I. Overview

Macro environmental factors potentially affecting financial sector

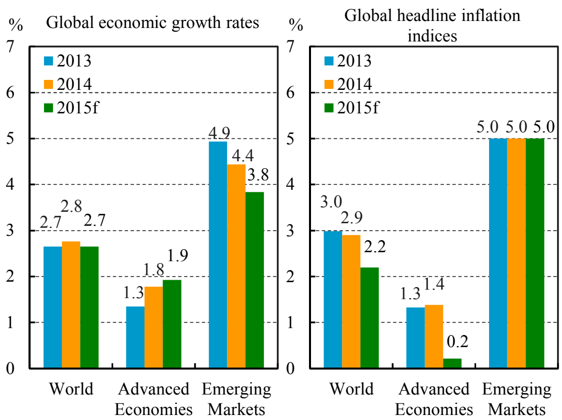
Global economy saw a moderate recovery, while international financial markets risks increased

Global recovery proceeded at a mild pace, and inflationary pressures receded

In 2014, global economic recovery remained modest with uneven prospects across the major economies. In the US, economic growth sustained, reflecting a resumed growth in private consumption and fixed investment. However, euro area growth remained weak despite it gradually shrugging off the shadow of the sovereign debt crisis. In contrast, Japan witnessed declining economic growth owing to an adverse impact on private demand following its sales tax hike. Meanwhile, growth momentum in emerging markets waned as exports were hampered by a subdued global recovery and the domestic demand in many of the economies fell short of expectations.

In 2015 Q1, US economic growth was weaker than expected owing to harsh winter weather and a strong dollar, while continued monetary easing policies gave impetus to growth in the euro area and Japan. However, recovery momentum in advanced economies was still not strong enough and growth in emerging markets decelerated distinctly. In this setting, IHS[2] predicts[3] world real gross domestic product (GDP) growth to decrease to 2.7% in 2015 from 2.8% in 2014. Real GDP in advanced economies is projected to slightly

Chart 1.1 Global economic growth rates and headline inflation indices

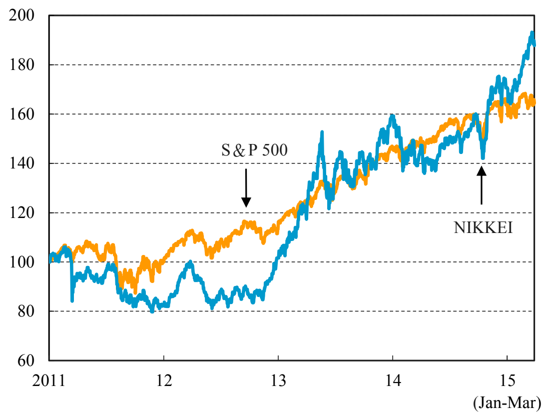


Note: Figures for 2015 are IHS estimates.
Source: IHS (2015/5/15).

[2] See Note 1.
[3] IHS estimate on 15 May 2015.

increase to 1.9%. The average growth rate in emerging economies is forecast to decline continuously to 3.8% (Chart 1.1).

Chart 1.2 Performance of equity indices of US and Japan



Note. January 2011 = 100.
Source: Bloomberg.

Regarding consumer prices, thanks to a fall in the international prices of crude oil and cereals, the global consumer price index (CPI) inflation rate dropped to 2.9% in 2014, slightly lower than the 3.0% recorded a year earlier. CPI inflation rates in advanced economies rose marginally, whereas the rates in emerging economies remained at the same level. IHS predicts the global headline inflation rate to keep decreasing to 2.2% in 2015, while the US and the euro area may both face the challenge of disinflation.

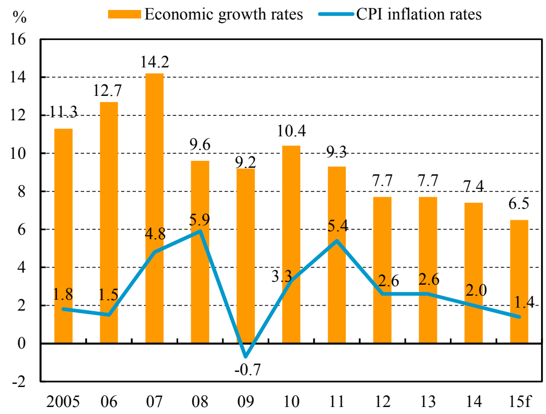
Financial stability risks have shifted from advanced economies to emerging markets

In 2014, the global economy recovered moderately, bolstered by continuous easy monetary policies in major advanced economies alongside more neutral fiscal policy relaxations that offset the adverse impacts of the economic slowdown in emerging economies. However, against the backdrop of a prolonged period of monetary policy easing and a low-interest-rate environment, herding among portfolio managers searching for yield has been rising and credit markets appeared to be undergoing structural changes. As a result, financial stability risks have shifted from advanced economies to emerging markets.

Financial markets in advanced economies had yet to fully stabilize in 2014. US share prices continuously hit new highs; however, credit risks increased, spurred by a rocketing rise in high-yield corporate bonds and leveraged loans. In Japan, the expansion of its monetary easing policy propelled a rise in Japanese stock prices (Chart 1.2) but correspondingly resulted in sharp depreciation of the yen, which may possibly inspire capital outflows and impact other emerging economies through its spillovers. Nevertheless, the euro area periphery economies kept facing the challenges of elevated government debt, high unemployment rates and mounting deflationary risks.

Financial risks in some emerging markets mounted. Among them, some economies suffering from high levels of external debt and some oil and raw material exporters have faced higher financial and economic risks. Meanwhile, Asian emerging economies with considerable capital inflows may encounter intense pressures on their financial markets in the event of a reversal to a massive outflow. In addition, some emerging economies still faced challenges derived from mounting enterprise leverage and worsening loan quality.

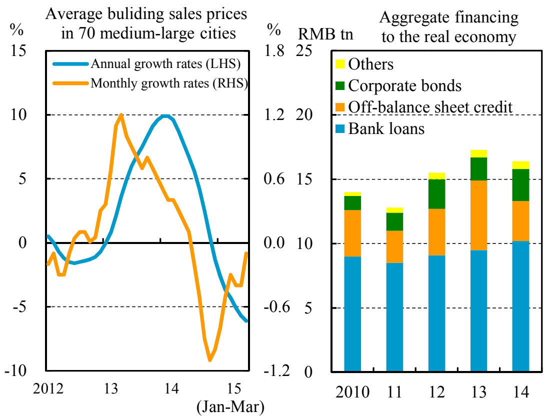
Chart 1.3 Economic growth rates and CPI inflation rates of Mainland China



Note: Figures for 2015 are IHS projections.
Sources: National Bureau of Statistics of China and IHS (2015/5/15).

China's economic growth momentum waned, while aggregate financing to the real economy slightly decreased

Chart 1.4 Mainland China's building sales prices in 70 medium-large cities and aggregate financing to the real economy



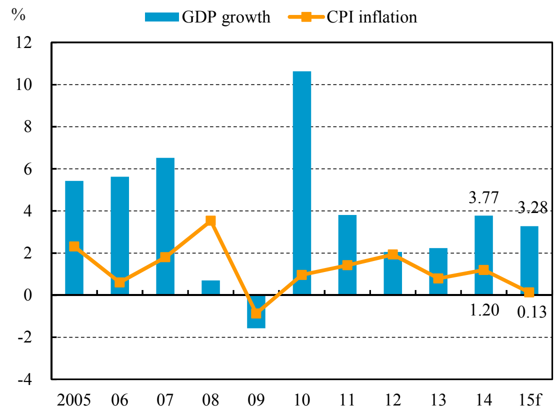
Sources: PBC, National Bureau of Statistics of China and Thomson Reuters.

Mainland China's economic growth rate dipped to 7.4% throughout 2014 from 7.7% a year before, driven by excess capacity in manufacturing and lackluster property markets. Against the backdrop of this "new normal"[4] economic situation, the authorities adjusted downwards Mainland China's target economic growth rate to 7%. However, IHS projects the economic growth rate to continue falling to 6.5% in 2015 as overcapacity and mounting property inventory problems are still lingering. Meanwhile, affected by sluggish domestic demand and falling international raw material prices, the CPI inflation rate of Mainland China stood at 2.0% in 2014, lower than the official goal of 3.5%. IHS projects the annual CPI inflation rate of 2015 to further decline to 1.4% (Chart 1.3).

[4] The term "new normal" refers to the economy entering an era of relatively slower growth, better structure and putting transformation momentum in place.

In view of adjustments in the property markets and waning investor confidence, real estate sales fell in 2014. The annual growth rate of building sales prices in 70 medium-large cities also reversed to decline from May onwards. To avoid the slumping housing prices jeopardizing economic growth, Mainland China's government successively took measures to ease purchase restrictions, aiming to stabilize housing prices. Meanwhile, aggregate financing to the real economy[5] in 2014 contracted to RMB16.4 trillion from the historical high of RMB17.3 trillion in the previous year, mainly resulting from a decline in off-balance sheet financing as Mainland China strengthened supervision on shadow banking and financial institution deleveraging (Chart 1.4). Moreover, various measures were successively launched by the central government in response to local government debt problems.

Chart 1.5 Economic growth rates and CPI inflation rates of Taiwan



Note: Figures for 2015 are DGBAS projections on 22 May 2015.
Source: DGBAS.

Domestic economy grew steadily, while consumer prices rose mildly

Bolstered by expanding exports, increasing private consumption and moderately growing investment, the annual economic growth rate registered 3.77% for 2014, higher than the 2.23% of the previous year. Meanwhile, domestic prices rose mildly throughout 2014, reflecting the fact that the average CPI inflation rate increased to 1.20% from the 0.79% recorded a year earlier (Chart 1.5).

So far in 2015, the global economic recovery has been less robust than expected. This, coupled with the localization of industry supply chains in Mainland China resulting in more competition for domestic companies, could impact on export growth. Moreover, food safety scandals continue to curb private consumption momentum. As a result, the DGBAS forecasts[6] Taiwan's economic growth rate to fall to 3.28% for the whole year. With global economic growth slowing down and the international prices of crude oil and cereals remaining low, the DGBAS projects the annual CPI inflation rate to post 0.13% (Chart 1.5).

Taiwan's external debt registered US$177.9 billion at the end of 2014 while foreign exchange

[5] It refers to the total funding obtained from the financial system for the real economy within a certain period. The concept is based on an incremental method.
[6] The figures are based on a DGBAS press release on 22 May 2015.

reserves remained at a sufficient level of US$419 billion, implying that the capacity to service external debt remained robust. With respect to the government's fiscal position, the amount of the fiscal deficit saw an expansion, increasing to 2.06%[7] of annual GDP in 2014. The outstanding public debt at all levels of government in 2014 expanded to NT$6.26 trillion, but the ratio of outstanding public debt to annual GDP dropped to 38.90%[8] as a result of a higher increase in GDP. The Ministry of Finance kept implementing the "Fiscal Health Plan" in the hope of improving the structures of fiscal revenue and expenditure, and controlling the scale of public debt.

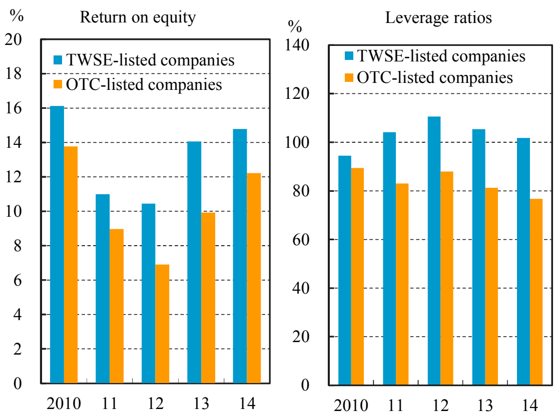
Non-financial sectors

Corporate sector

In 2014, the profitability of Taiwan Stock Exchange (TWSE) listed and over-the-counter (OTC) listed companies broadly improved compared to that of the previous year, mainly underpinned by growing profitability from the semiconductor industry. At the end of 2014, leverage ratios for listed companies declined somewhat (Chart 1.6) owing to a greater rise in equity, while short-term debt servicing capacity enhanced as a result of increasing profitability.

The NPL ratio of corporate borrowing declined to 0.40% at the end of 2014, the lowest level on record, reflecting sound credit quality for the corporate sector. Nevertheless, strong industrial competition among countries, economic slowdown and promotion of industrial supply chain localization in Mainland China could pose challenges to the corporate sector's profit outlook.

Chart 1.6 Return on equity and leverage ratios in corporate sector



Notes: 1. Figures are from consolidated financial statements, and those from 2012 forward are on the TIFRSs basis, while those of prior years are on the ROC GAAP basis.
2. Return on equity = net income before interest and tax / average equity.
3. Leverage ratio = total liabilities / total equity.
Source: TEJ.

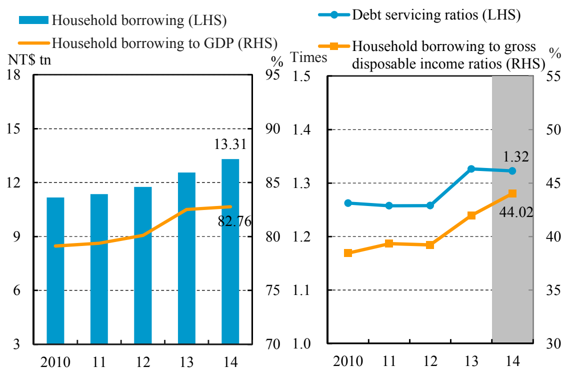
[7] As a comparison, fiscal deficits in EU member nations are not allowed to exceed 3% of GDP, according to the *Maastricht Treaty* and the subsequent *Stability and Growth Pact*.
[8] As a comparison, outstanding debt in EU member nations is not allowed to exceed 60% of GDP, according to the *Maastricht Treaty* and the subsequent *Stability and Growth Pact*.

Household sector

At the end of 2014, total household borrowing saw a continued expansion and reached NT$13.31 trillion, equivalent to 82.76% of annual GDP. As total household borrowing grew at a slower pace than disposable income in 2014, the ratio of household borrowing to total disposable income shrank to 1.32 at the end of the year, reflecting that the household debt burden lessened. However, owing to the increase in loans for the purchase of movable properties and current operations, the debt servicing ratio uplifted to 44.02% in 2014 (Chart 1.7). As a result, short-term debt servicing pressure remained high.

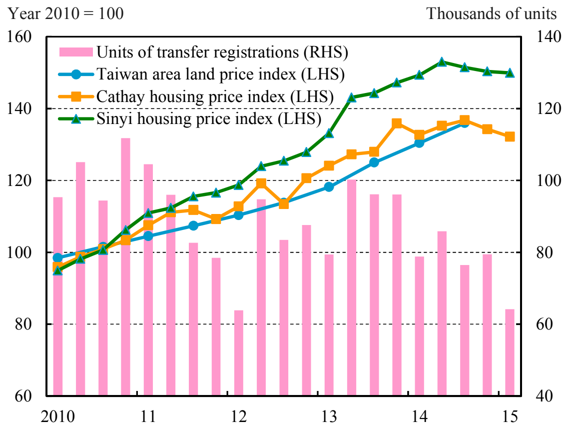
In 2014, the NPL ratio of household borrowing continuously dropped to 0.23% at the end of 2014 and touched a fifteen-year low, indicating that household credit quality remained satisfactory. Moreover, the decreasing domestic unemployment rate and steady growth of regular earnings should help improve the debt servicing capacity of households.

Chart 1.7 Household indebtedness and debt-servicing capacity



Note: Gross disposable income in shadow area is CBC estimate.
Sources: CBC, JCIC and DGBAS.

Chart 1.8 Building ownership registrations and real estate price indices



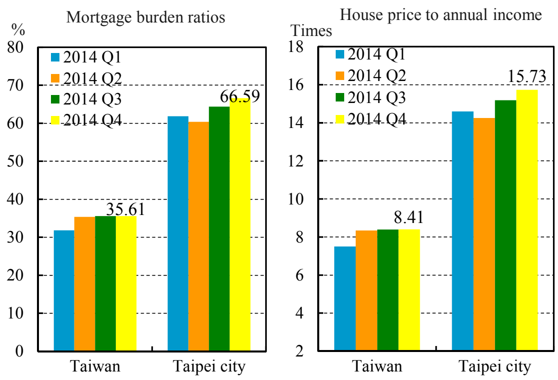
Notes: 1. Taiwan area land price index is released semiannually.
2. For comparison purposes, all three indices use the same base year of 2010.
Sources: MOI, Cathay Real Estate and Sinyi Real Estate Inc.

Real estate market

From 2014 onwards, housing market sentiment turned conservative and trading volume in the real estate market kept contracting. The main reasons behind this were that the government expanded the scope of tax audits, strengthened the regulation of non-first-time house-purchase loans, increased the tax burden on high-priced house owners and people who own multiple houses, and proposed to levy a consolidated housing and land tax based on the market price. With subdued housing market transactions, the Sinyi housing price index (for existing buildings) and Cathay housing price index (for new constructions) turned to decline in 2014 Q3 and Q4, respectively (Chart 1.8).

In 2014, since housing prices stayed high and mortgage interest rates rose slightly, the mortgage burden ratio for Taiwan increased somewhat to 35.61% in Q4. The house price to income ratio during the same period was 8.41. Among them, the mortgage burden and house price to income ratios in Taipei City were the highest, reaching 66.59% and 15.73, respectively (Chart 1.9), implying a still-heavy debt burden.

Chart 1.9 Mortgage burden ratios and house price to income ratios



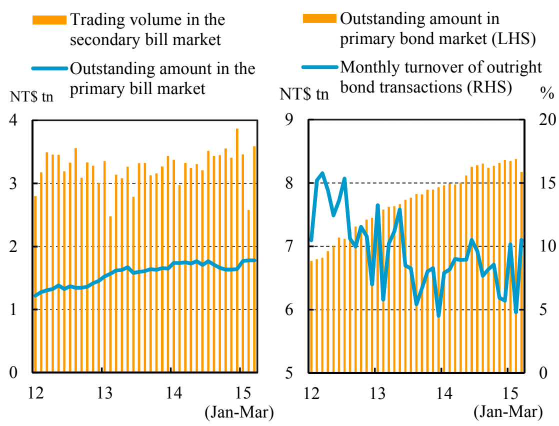
Notes: 1. Mortgage burden ratio = median housing loans monthly payments / median household monthly disposable income.
2. House price to annual income = median house price / median household annual disposable income.
Source: Housing Price Affordability Indicator Statistics, Construction and Planning Agency of the MOI.

Assessment of the financial sector

Financial markets

Bond issuance in the primary market expanded, but the turnover of outright transactions in the secondary market remained at a lower level

Chart 1.10 Primary and secondary bill and bond markets



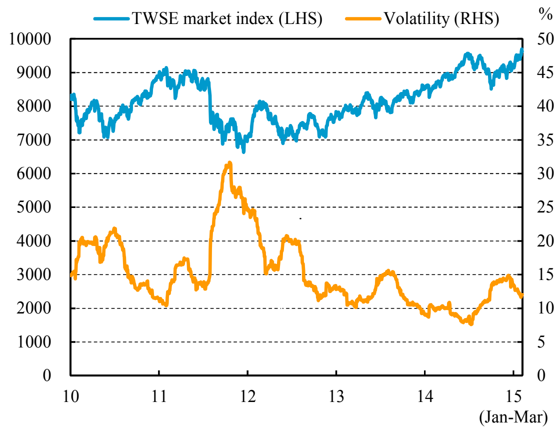
Notes: 1. Bonds include government bonds, corporate bonds and financial debentures.
2. Monthly turnover = trading value in the month / average bonds issued outstanding.
Average bonds issued outstanding = (outstanding at the end of the month + outstanding at the end of last month)/2.
Sources: CBC and FSC.

The outstanding amount of bill issuance in the primary market at the end of 2014 slightly reduced. However, trading volume in the secondary market increased owing to the expansion of commercial paper issuance and the ample liquidity in markets fulfilling the increasing needs of banks and private enterprises for bill investments. Meanwhile, the outstanding amount of bond issuance at the end of 2014 was higher than the figure posted a year earlier, particularly with regard to foreign currency-denominated international bonds, which exhibited the highest upsurge. The monthly turnover ratio of outright transactions of the main bonds[9] in the secondary market

[9] It includes government bonds, corporate bonds and financial bonds.

roughly remained flat (Chart 1.10).

Chart 1.11 TWSE market index and volatility



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

As for short-term market rates, the yield on 90-day commercial paper in the secondary market remained broadly stable in the first three quarters of 2014. However, at the end of the year, short-term market rates slightly soared owing to seasonal factors. The trend of long-term market rates closely followed the movement of US government bonds. Consequently, in the middle of September, a rising expectation of an interest rate hike made by the Board of Governors of the Federal Reserve System (Fed) in the future drove up the yield on Taiwan's 10-year government bonds. However, from Q4 onwards, a tumble in international oil prices alleviated inflationary pressures. This, coupled with bullish global bond markets in response to the successive implementation of easing monetary policies by some economies, led to a drop in the yield on Taiwan's 10-year government bonds.

Stock indices trended up gradually amid heavy volatility

The TWSE market performed better in 2014 than in 2013. The Taiwan Stock Exchange Weighted Index (TAIEX) of the TWSE market registered 9,307 at the end of the year, an increase of 8.08% year on year. In 2015 Q1, the TAIEX continued its upward path, buoyed by the fact that the FSC announced a program to boost securities markets and US stock indices kept hitting new highs (Chart 1.11).

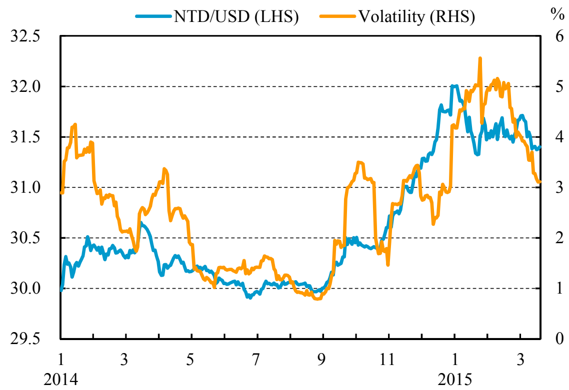
In 2014, volatility in the TWSE market amplified after initially trending down, standing at 14.51% at the end of the year. At the beginning of 2015, volatility contracted gradually as local stock indices rebounded and resumed stability (Chart 1.11).

The NT dollar exchange rate reversed from appreciation to depreciation, but the volatility remained relatively stable compared to other currencies

From 2014 Q2 onwards, the NT dollar exchange rate turned to appreciation against the US dollar, reaching a yearly high of 29.905 on 2 July, owing to an increase in net foreign capital inflows. Thereafter, the Fed ended its asset purchase program, known as quantitative easing

(QE), at the end of October and the European Central Bank (ECB) and the Bank of Japan (BOJ) introduced further monetary easing, leading the US dollar to appreciate and the NT dollar to weaken. At the end of 2014, the NT dollar exchange rate further depreciated and stood at 31.718, with an annual depreciation of 5.57%. Afterwards, the NT dollar exchange rate fluctuated within a narrow range against the US dollar in 2015 Q1 (Chart 1.12).

Chart 1.12 Movements of NT dollar exchange rate against US dollar



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

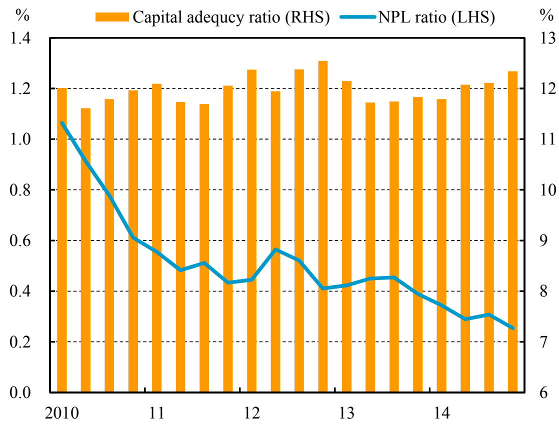
The volatility in the NT dollar exchange rate against the US dollar fluctuated between 0.79% and 4.25% in 2014, and registered an annual average of 2.22%. In early 2015, Europe, Mainland China and South Korea set off a wave of monetary policy easing and interest-rate reduction. In addition, the Swiss National Bank's (SNB's) announcement to abandon the Swiss franc's cap against the euro, coupled with the introduction of negative interest rates in many countries, induced international capital to flow into Asia and roiled financial markets. The volatility in the NT dollar exchange rate against the US dollar was thus affected and rose by around 5%, yet later gradually trended downwards (Chart 1.12). However, 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.

Financial institutions

Domestic banks

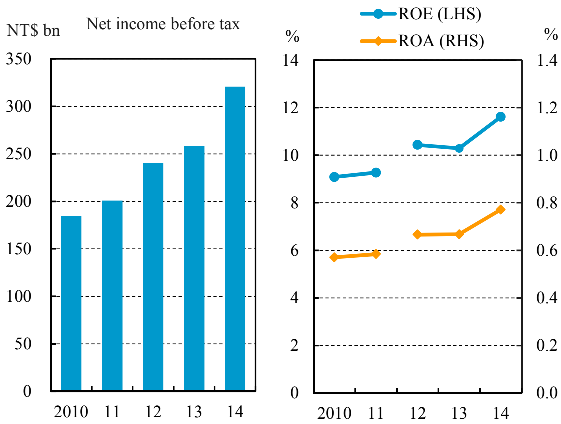
In 2014, the loans granted by domestic banks saw stable growth. The NPL ratio touched a new low of 0.25%, implying satisfactory asset quality (Chart 1.13), along with ample loan loss reserves. The credit concentration of corporate loans continually declined, while the concentration of credit exposure in real estate loans has also been addressed. The aggregate amount of exposure to Mainland China grew constantly in the first three quarters, but turned to drop in the fourth quarter. At the end of 2014, the ratio of the aggregate amount of such exposure to banks' net worth stood at 68%, still within the statutory limit and no domestic bank broke the limit. Meanwhile, the average capital adequacy ratio over the same period was higher than the figure posted a year earlier as a result of capital injection and accumulated earnings of banks. The rise in the ratio was in favor of reinforcing domestic banks' loss absorbency (Chart 1.13). The estimated Value at Risk (VaR)[10] for market risk exposures of domestic banks rose, but had limited influence on capital adequacy.

Chart 1.13 NPL and capital adequacy ratios of domestic banks



Note: Figures for the capital adequacy ratio from 2013 forward are on the Basel III and TIFRSs basis, while those of prior years are on the Basel II and ROC GAAP basis.
Source: CBC.

Chart 1.14 Profitability of domestic banks



Notes: 1. Figures from 2012 forward are on the TIFRSs basis, while those of prior years are on the ROC GAAP basis.
2. ROE = net income before tax / average equity.
3. ROA = net income before tax / average total assets.
Source: CBC.

The aggregate net income before tax of domestic banks reached a historical high of NT$320.7 billion in 2014. The average return on equity (ROE) and return on assets (ROA) also climbed to new highs of 11.62% and 0.77%, respectively, showing a significant enhancement in business performance (Chart 1.14).

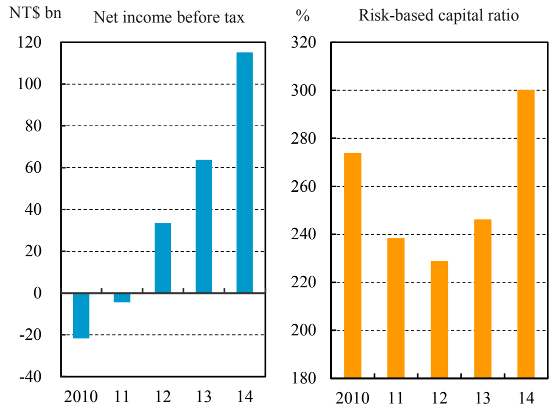
[10] See Note 65 for the calculation of the estimated VaR for market risk.

Life insurance companies

Life insurance companies reported a record-high net income before tax of NT$115.2 billion in 2014, dramatically increasing by 80.65% over the previous year (Chart 1.15). This was mainly fueled by huge foreign exchange gains derived from the depreciation of the NT dollar, as well as incremental expansion of interest income and realized gains on available-for-sale financial assets spurred by continuous growth and adjustments of bond and bill investments.

The average risk-based capital (RBC) ratio notably increased to 300.12% at year-end 2014 (excluding Singfor and Global Life Insurance Companies, which were under receivership), posting an eight-year high (Chart 1.15). However, the financial health of the few companies with RBC ratios below 200% warrants improving.

Chart 1.15 Net income before tax and risk-based capital ratio of life insurance companies



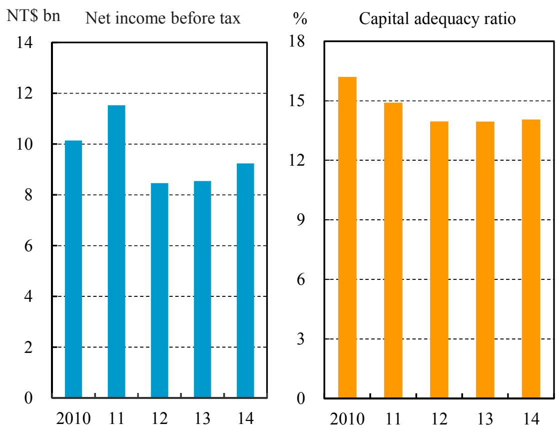
Notes: 1. Figures for net income before tax from 2012 forward are on the TIFRSs basis, while those of prior years are on the ROC GAAP basis.
2. Figure for end-2014 is exclusive of Singfor and Global Life Insurance Companies, which were taken into receivership by the Taiwan Insurance Guaranty Fund in August 2014 and sold by tender to Cathay Life Insurance Co. in March 2015.

Source: FSC.

Bills finance companies

The outstanding guarantees business undertaken by bills finance companies increased at the end of 2014, while credit quality remained satisfactory. The reason was primarily because the domestic economy saw a gradual recovery and the issuance of commercial paper by corporations for short-term funding increased thanks to a still-low level of interest rates in the bills markets. The liquidity risk of bills finance companies remained high as a maturity mismatch between assets and liabilities still persisted.

Chart 1.16 Net income before tax and capital adequacy ratios of bills finance companies



Note: Figures for net income before tax from 2012 forward are on the TIFRSs basis, while those of prior years are on the ROC GAAP basis.

Source: CBC.

Nonetheless, bills finance companies posted a combined net income before tax of NT$9.24 billion in 2014, with an increase of 8.12% year on year. The average capital adequacy ratio rebounded to 14.06% (Chart 1.16), while the individual ratio for each bills finance company was higher than 13%.

Financial infrastructure

The CBC continuously expanded the functions of the foreign currency clearing platform and assisted the development of electronic payment services

In 2014, all three systemically important payment systems (SIPSs)[11] in Taiwan were functioning normally. Moreover, the functions of the foreign currency clearing platform have been continuously expanded since its introduction in March 2013, and the domestic and cross-border euro remittances services are scheduled to launch in June 2015. From then on, the platform will provide payment-versus-payment (PVP) settlement for dual currency transactions, including the US dollar, renminbi, Japanese yen, euro and NT dollar. In addition, the platform plans to set up a delivery-versus-payment (DVP) mechanism for foreign currency-denominated bond and bill transactions in July 2015.

In order to promote the sound operations and development of electronic payment institutions (EPIs), the FSC promulgated the *Act Governing Electronic Payment Institutions* (namely the *Third-party Payment Act*) in February 2015, focusing on EPIs' electronic payment services. The CBC also amended regulations governing deposits of reserves as well as foreign exchange declaration and settlement of EPIs to facilitate their operations. Furthermore, mobile payments have gradually become accepted by the public in recent years. With the intention of helping national authorities to develop sound and effective oversight frameworks for mobile payments, the IMF published a related report "Oversight Issues in Mobile Payments" in 2015, providing an important reference for strengthening the supervision of mobile payments.

Other financial regulatory reform

With a view to strengthening the liquidity risk management of domestic banks and complying with international standards, the FSC and the CBC jointly promulgated *Standards Implementing the Liquidity Coverage Ratio of Banks,* which came into force on 1 January 2015. In addition, the *Offshore Banking Act* was amended and promulgated on 4 February

[11] The three SIPSs include the CBC Interbank Funds-Transfer System (CIFS), the Interbank Remittance System (IRS) and the Check Clearing House System (CCHS).

2015 to include insurance businesses in offshore finance. This was done to benefit the expansion of insurance market scale and reinforce the international competitiveness of the domestic insurance industry.

Furthermore, in order to enhance the internationalization and transparency of financial reports of local companies, from 2015 onwards, Taiwan's public companies have fully converged local accounting principles with the International Financial Reporting Standards (IFRSs) and already switched to adopt the updated accounting principles of the 2013 version (excluding IFRS 9 Financial Instruments). The competent authority has taken measures to revamp compensation schemes of financial institutions, contributing to improving the design of incentive compensation schemes. In addition, at the end of 2014, the successful completion of the transformation of interest rate benchmarks for NTD financial contracts promises to help to further improve the financial operating environment as well.

Taiwan's financial system remained stable

In 2014, the domestic economy grew steadily and profitability in the corporate sector was strengthened amid moderate global recovery. Against this backdrop, domestic financial markets operated smoothly and financial institutions saw a marked rise in profits with sound asset quality. Most domestic financial institutions, except for a few life insurance companies, registered adequate capital ratios. The three major payment systems functioned along an orderly trajectory. By and large, the financial system in Taiwan remained stable.

The upcoming events emanating from the evolution of domestic and international economic and financial conditions that may have impacts on Taiwan's real economy and financial system necessitate increased vigilance. Above all, the spillovers from the divergence in the monetary policies of advanced economies on emerging economies and the subdued growth momentum in Mainland China's economy deserve special attention. In response, the CBC will pay close attention and formulate adequate monetary, credit and foreign exchange policies to mitigate these impacts. Meanwhile, in the hope of facilitating the soundness of financial institutions and promoting financial stability, the FSC will persist in revamping financial regulations and enhancing financial supervisory measures, including: (1) strengthening banks' risk controls over real estate loans and their exposures to Mainland China; (2) establishing an exit mechanism in the insurance industry and strengthening the functions of the Taiwan Insurance Guaranty Fund; (3) amending regulations to better safeguard the interests of financial consumers; and (4) improving compliance officer systems in financial institutions and internal governance of listed companies.