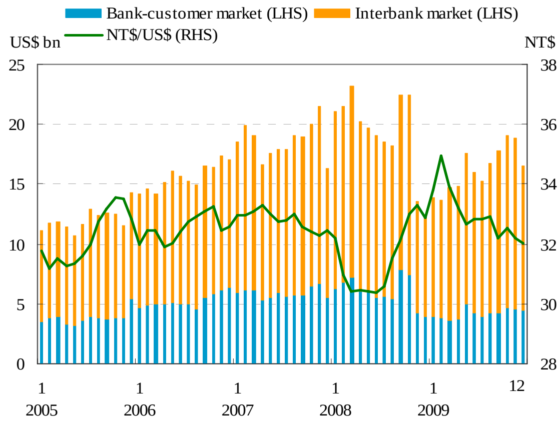
4.1.3 Foreign exchange market

The NT dollar exchange rate reversed to appreciation and trading volume increased slightly starting from 2009 Q2

Based on shrinking exports and increasing hedging needs for US dollars, the NT dollar exchange rate experienced depreciation in early 2009, once reaching 35 against the US dollar in early March. Afterwards, it turned to enter a period of appreciation mainly due to the weakening of the US dollar caused by capital inflows to emerging markets and high yield assets, as well as the inflow of residents' overseas funds caused by new policies of the government. The NT dollar exchange rate stood at 32.03 against the US dollar at the end of 2009, appreciating slightly by 2.59% compared to 32.86 at the end of 2008 (Chart 4.10). From early 2010, due to capital inflows by foreign investors, together with positive export growth, the NT dollar exchange rate kept appreciating, reaching a high of 31.755 against the US dollar in January. Later, owing to capital outflows by foreign investors and the increasing hedging needs for US dollars arising from the debt crisis of some countries in the euro area, it reversed to enter a period of depreciation and fell to 32.085 against the US dollar at the end of February. As for other key international currencies, the value of the yen went up as a result of the increasing hedging needs for international funds. However, Japan's decreasing trade surplus put more pressure for depreciation on the yen, causing the NT dollar to appreciate against the yen by 4.33% year on year at the end of 2009. Conversely, the NT dollar depreciated by 6.92% and 0.46% against the British pound and the euro, respectively, over the same period (Chart 4.11).

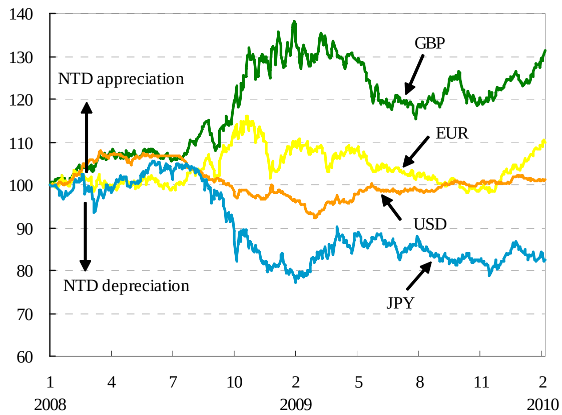
As a result of shrinking financial transactions caused by the global financial crisis and decreasing exports and imports caused by the global recession, the average foreign exchange daily trading volume fell to a new low of US$14.1 billion in 2009 Q1, after hitting a low point of US$16.1 billion in 2008 Q4, but saw a slight increase in 2009 Q2. Consequently, the average foreign exchange daily trading volume decreased by 16.24% year on year and registered US$16.2 billion in 2009 (Chart 4.10). A breakdown by counterparties shows that the average daily trading volume in the interbank market accounted for 74.12% of the total in 2009, while the bank-customer market made up a 25.88% share. As for types of transactions, spot trading accounted for 44.87% of the total, followed by foreign exchange swaps with 39.47%.

Chart 4.10 NT$/US$ exchange rate and foreign exchange market trading volume



Note: Trading volume is the monthly average of daily data, while exchange rate is end-of-period data.
Source: CBC.

Chart 4.11 Movements of NT dollar exchange rates against key international currencies

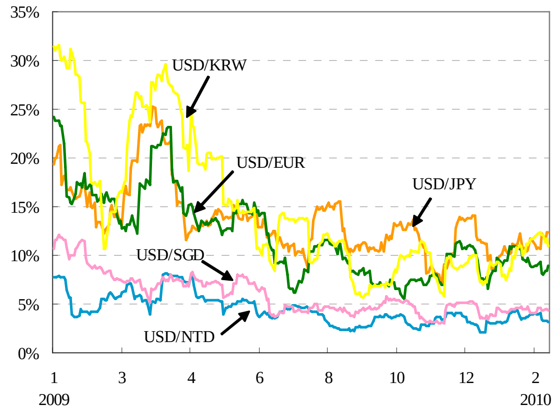


Note: 2 January 2008 = 100.
Source: CBC.

NT dollar exchange rate volatility remained relatively stable compared to other currencies

While the fluctuation of the NT dollar exchange rate increased slightly in the first half of 2009 before declining, the annual average volatility stood at 4.56% for the year as a whole. In January-February 2010, the volatility in the NT dollar exchange rate against the US dollar decreased further to 3.58%. The NT dollar exchange rate was relatively stable compared to the volatility in the exchange rates of major currencies such as the Japanese yen, euro, Korean won and Singapore dollar against the US dollar (Chart 4.12).

Chart 4.12 Exchange rate volatility of various currencies against US dollar



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

4.2 Financial institutions

This section analyses the relatively important financial institutions, including domestic banks, life insurance companies and bills finance companies.

4.2.1 Domestic banks

In the second half of 2009, the growth in loans extended by domestic banks returned to positive territory. Credit risk in corporate loans slightly decreased, but credit risk concentration was still high. Although the NPL ratio continuously decreased, special mention loans,[44] not reported as NPLs, rose and resulted in slight increases in both classified asset amounts and ratios, showing a slight decline in asset quality. The estimated Value at Risk (VaR) for market risk exposures decreased with limited influence on capital adequacy. Liquidity risk remained low as the banking system benefited from ample liquidity. The profitability of domestic banks rose substantially in 2009 compared to the previous year, and the average capital adequacy ratio continued to increase, strengthening the capability of domestic banks to bear risks.

[44] Special mention loans refer to:
(1) Loans for which borrowers' financial situations and debt repayment capacities are experiencing difficulties, and, upon agreement, are approved to delay principal repayments while interest has to be repaid on time;
(2) Loans for which borrowers applied for debt restructuring and repaid principal and interest as agreed, according to related rules; and
(3) Loans for which principal and interest are overdue by one to three months, or not yet due but already some poor credit exists.