

# *Financial Developments*

## II. Financial Developments

### 1. Overview

In 2014, in view of global uncertainties, moderate domestic growth and mild inflationary pressures, the CBC maintained a moderately accommodative policy stance and kept the policy rates unchanged to ensure price and financial stability. Market interest rates on deposits and loans both stayed at stable levels. Most money market rates exhibited a downward trend owing to ample liquidity, whereas 10-year government bond yields, mainly affected by the US Fed's decision to withdraw from asset purchases, exhibited an upward trend on average. Amid a moderate recovery in the domestic economy, growth in loans of monetary financial institutions picked up, while growth in investments was subdued. This, combined with net foreign capital inflows, boosted the growth in M2. With respect to the exchange rate, the NT dollar against the US dollar swung to depreciation, mainly because the Fed ended its asset purchase program and Asian currencies depreciated following the BoJ's additional easing. In the stock market, despite adverse factors including heightened international geopolitical tension and a series of domestic incidents including an aviation accident, gas explosions and food safety concerns, market indices swung higher, mainly driven by global economic recovery, better corporate profits, and strong buying by foreign investors.

#### **Growth in Monetary Aggregates Accelerated**

The monetary aggregate M2, measured on a daily average basis, recorded a yearly growth rate of 5.66 percent in 2014. This was higher than the 4.78 percent in 2013 and yet remained within the CBC's 2.5 to 6.5 percent target range for the year. The pickup was mainly a reflection of an increase in net foreign capital inflows. The annual growth rate of M1B, measured on a daily average basis, accelerated to 7.96 percent in 2014 from 7.27 percent in 2013. Meanwhile, the annual growth rate of reserve money decreased in 2014, mainly owing to slower growth in reserves deposited with the CBC as domestic funds moved towards foreign currency deposits.

#### **Growth in Bank Loans and Investments Increased Steadily**

The annual growth rate of loans and investments, compared with that at the end of 2013, increased from 4.59 percent to 5.20 percent at the end of 2014. The increase was due to expanded growth in bank loans, mainly driven by a growing demand for funds among the private sector and individuals amid an economic recovery and strong stock market activity. For the year as a whole, the average annual growth rate of loans and investments of monetary financial institutions dropped from 5.60 percent in 2013 to 4.96 percent in 2014. If the loans and investments of life insurance

companies, non-accrual loans reclassified, and bad loans written off by monetary financial institutions, as well as funds raised directly from capital markets, were all taken into account, the total funds raised by the non-financial sector would register an annual growth rate of 4.13 percent at the end of 2014, lower than the 4.78 percent recorded at the end of the previous year.

### **Asset Quality of Monetary Institutions Continued to Improve**

The asset quality of Taiwan's banks remained sound, mainly owing to their limited exposure to highly uncertain global financial markets. The overall non-performing loan ratio of monetary financial institutions decreased dramatically from 0.41 percent at the end of 2013 to 0.27 percent at the end of 2014. Since the pre-tax profits of monetary financial institutions kept growing during the year, their average return on assets and return on equity were both higher than those of the previous year, rising respectively from 0.58 percent and 10.04 percent to 0.66 percent and 11.23 percent.

### **Average Rates on Deposits and Loans Decreased Slightly**

The CBC, in view of greater uncertainties surrounding the global economy and mild domestic inflation, kept policy rates unchanged in 2014 to sustain price and economic stability. As a result, domestic banks kept their posted interest rates on deposits and loans at steady levels throughout 2014. The average fixed rate on one-year time deposits of the five major domestic banks stayed generally at the same level as that in 2013, while the weighted average rate on their new loans decreased slightly because of a downswing in rates on loans for working capital and current operations.

The weighted average interest rates on deposits moved downward, mainly because transaction deposits made up a larger share in total deposits. Meanwhile, the weighted average interest rate on loans also declined slightly, mainly because of the increases in low-interest local government loans and syndicated loans.

### **Bills Market Rates Largely Declined; 10-Year Government Bond Yields Rose**

The CBC continued to manage market liquidity to maintain excess reserves of banks at an appropriate level. The interbank overnight call loan rate remained at a stable level in 2014. With regard to the bills market, easy funding conditions led money market rates to exhibit downtrends.

During the first few months of 2014, the yield on the benchmark 10-year government bond recorded a downtrend, mainly influenced by the Fed's gradual reduction of asset purchases and increased hedging demands for US bonds against geopolitical risks. The yield started to move upwards in June. However, by the end of October, as the Fed announced an end to asset purchases, coupled with monetary stimulus expansions in Europe and Japan and a plunge in international oil prices, the yield trended downwards again. For the year as a whole, the average yield rose as compared with that in the previous year. The rise in the bond yield, likely to push up the funding

cost of the national treasury, caused some government bond auctions to be cut off. However, the total amount of government bonds issued increased compared to the previous year.

### **Exchange Rate Depreciated**

At the beginning of 2014, the NT dollar depreciated against the US dollar, mainly influenced by better employment figures in the US and the Fed's tapering of bond purchases. The NT dollar reached a new low against the US dollar on March 21. Afterwards, the NT dollar appreciated because of continuous net foreign capital inflows and reached a yearly high on July 2. From October, the Fed concluded its asset purchase program, and Asian currencies softened as the yen weakened further following Japan's monetary stimulus expansion. These, combined with a steady economic recovery in the US and dramatic oil price falls, brought the NT dollar to depreciate again and hit a yearly low on December 24. At the end of 2014, the NT dollar depreciated against the US dollar by 5.57 percent compared to that at the end of the previous year. On an annual average basis, the NT dollar depreciated by 1.97 percent in 2014.

### **Stock Index Climbed**

During early 2014, the domestic stock market's mainboard index, the TAIEX, extended gains following a rally at the end of the previous year, whereas it was brought down to a yearly low of 8,264 points on February 5, mainly affected by plunges across international stock markets. Afterwards, the TAIEX trended up to hit an all-year high at 9,569 on July 15, mainly driven by the global economic recovery, better corporate profits, and continued net purchases by foreign investors. In the following months, some negative factors, including heightened international geopolitical risks, a plane crash on Taiwan's offshore island of Penghu, gas blasts in Kaohsiung and domestic food safety concerns raised by the tainted oil scandal, brought the TAIEX to swing downwards. On a daily average basis, the TAIEX was 8,992 points in 2014, rising by 11.11 percent from 8,093 points in the previous year.

## 2. Monetary Aggregates

The CBC has selected the monetary aggregate M2 as the intermediate target since 1992. For the year 2014, M2 recorded an annual growth rate of 5.66 percent, higher than the previous year's 4.78 percent but still within the CBC's target range of 2.5 percent to 6.5 percent. Overall, there was sufficient liquidity to sustain economic growth.

The annual growth rate of the narrow monetary aggregate M1B accelerated to 7.96 percent in 2014 from the previous year's 7.27 percent. The growth in M1B was mainly attributable to an increase in the transaction demand for money resulting from the economic recovery as well as the booming stock market.

### Moderate Growth in Reserve Money

Reserve money grew at a slower pace for the year 2014, recording a growth rate of 6.94 percent, and was 0.24 percentage points lower than the previous year's figure. In terms of the monthly movements of reserve money, the annual growth rates of reserve money for January and February are more volatile as the exact timing of the Lunar New Year holidays shifts on the Gregorian calendar each year. In 2014, they posted a combined growth rate of 7.96 percent during this period. In subsequent months, growth rates remained stable and reached a yearly high of 7.02 percent in October and a yearly low of 6.44 percent in June.

On the demand side, currency held by the non-bank public grew moderately because the low interest rates paid on bank deposits enhanced the willingness to hold currency in hand. Banks' demand for reserves kept growing in the context of favorable domestic economic performance. However, the overall growth rate of banks' reserves decreased slightly compared to the previous year as the CBC adjusted its monetary policy operations and fund management to reduce banks' excess reserves.

From the supply side perspective, the balance sheet of the CBC revealed the sources of changes in reserve money. The increase was mostly attributable to the increase in foreign assets held by the CBC and claims on financial institutions, while the decrease resulted largely from the increase in the issuance of certificates of deposit (CDs).

**Annual Growth Rate of Reserve Money**

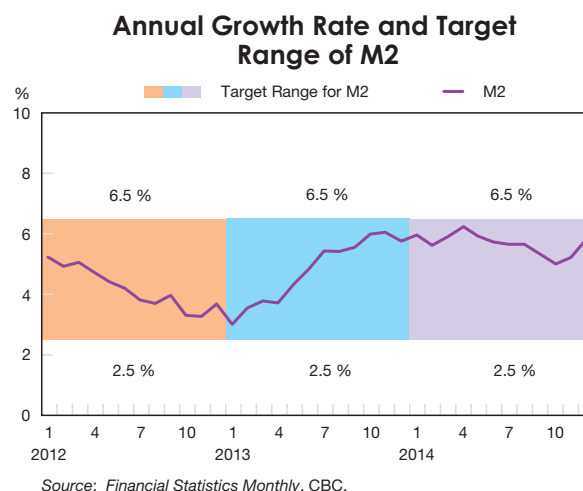


Source: *Financial Statistics Monthly*, CBC.

## Steady Growth in M2

The monetary aggregate M2 is comprised of currency in circulation, deposits in banks' checking and passbook accounts, and quasi-money. The annual growth rate of M2 in 2014 was 5.66 percent, up by 0.88 percentage points from the previous year and higher than the mid-point of the CBC's target range.

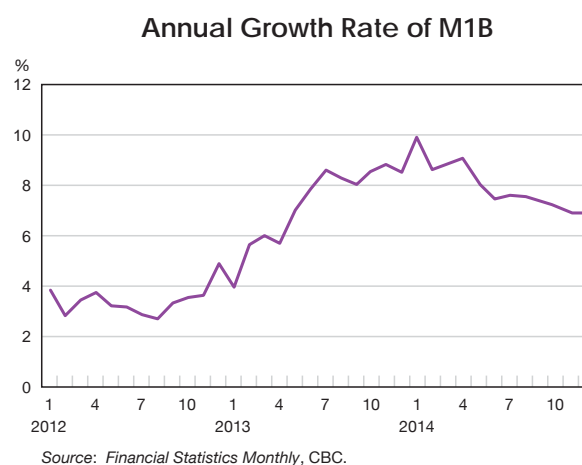
The monthly movements of the M2 annual growth rate in 2014 were all within the CBC's target range. In January, M2 growth rose to 5.97 percent owing to the seasonal factor of the Lunar New Year holidays, and then fell to 5.61 percent in February. The M2 growth rate rose in March and April on account of net foreign capital inflows. In addition, the Taiwan Insurance Guaranty Fund transferred a deposit to one life insurance company (which is not included in the monetary aggregates) in April 2013, resulting in a lower base. As a consequence, the annual growth rate of M2 recorded an all-year high of 6.24 percent in April. The M2 growth rates gradually trended down in the following months and hit a yearly low of 4.98 percent in October as a result of a decrease in net foreign capital inflows, which later turned into net outflows, and the higher base of the corresponding period in the previous year. Nevertheless, the annual growth rates exhibited an uptrend in November and December, respectively, because of net foreign capital inflows and the surge in foreign currency deposits.



## Slight Increase in M1B Growth

As the sustained recovery in the domestic economy led to the rise in the transaction demand for money, coupled with a buoyant stock market, the average annual growth rate of M1B recorded 7.96 percent, 0.69 percentage points higher than the previous year's figure.

As for the monthly movements of M1B, the annual growth rate reached its yearly high of 9.93 percent in January because of a lower base effect and the Lunar New Year holidays, and then slid to 8.63 percent in February. In



March and April, M1B growth rose to 8.87 percent and 9.10 percent, respectively, owing to net foreign capital inflows. In subsequent months, the annual growth rates generally moved downward and recorded an all-year low of 6.90 percent in December.

### 3. Banking Sector

#### Number of Monetary Financial Institutions

At the end of 2014, the number of monetary financial institutions (defined hereafter in this chapter as excluding the central bank) amounted to 400. Among them, the number of domestic banks remained unchanged. The number of foreign and Mainland Chinese banks decreased by one as The Standard Bank of South Africa withdrew from Taiwan's market in March. The number of credit cooperatives decreased by one as a credit cooperative was acquired by a bank, while the number of credit departments of farmers' and fishermen's associations increased by three owing to new openings.

#### Number of Monetary Financial Institutions by Category

Types of institutions	End of 2014	End of 2013	Annual Change
Total Number of Main Offices	400	399	1
Domestic Banks	40	40	0
Credit and Mainland Chinese Banks	30	31	-1
Credit Cooperatives	23	24	-1
Credit Departments of Farmers' and Fishermen's Associations	306	303	3
Chunghwa Post	1	1	0
Total Number of Branches	6,113	6,102	11
Local Branches	5,932	5,927	5
Overseas Branches	119	112	7
Offshore Banking Units	62	63	-1

Sources: 1. *Financial Statistics Monthly*, CBC.  
2. Department of Financial Inspection, CBC.

The number of money market mutual funds and the number of financial holding companies remained at one and 16, respectively, with the former being a fund raised and managed by Yuanta Commercial Bank.

#### Market Shares of Deposits and Loans

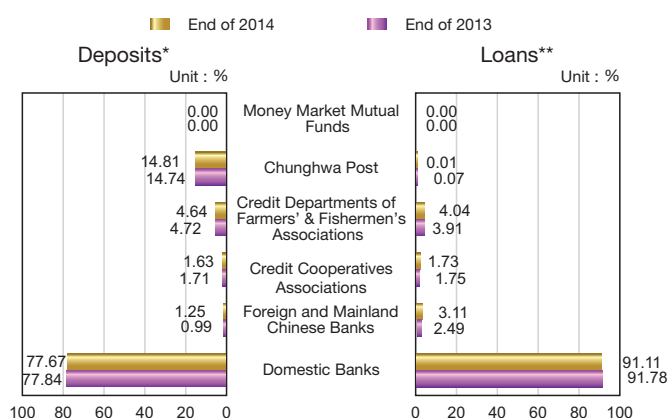
In terms of market share of deposits, domestic banks accounted for 77.67 percent at the end of 2014, lower than the previous year, mainly owing to the reduction of NCD issuance by domestic banks. The market share of foreign and Mainland Chinese banks grew to 1.25 percent as a result of a significant increase in foreign currency deposits caused by the depreciation of the NTD. Chunghwa Post gained a larger market share, reaching 14.81 percent, with its effort to expand business. The market share of credit departments of farmers' and fishermen's associations slipped



owing to deposits outflows, while credit cooperatives' market share contracted as a result of a merger.

In terms of loans, the market share of domestic banks shrank to 91.15 percent for the year, owing to a greater repayment of borrowings by government and public enterprises. The share of foreign and Mainland Chinese banks went up to 3.11 percent with expanded lending to the private sector. Chunghwa Post's market share of loans slid to 0.01 percent, resulting from a significant decrease in lending to bills finance companies. The market share of credit departments of farmers' and fishermen's associations rose to 4.01 percent with three new openings, whereas the share of credit cooperatives dropped to 1.73 percent with one closing.

### Market Shares of Deposits and Loans by Category of Monetary Financial Institutions



Notes: \* The carrying values of the host contracts of structured products issued by banks are excluded.

\*\* Including data for securities acquired under reverse repurchase agreements.

Source: Financial Statistics Monthly, CBC.

### Sources and Uses of Funds in Monetary Financial Institutions

At the end of 2014, the total amount of funds in monetary financial institutions was NT\$42,078 billion, increasing by NT\$2,548 billion compared to the end of 2013. A booming stock market and net foreign capital inflows thanks to an economic recovery led all the sources of funds to increase. Transaction deposits and non-transaction deposits accounted for over 86 percent of total sources of funds. In terms of non-transaction deposits, the effect of NT dollar (NTD) depreciation not only led to a shift in shares taken up by foreign currency deposits and NTD deposits but also caused the balance of foreign currency deposits to soar. As for government deposits, the amount slightly edged up by NT\$47.5 billion, but the share remained unchanged. In addition, there was a greater amount of other items, mainly resulting from the increased issuance of bank debentures as well as banks' increasing profits.

As for the uses of funds, the amount of all items except deposits with the CBC increased at the end of 2014 compared to the end of 2013. Among them, the share of bank loans dropped mainly owing to the significantly decreasing demand from government and public enterprises because of rising income tax revenues and higher profits of public enterprises, and the reduction in foreign currency loans by the corporate sector. Furthermore, both the balance and the share of net foreign assets increased over the end of the previous year.

Sources and Uses of Funds in Monetary Financial Institutions<sup>1</sup>

Unit: NT\$ Billion

	End of 2014		End of 2013		Annual Change	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Sources:						
Transaction Deposits <sup>2</sup>	12,849	30.54	12,141	30.71	708	-0.17
Non-transaction Deposits <sup>3</sup>	23,386	55.58	22,048	55.77	1,338	-0.19
NT Dollar Deposits	19,226	45.69	18,573	46.98	653	-1.29
Foreign Currency Deposits	4,161	9.89	3,475	8.79	685	1.10
Government Deposits	773	1.84	725	1.84	48	0.00
Other Items	5,069	12.04	4,616	11.68	454	0.36
Total	42,078	100.00	39,530	100.00	2,548	0.00
Uses:						
Net Foreign Assets <sup>4</sup>	3,198	7.60	2,310	5.84	888	1.76
Loans	23,465	55.77	22,413	56.70	1,052	-0.93
NT Dollar Loans	22,495	53.46	21,463	54.30	1,032	-0.84
Foreign Currency Loans <sup>4</sup>	970	2.31	950	2.40	21	-0.09
Portfolio Investments <sup>5</sup>	4,638	11.02	4,316	10.92	322	0.10
Purchases of CDs Issued by CBC	7,020	16.68	6,725	17.01	295	-0.33
Deposits with CBC	3,757	8.93	3,767	9.53	-10	-0.60

Notes: 1. Monetary financial institutions include domestic banks, local branches of foreign and Mainland Chinese banks, credit cooperatives, credit departments of farmers' and fishermen's associations, Chunghwa Post and money market mutual funds.

2. Including checking accounts, passbook deposits and passbook savings deposits.

3. Including time deposits, time savings deposits, foreign currency deposits, postal savings deposits, non-residents' NT dollar deposits, repurchase agreements and money market mutual funds.

4. Excluding valuation changes in the exchange rate of the NT dollar against foreign currencies.

5. Measured at original costs.

Source: Financial Statistics Monthly, CBC.

Because funds in the banking system were at ample levels, both portfolio investments and banks' purchases of CDs issued by the CBC rose at the end of 2014 compared to the end of 2013. However, portfolio investments grew slower, mainly owing to geopolitical risks and fluctuations in global financial markets, but the share still increased at the end of 2014 from a year before. In addition, diversified uses of funds have resulted in the share of banks' purchases of CDs issued by the CBC continuously declining during recent years.

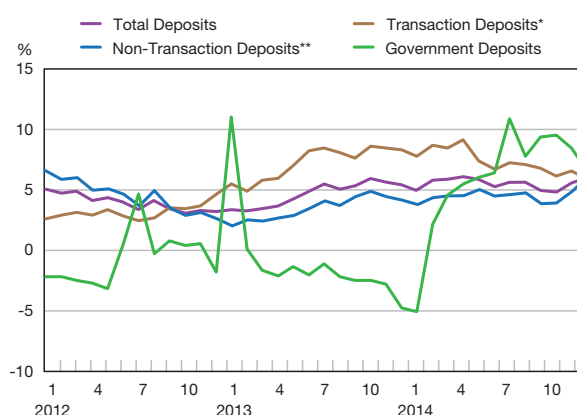
### Pickup in Deposit Growth

At the end of 2014, total deposits of monetary financial institutions stood at NT\$37,008.3 billion, registering an annual growth rate of 6.00 percent, higher than last year's 5.38 percent. This was mainly attributable to steady economic growth and a significant net inflow of foreign capital.

With the Chinese New Year holidays boosting demand for currency in January, the annual growth rate of deposits lowered to 4.93 percent. The growth rate climbed upwards in February because money started to flow back to banks after the holidays and social security funds also increased their transaction deposits. This trend continued in March on account of larger net foreign

capital inflows and a buoyant stock market. The deposit growth rate reached its peak of 6.08 percent in April due to a lower base the previous year as the Taiwan Insurance Guaranty Fund transferred a deposit to one life insurance company (which is not included in the deposits of monetary financial institutions) last year. After May, when companies paid more corporate income taxes compared to the same period the year before annual deposit growth began to drop. From July, the growth rate fluctuated along with the movement of foreign capital. It declined to 4.75 percent in October due to a net foreign capital outflow and a wavering stock market, but rose in November when the outflow in foreign capital reversed. At the end of the year, despite a net foreign capital outflow, the annual growth rate of deposits went up to 6.00 percent, mainly because of faster growth in bank loans and investments.

### Annual Growth Rates of Deposits



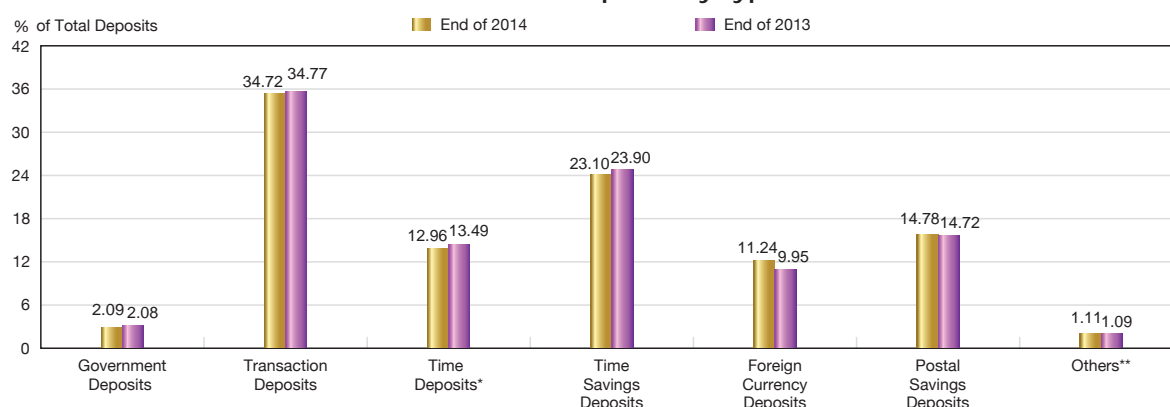
Notes: \* Including checking accounts, passbook deposits and passbook savings deposits.

\*\* Including time deposits, time savings deposits, foreign currency deposits, postal savings deposits, non-residents' NT dollar deposits, repurchase agreements, and money market mutual funds.

Source: Financial Statistics Monthly, CBC.

Despite an upswing in the stock market in the first half of the year, transaction deposits posted a lower annual growth rate of 5.83 percent for the whole year, down from 8.26 percent last year, with its share in total deposits declining to 34.72 percent from 34.77 percent. The slower growth was mostly caused by the increased volatility in the domestic stock market in the second half of the year as monetary policy divergence among major economies heightened uncertainties. Meanwhile,

### Shares of Deposits by Type



Notes: \* Including NCDs.

\*\* Including repurchase agreements, non-residents' NTD deposits and money market mutual funds.

Source: Financial Statistics Monthly, CBC.

with moderate economic growth and a significant net inflow of foreign capital, the annual growth rate of non-transaction deposits rose to 6.07 percent from 4.22 percent the previous year. Its share in total deposits climbed to 63.19 percent at the year end, up from 63.15 percent the year before.

By type of non-transaction deposits, the depreciation of the NTD helped foreign currency deposits to take up a larger share by the year end, though the growth of RMB deposits slowed down from last year. In contrast, the shares of time deposits and time savings deposits declined. The share of postal savings deposits grew slightly to 14.78 percent.

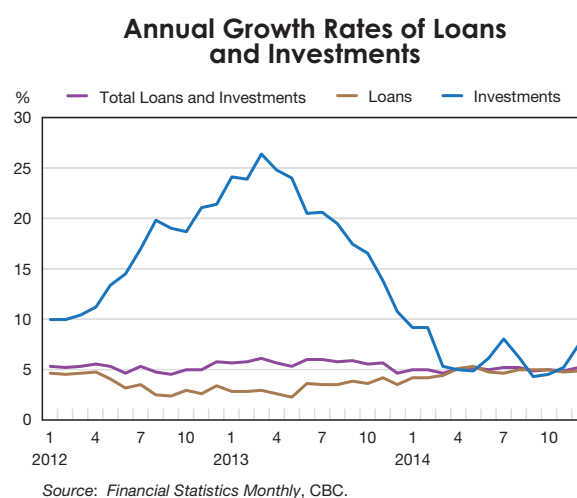
With greater tax revenues and more earnings contributed to the nation's treasury by public enterprises, the annual growth rate of government deposits returned to positive territory at 6.54 percent from -4.79 percent last year. Its share in total deposits edged up to 2.09 percent at year end.

### Higher Growth in Bank Loans and Investments

The annual growth rate of loans and investments of monetary financial institutions was 5.20 percent at the end of 2014, increasing from 4.59 percent at the end of 2013. Growth in loans accelerated to 4.77 percent at the end of 2014 from 3.48 percent at the end of the previous year, mainly owing to a greater demand from private enterprises and individuals amid a recovering economy and active trading in the stock market. In contrast, growth in portfolio investment decelerated to 7.46 percent at the end of 2014 from 10.71 percent a year earlier, mainly owing to slower growth of investments in commercial paper.

### Loans by Sector

The annual growth rate of loans extended to the private sector rose to 5.52 percent at the end of 2014 from 4.11 percent at the end of 2013. The upturn was mainly due to increasing demand from individuals and private enterprises. The annual growth rate of loans to public enterprises decreased significantly to -10.25 percent at the end of 2014 from 1.51 percent, mainly because the Taiwan Power Company and the CPC Corporation, Taiwan, reduced their borrowing from banks. For the part of Taiwan Power Company, the reduction was mainly a reflection of the company's considerable gains in annual profits; as for the CPC Corporation, it was mainly due to the company

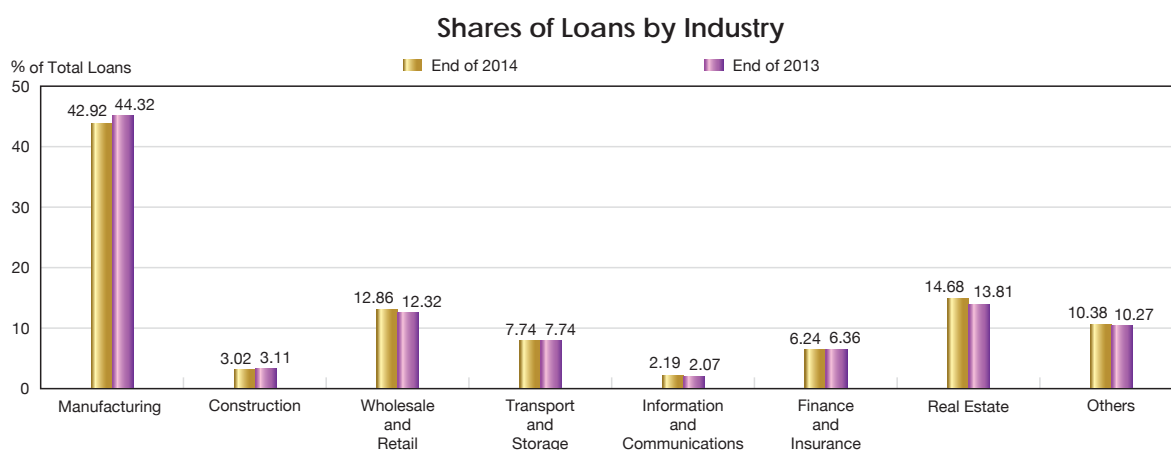


changing its policy to raise funds by issuing corporate bonds instead. Meanwhile, the annual growth rate of loans to government agencies was -0.74 percent at the end of 2014, mainly on account of increased income tax revenues thanks to the economic recovery. However, the negative growth still represented a remarkable improvement compared to the -9.25 percent of the previous year end, mainly owing to a lower base effect in 2013 resulting from 4G network license fees of NT\$118.7 billion received by the treasury which hugely reduced the borrowing needs to the government.

In terms of loan composition, loans extended to the private sector accounted for 90.56 percent of total loans, higher than the 89.72 percent recorded at the end of 2013. Loans extended to government agencies and public enterprises accounted for 6.56 percent and 2.88 percent, respectively, both lower than those recorded at the end of the previous year.

## Loans by Industry

Broken down by industry sector, bank loans to the manufacturing sector continued to account for the largest portion, at 42.92 percent at the end of 2014, decreasing from 44.32 percent at the end of the previous year. The decrease was mainly due to slower growth in loans extended to the electronics industry at the end of 2014. The shares of loans extended to the construction industry and the finance and insurance industry also exhibited downtrends. Meanwhile, the shares of loans extended to the wholesale and retail industry, the information and communications industry, and the real estate industry increased at the end of 2014.



## Consumer Loans

The annual growth rate of consumer loans extended by banks increased from 2.36 percent at the end of 2013 to 2.81 percent at the end of 2014. Among them, house-purchasing loans increased NT\$220.2 billion in 2014, mainly owing to an increase in the number of new home sales, but the

annual increase of 3.90 percent showed slowing growth for the year. As for the shares of various consumer loans, house-purchasing loans remained the largest component, with its share rising from 80.60 percent at the end of 2013 to 81.46 percent at the end of 2014. Car loans accounted for 1.62 percent, increasing from 1.49 percent mainly because car sales were boosted by low oil prices and a surge in replacement purchases. Meanwhile, house-repairing loans and revolving credit for credit cards accounted for 3.31 percent and 1.56 percent, respectively, both decreasing from the end of the previous year.

## Investments

Portfolio investments by monetary financial institutions, measured on a cost basis, showed slower growth with an annual increase of 7.46 percent in 2014, mainly because banks became more cautious with their investments in response to the uncertainties in the global economic recovery and geopolitical risks.

Among the investment instruments, government bonds accounted for the largest share with 60.97 percent, higher than the 57.88 percent a year ago, mainly bolstered by the massive purchases of government bonds by banks and the Department of Savings and Remittances of Chunghwa Post for safety reasons. Meanwhile, banks anticipated interest rates may probably not rise in the near term because more monetary stimulus was announced by the ECB and the BoJ. In order to raise the rate of return, banks turned to purchase corporate bonds instead of commercial paper. Corporate bonds accounted for a share of 14.53 percent at the end of 2014, larger than a year ago. Commercial paper accounted for a share of 14.18 percent, decreasing from the end of 2013.

In terms of annual growth trends, portfolio investments by monetary financial institutions, measured at fair value, recorded a year-on-year increase of NT\$329.2 billion, while the increase was smaller, at NT\$321.8.0 billion, when measured on a cost basis.

## Direct Finance and Indirect Finance

Financing channels of the non-financial sector comprise direct finance and indirect finance, referring respectively to issuing securities in the markets and borrowing from financial institutions. The annual increase in direct finance and indirect finance in 2014 shrank from the previous year's NT\$1,873.1 billion to NT\$1,699.6 billion. Direct finance increased NT\$234.2 billion during 2014, higher than last year's increase of NT\$62.6 billion. Indirect finance decreased from the previous year's NT\$1,810.5 to NT\$1,465.4 billion, which was mainly due to slower growth in investments by financial institutions.

Based on the outstanding balance, the share of direct finance in total funds raised decreased from 20.65 percent at the end of 2013 to 20.63 percent, while the share of indirect finance increased from 79.35 percent to 79.37 percent.

## Direct Finance vs. Indirect Finance\*

Unit: NT\$ Billion

Year	Direct Finance (1)	Indirect Finance (2)			Total Funds Raised (3)=(1)+(2)
		Loans	Investments	Subtotal	
2005	181.5	1,458.5	321.7	1,780.2	1,961.7
2006	-151.3	820.6	537.1	1,357.7	1,206.4
2007	82.7	737.0	228.6	965.6	1,048.3
2008	-316.1	649.2	563.0	1,212.2	896.1
2009	142.8	133.0	259.3	392.3	535.1
2010	165.5	1,242.6	433.8	1,676.4	1,841.9
2011	19.0	1,141.4	642.5	1,783.9	1,802.9
2012	17.0	809.4	880.7	1,690.1	1,707.1
2013	62.6	1,007.2	803.3	1,810.5	1,873.1
2014	234.2	1,247.9	217.9	1,465.8	1,700.0

Notes: \* Measured in terms of flow data.

(1) Refers to loans and investments (measured on a cost basis) made by monetary financial institutions, trust and investment companies, and life insurance companies, after taking account of their non-accrual loans reclassified and bad loans written-off.

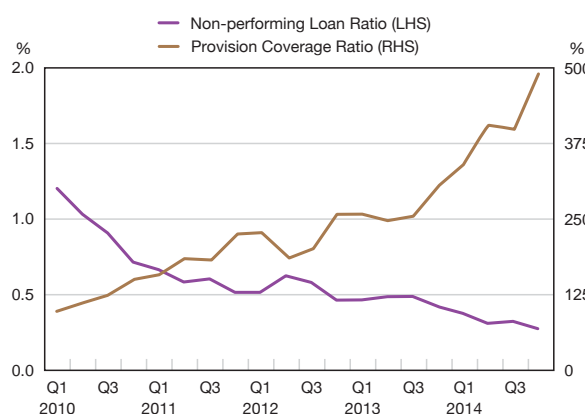
(2) Refers to the total amount of new issues of various marketable securities, including government bonds, corporate bonds, listed stocks, offshore bonds, depository receipts, short-term bills and asset-backed securities held by the non-financial sector.

Source: Financial Statistics Monthly, CBC.

## Decline in the Non-performing Loan (NPL) Ratio

With improved asset quality, the average NPL ratio of monetary financial institutions as a whole declined further to 0.27 percent at the end of 2014 from the previous year's 0.41 percent. Among the different types of financial institutions, community financial institutions continued to show the biggest improvement in the average NPL ratio during the course of the year.

**Non-performing Loan Ratio and Provision Coverage Ratio of Monetary Financial Institutions\***

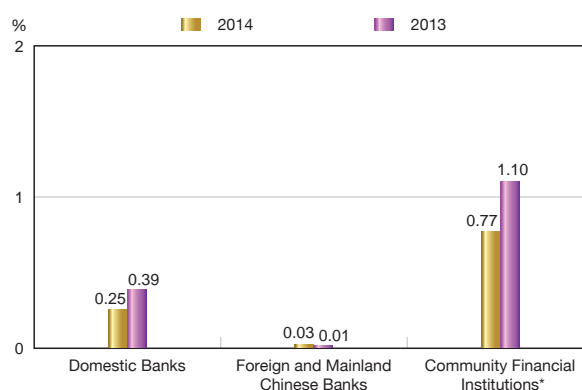


Note: \* Include domestic banks, foreign and Mainland Chinese banks, credit cooperatives, credit departments of farmers' and fishermen's associations.

Non-performing Loan Ratio = Non-performing Loans / Total Loans  
Provision Coverage Ratio = Loan Loss Provisions / Non-performing Loans

Source: Department of Financial Inspection, CBC.

**Non-performing Loan Ratios by Type of Monetary Financial Institutions**



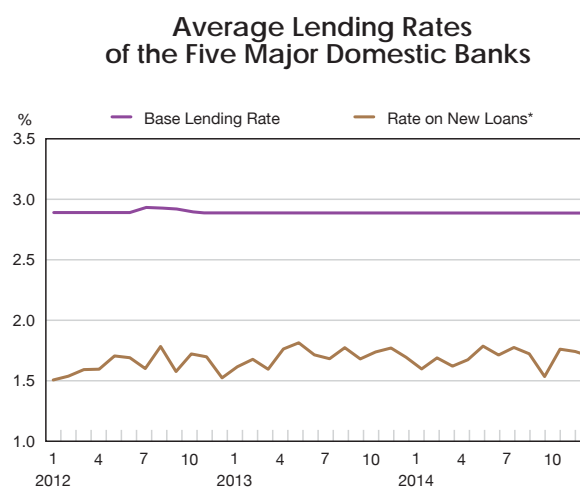
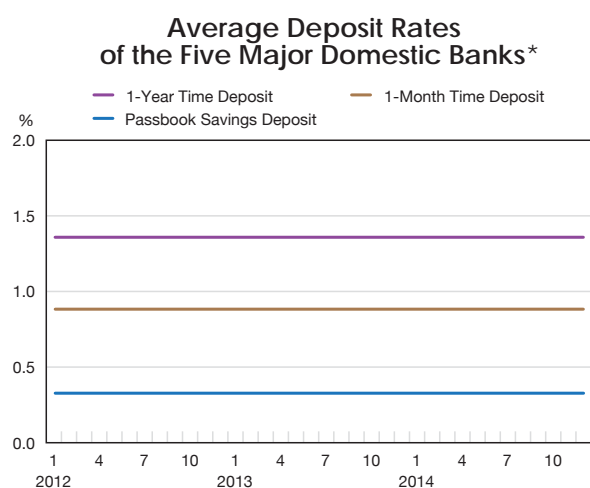
Note: \* Include credit cooperatives and credit departments of farmers' and fishermen's associations.

Source: Department of Financial Inspection, CBC.

Owing to an increase in loan loss provisions and the decline in the average NPL ratio, the average provision coverage ratio of monetary financial institutions climbed to 491.81 percent at the end of 2014 from 306.09 percent the previous year.

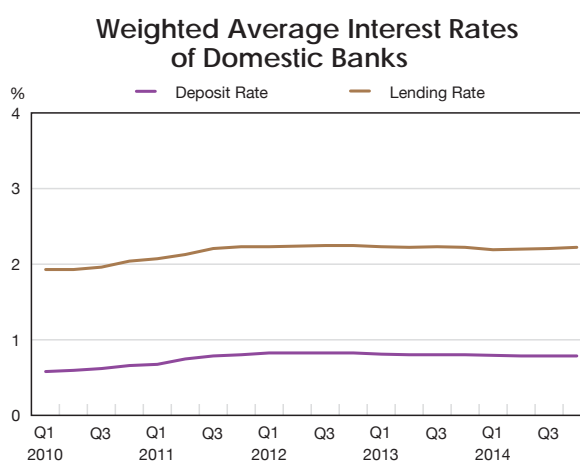
### Bank Interest Rates Unchanged

Throughout 2014, the domestic economy experienced a moderate recovery and inflationary pressures were muted. However, because of an uneven pace of recovery among major economies, global uncertainties lingered. The CBC decided to keep policy rates unchanged; hence domestic bank interest rates remained broadly steady. In the case of the interest rates of the five major domestic banks, their average fixed rates on one-month and one-year time deposits, respectively, remained at 0.88 percent and 1.36 percent at the end of 2014.



Stock market trading activity became more vigorous during the first half of the year and resulted in an increased share of transaction deposits in total deposits. The weighted average interest rate on total deposits of domestic banks was 0.78 percent in 2014, which was 0.02 percentage points lower than that recorded in the previous year.

Regarding the loan rate, the average base lending rate remained at 2.88 percent at the





end of 2014. As banks' rates on central government loans declined in 2014, bringing down banks' rates on current operations loans, the weighted average interest rate on new loans of the five major domestic banks decreased from 1.70 percent in 2013 to 1.68 percent in 2014, down by 0.02 percentage points. However, because some banks enhanced mortgage-related risk management, the interest rate on housing loans rose slightly from 1.95 percent in 2013 to 1.96 percent in 2014. Excluding central government loans, the weighted average interest rate on new loans decreased from 1.75 percent in 2013 to 1.74 percent in 2014, down by 0.01 percentage points.

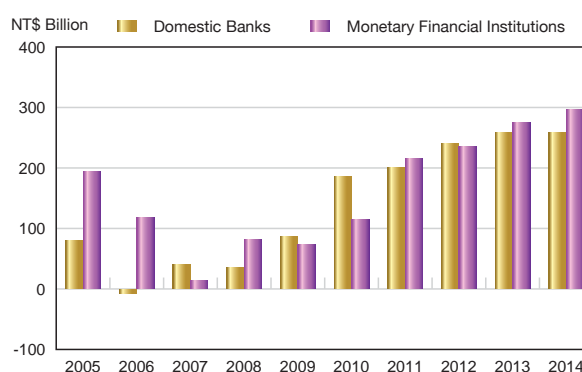
In the first quarter of the year, owing to higher growth in bank claims on local governments, the weighted average interest rate on total loans of domestic banks moved downward from 2.22 percent in the fourth quarter of 2013 to 2.19 percent. In the second quarter, as some banks' interest rates on loans for land and construction climbed, the weighted average interest rate moved slightly upward to 2.20 percent. Henceforward, because some local governments repaid their low-interest rate loans, the weighted average interest rate on loans moved upward to 2.22 percent in the fourth quarter. For the year as a whole, the weighted average interest rate on loans of domestic banks was 2.21 percent, which was 0.02 percentage points lower than that recorded in the previous year.

Because the decreases in deposit rates were more than in lending rates, the interest rate spread between deposits and loans widened to 1.44 percentage points, more than the 1.42 percentage points recorded in the fourth quarter of 2013.

## Record Profitability

Benefitting from moderate economic growth,

### Pre-tax Profits



Source: Department of Financial Inspection, CBC.

## Profits of Monetary Financial Institutions

Unit: NT\$ Billion

	Pre-tax Profits			Return on Assets (%)*			Return on Equity (%)**		
	2014	2013	Annual Change	2014	2013	Annual Change	2014	2013	Annual Change
Domestic Banks	320.7	258.2	62.5	0.75	0.65	0.10	11.00	9.82	1.18
Foreign and Mainland Chinese Banks	25.7	16.3	9.4	0.55	0.46	0.09	26.71	22.05	4.66
Credit Cooperatives	2.5	3.5	-1.0	0.39	0.55	-0.16	5.71	8.09	-2.38
Credit Departments of Farmers' and Fishermen's Associations	5.6	4.9	0.7	0.29	0.27	0.02	4.78	4.48	0.30
Chunghwa Post	13.8	13.7	0.1	0.24	0.25	-0.01	12.68	13.85	-1.17
Total	368.3	296.6	71.7	0.66	0.58	0.08	11.23	10.04	1.19

Notes: \* Return on Assets = Pre-tax Profits / Total Assets

\*\* Return on Equity = Pre-tax Profits / Net Worth

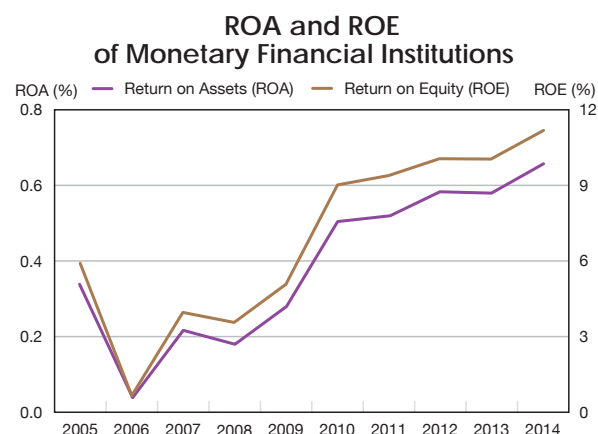
Source: Department of Financial Inspection, CBC.

the pre-tax profits of monetary financial institutions increased by NT\$71.7 billion to a historical high of NT\$368.3 billion in 2014. Those of domestic banks increased by NT\$62.5 billion to NT\$320.7 billion, mainly owing to increases in net interest revenue and net fee income, as well as realized gains from an overseas merger and acquisition. The pre-tax profit of foreign and Mainland Chinese banks increased by NT\$9.4 billion, and the pre-tax profit of Chunghwa Post also slightly increased by NT\$0.1 billion.

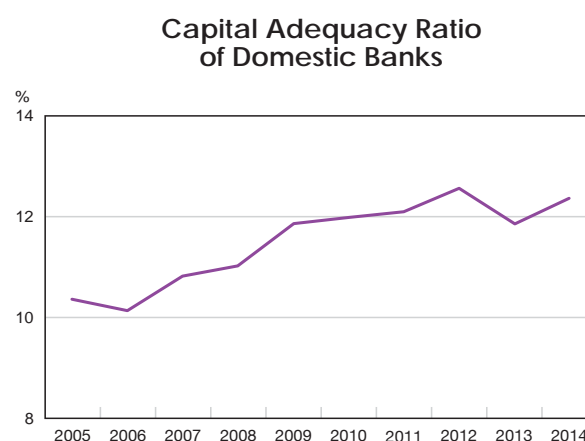
### Increases in both ROA and ROE

The average return on assets (ROA) of monetary financial institutions in 2014 increased to 0.66 percent from 0.58 percent the previous year, as their return on equity (ROE) also went up to 11.23 percent from 10.04 percent a year earlier. Among monetary financial institutions, domestic banks were the best performers in terms of ROA, and foreign and Mainland Chinese banks performed the best in terms of ROE.

With regard to capital adequacy ratios, the average ratio for domestic banks increased to 12.34 percent at the end of the year from 11.83 percent at the previous year end, mainly owing to capital increases by some domestic banks.



Source: Department of Financial Inspection, CBC.



Source: Department of Financial Inspection, CBC.

## 4. Money Market

In 2014, the total turnover in the interbank call loan market increased by 20.31 percent, but that in the short-term bills market decreased by 2.40 percent. Interest rates in both markets remained broadly stable at a low level.

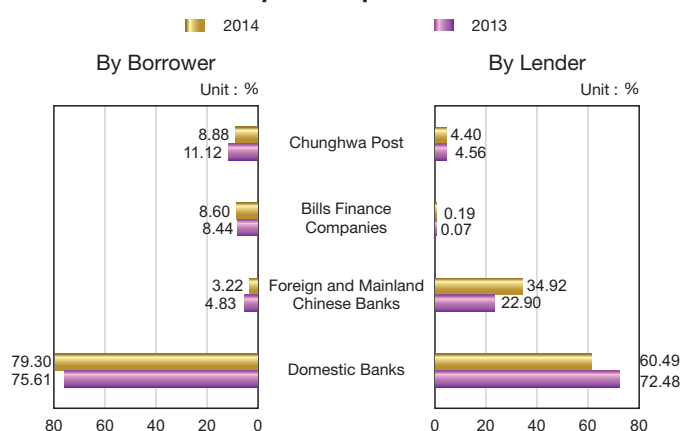
### Significant Increase in Interbank Call Loans

Trading in the interbank call loan market was active in 2014. As the domestic economy experienced a moderate recovery, banks' loans and investments increased steadily and banks' demand for funds became stronger. Coupled with the abundant supply of funds in the local market associated with massive foreign capital inflows, total annual turnover of interbank call loans amounted to NT\$47,934.6 billion for the year, showing a marked increase of 20.31 percent when compared with the previous year.

With regard to borrowers, domestic banks were still the largest player during the year, accounting for 79.30 percent of total transactions, followed by Chunghwa Post, bills finance companies, and foreign and Mainland Chinese banks, with shares of 8.88 percent, 8.60 percent and 3.22 percent, respectively. In light of continuous foreign capital inflows, the CBC increased the issuance of certificates of deposit to absorb excess market liquidity, yet later in the year banks' demand for borrowing rose owing to their funding needs. As a consequence, the amount borrowed by domestic banks increased by NT\$7,889.6 billion or 26.19 percent compared with the previous year. On the other hand, the amount borrowed by bills finance companies increased by NT\$759.1 billion or 22.57 percent during the year because of their stronger demand for funds, which was associated with more transactions in short-term bills. However, the borrowed amount of Chunghwa Post and foreign and Mainland Chinese banks decreased by NT\$173.9 billion or 3.92 percent and NT\$383.3 billion or 19.91 percent, respectively.

With respect to lenders, domestic banks continued to be the largest supplier of funds, accounting for 60.49 percent of total transactions in 2014. Following domestic banks were foreign and Mainland Chinese

**Composition of Interbank Call Loan Market by Participant**



Source: Financial Statistics Monthly, CBC.

banks, Chunghwa Post and bills finance companies with respective shares of 34.92 percent, 4.40 percent and 0.19 percent. Domestic banks had stable sources of deposits and could provide sufficient funds for lending. However, the CBC conducted more open market operations to maintain market liquidity at an appropriate level. As a result, the amount lent by domestic banks only slightly increased by NT\$117.2 billion or 0.41 percent compared with the previous year. With abundant funds gained from the custodian business for foreign investors, the lending amount of foreign and Mainland Chinese banks kept increasing. The amount lent by foreign and Mainland Chinese banks grew by NT\$7,615.2 billion or 83.47 percent, with their share of total lending climbing from 22.90 percent in the previous year to 34.92 percent. Meanwhile, Chunghwa Post supplied more funds to the interbank call loan market because of statutory restrictions on its lending business. Therefore, the amount lent by Chunghwa Post increased by NT\$293.6 billion or 16.16 percent compared with the previous year.

In terms of maturity, interbank overnight call loans remained the most actively traded instrument in the market with a predominant share of 58.38 percent, down by 5.69 percentage points from that of the previous year. Second were those with a maturity of 1 week, accounting for 34.73 percent, up by 5.49 percentage points from that of the previous year because the interbank overnight call loan rate remained broadly stable. The share of loans with a 2-week maturity rose to 5.67 percent from 5.40 percent in the previous year. Shares for the trading of interbank call loans with maturities of 3 weeks, 1 month, 2-6 months, and above 6 months were negligible.

### Decrease in Short-Term Bill Transactions

In 2014, newly issued short-term bills totaled NT\$10,840.6 billion. Of the new issues, commercial paper continued to account for the lion's share of 91.50 percent. Second were negotiable certificates

### Short-Term Bills Market

Unit: NT\$ Billion

Year	Total		Treasury Bills		City Treasury Bills		Commercial Paper		Bankers' Acceptances		Negotiable Certificates of Deposit	
	Issues	Year-end Outstanding	Issues	Year-end Outstanding	Issues	Year-end Outstanding	Issues	Year-end Outstanding	Issues	Year-end Outstanding	Issues	Year-end Outstanding
2005	7,121.0	1,168.1	115.0	45.0	-	-	5,690.4	747.0	31.1	7.7	1,284.5	368.5
2006	7,004.0	1,092.4	45.0	25.0	-	-	5,879.8	717.6	36.1	8.1	1,043.1	341.7
2007	6,495.1	925.3	88.0	28.0	-	-	5,577.2	664.8	38.2	8.4	791.7	224.0
2008	6,948.6	969.8	240.0	106.8	-	-	6,074.7	690.2	33.3	4.9	600.6	167.8
2009	6,293.4	1,043.1	435.0	215.0	-	-	5,397.7	651.3	21.9	4.9	438.8	171.9
2010	7,140.8	1,167.5	365.0	240.0	-	-	5,903.4	686.1	33.1	6.2	839.3	235.2
2011	7,424.0	1,192.6	321.2	180.3	-	-	6,270.5	735.2	30.1	5.7	802.2	271.5
2012	8,187.7	1,454.0	265.0	195.0	-	-	7,311.6	1,023.6	24.2	4.3	586.9	231.1
2013	9,809.0	1,650.2	324.6	214.6	-	-	8,827.4	1,199.2	23.5	4.2	633.5	232.3
2014	10,840.6	1,641.2	244.9	130.0	10.0	0.0	9,919.5	1,306.8	24.1	4.3	642.2	200.2
2014-2013 Change	1,031.7	-9.0	-79.7	-84.6	10.0	0.0	1,092.1	107.6	0.6	0.1	8.6	-32.1

Source: Financial Statistics Monthly, CBC.

of deposit with a share of 5.93 percent, followed by treasury bills with a share of 2.26 percent. Because market interest rates remained at low levels, private and government enterprises were more willing to issue commercial paper instead of borrowing from banks. As a result, compared with the previous year, the amount of commercial paper issued increased by NT\$1,092.1 billion. On the contrary, the Ministry of Finance decreased the issues of treasury bills by NT\$79.7 billion owing to increased tax revenue. Meanwhile, the New Taipei City Government issued city treasury bills with a total amount of NT\$10.0 billion in order to relieve the city's budget shortage. As of the end of 2014, total outstanding short-term bills amounted to NT\$1,641.2 billion, 0.54 percent less than that of the previous year end.

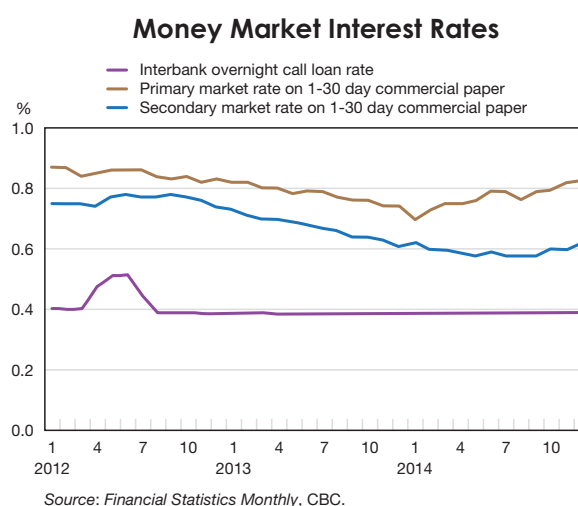
The total turnover of short-term bills in 2014 decreased by 2.40 percent to NT\$35,676.0 billion<sup>1</sup>. Of the total transactions, commercial paper still made up the largest share of 92.81 percent, representing an increase of 0.52 percentage points compared with the previous year. It was followed by negotiable certificates of deposit with a share of 6.10 percent, representing an increase of 0.80 percentage points over 2013. Treasury bills and bankers' acceptances made up a negligible share of transactions. With respect to market participants, private enterprises were the largest player in the market with a share of 47.63 percent, followed by banks with a share of 24.43 percent.

### Stable Money Market Rates

In 2014, the domestic economy experienced a moderate recovery and inflationary pressures were subdued. However, as the pace of recovery was uneven across major economies, uncertainties in the global economy still lingered. The CBC has continued to manage market liquidity to maintain excess reserves of banks at an appropriate level.

The interbank overnight call loan rate remained broadly stable and averaged 0.387 percent for the whole year, slightly higher than the 0.386 percent registered in the previous year.

The primary market rate on commercial paper with a maturity of 1-30 days moved upward from 0.70 percent in January of 2014 to 0.83 percent in December of the same year. However, the secondary market rate on commercial paper with a maturity of 1-30 days descended from 0.62 percent in January to 0.58 percent in September and then moved upward to 0.62 percent in December of the same year.



<sup>1</sup> In early 2014, some financial institutions were found to report incorrect data for short-term bill transactions, and the errors were gradually corrected in the second half of the year.

## Decrease in Money Market Funds

At the end of 2014, there were a total of 45 money market funds in Taiwan with total assets reaching NT\$741.4 billion, a decrease of NT\$73.6 billion or 9.03 percent over the previous year. With regard to portfolio composition, the largest use of the funds was bank deposits with a share of 69.14 percent at the end of the year, followed by short-term bills with a share of 18.37 percent, up by 4.59 percentage points over the previous year. This was primarily because the profits from short-term bill transactions increased owing to the decline in short-term bill rates. Meanwhile, repurchase agreements accounted for 12.19 percent of total money market funds, down from 13.55 percent in the previous year. In addition, the bond holding ratio of all money market funds was negligible.

## Portfolio Composition of Money Market Funds

Unit: NT\$ Billion

Year/Month End	Total	Bank Deposits		Short-Term Bills		Repurchase Agreements		Bonds	
		Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
2012	713.2	527.7	73.99	60.6	8.50	123.0	17.25	1.9	0.27
2013	815.0	592.0	72.64	112.3	13.78	110.4	13.55	0.3	0.04
2014	741.4	512.6	69.14	136.2	18.37	90.4	12.19	2.3	0.30
2014/ 1	794.6	581.0	73.12	104.2	13.11	108.5	13.65	0.9	0.12
2	858.8	610.1	71.04	123.8	14.41	124.1	14.45	0.8	0.10
3	832.5	592.2	71.14	124.3	14.93	115.3	13.85	0.7	0.09
4	930.9	630.9	67.77	158.3	17.00	140.9	15.13	0.9	0.09
5	840.6	608.8	72.43	122.9	14.62	107.8	12.82	1.1	0.13
6	796.6	584.4	73.36	115.4	14.48	95.8	12.03	1.1	0.13
7	825.2	596.3	72.27	133.6	16.20	94.0	11.39	1.2	0.14
8	814.2	578.4	71.04	127.9	15.71	106.3	13.06	1.6	0.19
9	794.5	553.1	69.61	138.7	17.46	101.0	12.71	1.7	0.22
10	833.9	571.5	68.54	138.9	16.65	121.3	14.55	2.1	0.26
11	844.0	570.5	67.59	140.1	16.60	131.1	15.53	2.4	0.28
12	741.4	512.6	69.14	136.2	18.37	90.4	12.19	2.3	0.30

Source: Securities Investment Trust & Consulting Association of the R. O. C. (Taiwan).

## 5. Foreign Exchange Market

### Slight Depreciation of the NT Dollar

In 2014, as the NT dollar slightly depreciated against most major international currencies but appreciated against the Japanese yen, the trade-weighted nominal effective exchange rate index of the NT dollar decreased by 0.35 percent on a daily average basis. The exchange rate movements of the NT dollar against the US dollar, the euro, the yen, the renminbi (RMB), and the Korean won are analyzed as follows.

The NT dollar against the US dollar slightly fluctuated before it weakened in the second half of 2014. Early in the year, as US labor market conditions improved and the Fed began to reduce its asset purchase program, the US dollar strengthened and the NT dollar reached a period low on March 21. In June, because the European Central Bank (ECB) introduced a negative deposit facility interest rate and the Fed announced it would keep its policy rate near zero, international capital flowed into Asia, and the NT dollar against the US dollar soared to a yearly high on July 2. At the end of October, as the Fed ended its asset purchase program and the Bank of Japan (BoJ) introduced further monetary easing, the yen slumped against the US dollar. In the meantime, the US economy expanded at a moderate pace, while recovery in the euro area and Japan remained weak and international oil prices dropped dramatically. Consequently, the US dollar strengthened against most currencies and the NT dollar hit a yearly low on December 24. At the end of 2014, the NT dollar depreciated by 5.57 percent against the US dollar compared with the end of the previous year. On a daily average basis, the NT dollar depreciated against the US dollar by 1.97 percent in 2014.

The NT dollar slightly depreciated against the euro in the first half of the year but then soared toward the end of the year. In the first quarter of the year, owing to an economic upturn in the euro area, the NT dollar versus the euro edged down to a yearly low on March 19. On June 5, the

### Annual Changes of NTD Exchange Rate Against Major Currencies

	NTD/USD	NTD/EUR	NTD/JPY	NTD/CNY	NTD/KRW
Exchange Rate (2014/12/31)	31.718	38.550	0.2652	5.1125	0.0291
Exchange Rate (2013/12/31)	29.950	41.288	0.2853	4.9472	0.0284
Annual Change	-5.57%	7.10%	7.59%	-3.23%	-2.40%
Average Exchange Rate (2014)	30.368	40.290	0.2866	4.9431	0.0288
Average Exchange Rate (2013)	29.770	39.527	0.3050	4.8049	0.0272
Annual Change	-1.97%	-1.89%	6.42%	-2.80%	-5.72%

Source: Department of Economic Research, CBC.

ECB introduced a negative deposit facility interest rate and the NT dollar appreciated. In the middle of July, the collapse of Banco Espirito Santo, Portugal's largest listed bank by assets, led to renewed concerns among investors about the euro area's financial stability. In addition, the European Union imposed economic sanctions against Russia over its alleged involvement in shooting down a Malaysian airliner. This prompted investors to sell the euro, sending the euro down further. From September onwards, the US economy grew at a moderate pace and the Fed ended the asset purchasing program, while euro area industrial production slowed down and the ECB expanded its monetary easing. Against this backdrop, the NT dollar against the euro soared to a yearly high on November 7. Compared with the end of the previous year, the NT dollar appreciated against the euro by 7.10 percent at the end of 2014. On a daily average basis, the NT dollar depreciated against the euro by 1.89 percent.

In 2014, the NT dollar depreciated against the yen in the first three quarters and rapidly appreciated in the final quarter. At the beginning of the year, as the global economic outlook was unclear, the yen rose on safe-haven demand and the NT dollar versus the yen reached a yearly low on February 5. Then political tension in Ukraine and the ISIS-led insurgency in the Middle East further pushed up safe-haven demand for yen. However, as the BoJ reaffirmed its expansionary monetary policy, the NT dollar against the yen fluctuated between 0.2920 and 0.2976 from April to August. Later, on October 31, the BoJ announced further quantitative and qualitative monetary easing, and the NT dollar appreciated rapidly against the yen to reach a yearly high on December 8. In all, the NT dollar appreciated by 7.59 percent against the yen at the end of 2014 compared with the previous year end. On a daily average basis, the NT dollar appreciated against the yen by 6.42 percent.

In 2014, the NT dollar strengthened against the RMB in the first half of the year but weakened in the second half. Early in the year, since the economic growth of Mainland China slowed down and exports in February declined 20 percent, the RMB depreciated against the US dollar. In March, as the People's Bank of China widened the RMB's daily trading band and the RMB weakened, the NT dollar against the RMB reached a yearly high on June 3. In the second half of the year, as Mainland China's economy grew at a moderate pace and foreign capital inflows increased to take advantage of opportunities in the newly-launched Shanghai-Hong Kong Stock Connect, the NT dollar against the RMB generally followed a downward trend and dropped to a yearly low on December 25. The NT dollar depreciated against the RMB by 3.23 percent between end-2013 and end-2014. On a daily average basis, the NT dollar depreciated by 2.80 percent against the RMB when compared with the previous year.

In 2014, the NT dollar fluctuated against the Korean won all year. At first, as the Fed tapered its stimulus package and South Korea recorded net foreign capital outflows, the Korean won



weakened. In March and April, South Korea's current account surplus attracted foreign capital inflows and the won turned to appreciation. The NT dollar against the won fell to a yearly low on July 3. Later in July, as the Bank of Korea revised down the country's economic growth forecast and investors expected a policy rate cut, the NT dollar appreciated against the won. From October onwards, the BoJ announced more monetary easing, and the won thus fell following a weaker yen. The NT dollar against the won soared to a yearly high on November 20. Compared with the end of 2013, the NT dollar depreciated by 2.40 percent against the Korean won at the end of 2014. On a daily average basis, the NT dollar also depreciated by 5.72 percent against the won in 2014.

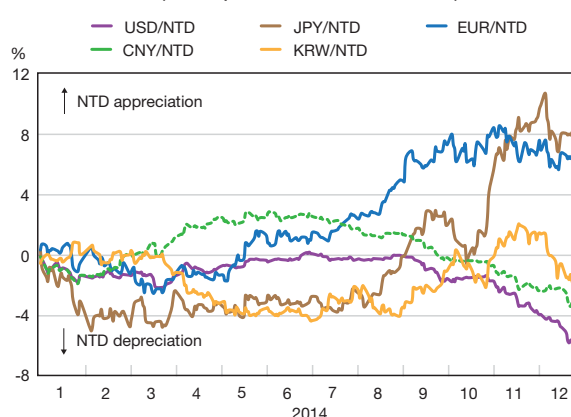
## Flourishing Foreign Exchange Market

Trading in the Taipei foreign exchange market expanded in 2014. Total net trading volume for the year reached US\$7,822.4 billion, representing a year-on-year growth rate of 9.0 percent. The daily average turnover was US\$31.3 billion. The increase in turnover reflects not only Taiwan's sustained growth in external trade but also the rise of transaction and hedging demands due to a greater volatility in major foreign currencies.

In terms of trading partners, transactions between banks and non-bank customers accounted for 25.6 percent of the total turnover, while interbank transactions made up 74.4 percent, including 23.7 percent for transactions among local banks and 50.7 percent for those between local banks and overseas banks.

As far as traded currencies were concerned, NT dollar trading against foreign currencies accounted for 40.6 percent of the total trading volume, of which trading against the US dollar

**Percent Changes of NT Dollar  
Against Major Currencies**  
(Compared with End-2013)



## Turnover of Major Products in the Taipei Foreign Exchange Market

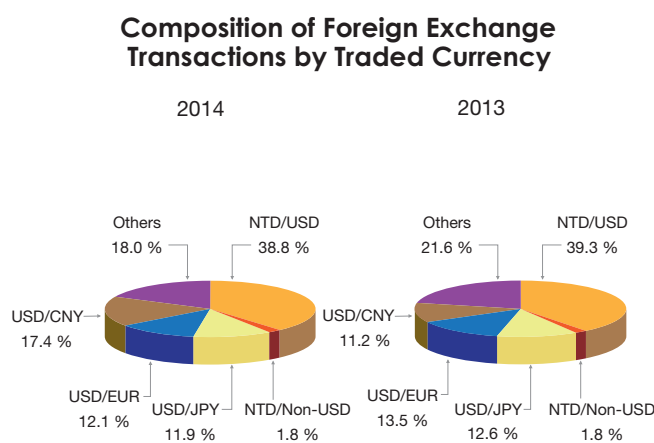
Unit: US\$ Million

Year	Spots	Forwards	Forex Swaps	Margin Trading	Options	Cross Currency Swaps	Total
2010	2,192,719	290,075	2,166,897	18,295	423,261	23,848	5,115,095
2011	2,570,319	415,459	2,454,626	19,016	529,351	24,587	6,013,357
2012	2,249,684	406,831	2,558,288	19,419	627,958	30,993	5,893,172
2013	2,681,798	373,006	2,991,819	21,730	1,072,740	32,983	7,174,076
2014	2,869,175	408,770	3,352,584	20,379	1,134,172	37,365	7,822,445
2013-2014 Growth Rate (%)	7.0	9.6	12.1	-6.2	5.7	13.3	9.0

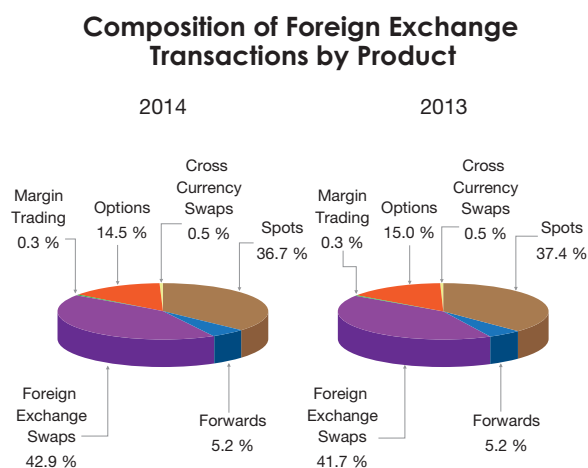
Source: Department of Foreign Exchange, CBC.

made up a dominant 38.8 percent. Transactions in third currencies contributed to 59.4 percent of the total trading volume, with trading in currency pairs of USD-RMB, USD-euro and USD-yen accounting for respective shares of 17.4 percent, 12.1 percent and 11.9 percent. Compared with 2013, NT dollar trading against foreign currencies moderately increased by 7.8 percent, and transactions in third currencies increased by 9.9 percent. The main reason for the latter increase was a steady increase in RMB business by domestic banking units (DBUs) since the cross-strait currency clearing mechanism was established.

With respect to types of transactions, the major types were foreign exchange swaps and spots, accounting for 42.9 percent and 36.7 percent of total turnover respectively. Compared with 2013, except for a decrease in margin trading, the trading volume in the total turnover of all the other types of transactions increased.



Source: Department of Foreign Exchange, CBC.



Source: Department of Foreign Exchange, CBC.

### Turnover of Other Products in the Taipei Foreign Exchange Market

Unit: US\$ Million

Year	Interest Rate-Related Products					Commodity-Related Products	Stock Index Options	Credit Derivatives	Total
	Forward Rate Agreements	Interest Rate Swaps	Interest Rate Options	Foreign Currency Interest Rate Futures	Subtotal	Commodity Options			
2010	842	125,541	6,043	392,368	524,794	18,060	105	10,126	553,085
2011	902	76,153	3,569	254,703	335,327	22,728	421	5,204	363,681
2012	1,069	51,887	4,320	142,310	199,586	15,440	955	2,243	218,223
2013	523	37,042	3,040	115,636	156,240	5,488	1,758	1,517	165,004
2014	22	43,179	1,657	122,236	167,093	3,870	302	1,401	172,666
2013-2014 Growth Rate (%)	-95.9	16.6	-45.5	5.7	-21.7	-29.5	-82.8	-7.6	4.6

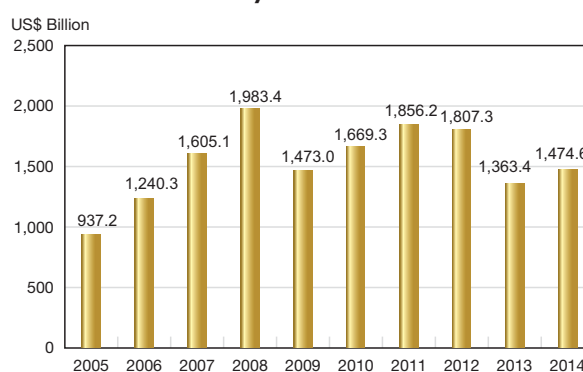
Source: Department of Foreign Exchange, CBC.

In 2014, the total turnover of forwards, swaps, and options based on foreign currency interest rates, stock price indices, commodity prices, and credit derivatives amounted to US\$172.7 billion. Of this amount, interest rate-related derivatives accounted for the lion's share with US\$167.1 billion, or 96.8 percent, with its turnover up by 6.9 percent from the previous year. Interest rate futures accounted for the majority of this increase, up by US\$6.6 billion. The main reason was that the Fed's tapering fueled market expectations of heightened market interest rate volatility.

### Increase in Trading in Foreign Currency Call Loan Market

The transaction volume in the foreign currency call loan market in 2014 was US\$1,474.6 billion, an increase of 8.2 percent over the previous year. Of this amount, US dollar transactions accounted for a dominant share with US\$1,426.1 billion, making up 96.7 percent of the total while increasing 6.9 percent from 2013. The rise was mainly because some banks increased short term foreign currency lending after accepting plenty of foreign currency deposits. Japanese yen transactions reached ¥1,185.4 billion in 2014, a small share of 0.8 percent of the total with a decline of 9.6 percent in the volume compared to the previous year. The amount of euro transactions totaled €1.2 billion, a share of less than 0.1 percent. Other currencies accounted for 2.4 percent of the total transaction volume.

**Transactions in the Taipei Foreign Currency Call Loan Market**



Source: Department of Foreign Exchange, CBC.

### Growing Assets of Offshore Banking Units

There were 62 offshore banking units (OBUs) at the end of 2014. Domestic banks operate 38 of these OBUs, while foreign banks run the other 24. The total assets of all OBUs grew to US\$184.0 billion at the end of the year, representing an increase of US\$14.4 billion or 8.5 percent from the previous year end. Domestic OBUs made up 84.4 percent of these combined assets with an amount of US\$155.3 billion, and the OBUs of foreign banks accounted for US\$28.7 billion, or 15.6 percent of the total.

In terms of the uses of funds, loans to non-financial institutions, at US\$87.9 billion, represented the majority share of 47.8 percent of total OBU assets. Claims on financial institutions came in second place, accounting for 15.8 percent of total OBU assets. In terms of the destination for funds, Asia accounted for the majority with 63.0 percent, followed by America at 25.0 percent.

The OBUs' main source of funds were interbank transactions, making up 43.8 percent of total liabilities. Furthermore, deposits of non-financial institutions grew sharply, accounting for 31.4 percent of total liabilities. OBUs were the main funding source of overseas Taiwanese firms, with 64.0 percent of their funds coming from Asia and 22.0 percent from America.

Owing to the increased variety of RMB-related business, forex trading turnover of all OBUs in 2014 rose by 26.4 percent and registered US\$602.0 billion, of which US\$364.3 billion went for spot transactions, US\$143.0 billion for forex swap transactions and US\$94.7 billion for forward transactions. Compared with the previous year, the growth rates of the trading of spots, forex swaps and forward transactions were 35.1 percent, 20.2 percent, and 8.1 percent, respectively.

The total turnover of other derivatives products increased to US\$1,426.1 billion, 15.7 percent higher than 2013. Of this amount, currency options and RMB options transactions registered a combined amount of US\$1,143.7 billion, making up 80.2% of the turnover.

### Consolidated Balance Sheet of Offshore Banking Units in Banking System

Unit: US\$ Million

End of Year	Loans to Non-financial Institutions	Portfolio Investment	Claims on Financial Institutions	Other Assets	Total Assets= Total Liabilities	Deposits of Non-financial Institutions	Due to Financial Institutions	Securities Issued	Other Liabilities
2010	40,752	15,952	55,878	10,348	122,930	35,587	75,270	364	11,709
2011	58,976	15,760	56,900	13,465	145,101	37,645	91,662	370	15,424
2012	67,811	18,240	60,200	24,655	170,906	44,102	100,389	364	26,051
2013	79,981	22,019	44,459	23,113	169,572	51,191	100,133	351	17,896
2014	87,849	22,066	47,681	26,379	183,974	57,818	101,671	338	24,146
2013-2014 Growth Rate (%)	9.8	0.2	7.2	14.1	8.5	12.9	1.5	-3.7	34.9

Source: Financial Statistics Monthly, CBC.

## 6. Stock Markets

Entering 2014, Taiwan's stock indices began to gradually climb, driven by global economic recovery, better corporate profits, and strong buying by foreign investors. In the second half of the year, the indices showed mixed fluctuations as the stock markets were affected by heightened international geopolitical tension and a series of domestic incidents including an aviation accident, petrochemical gas explosions and food safety concerns.

At the end of 2014, the Taiwan Stock Exchange (TWSE) weighted stock price index (TAIEX) gained 8.1 percent compared to the end of the previous year. However, most industrial groups posted price falls, with the largest decline in plastics and chemicals shares due to international oil price slumps. Only four groups, namely, electrical, shipping and transportation, trading and consumers' goods, and finance, were able to record year-on-year price gains. The TAIEX daily average trading value was NT\$88.3 billion, a 14.7 percent increase compared to the previous year.

In Taiwan's over-the-counter market, the weighted stock price index of the Taipei Exchange (TPEx, formerly known as GreTai Securities Market or GTSM) closed the year up by 8.3 percent over the previous year end. Amid mixed performances, the iron and steel group topped the risers with a 31.2 percent gain thanks to remarkable corporate profits, whereas textile shares came in with the largest fall of 13.4 percent. In 2014, the TPEx daily average trading value was NT\$25.6 billion, increasing significantly by 56.1 percent compared to the previous year.

### Major Statistics of the TWSE Market

Year/Month	Stock Price Index (end of period)	Daily Average Trading Value (NT\$ Billion)	Turnover Rate (%)	Market Capitalization (NT\$ Billion)	Net Buying Positions (NT\$ Billion)		
					Foreign Investors Net Buy/Sell	Securities Investment Trust Companies Net Buy/Sell	Securities Dealers Net Buy/Sell
2012	7,699.5	81.0	97.3	21,352.2	144.2	-16.1	-2.2
2013	8,611.5	77.0	82.6	24,519.6	243.0	-76.7	8.5
2014	9,307.3	88.3	84.6	26,891.5	354.6	-38.1	-0.4
2014/ 1	8,462.6	97.6	7.3	24,137.8	23.2	-4.7	-1.9
2	8,639.6	89.2	6.2	24,567.9	-16.2	-5.8	4.0
3	8,849.3	93.6	7.8	25,187.5	72.1	-9.1	2.4
4	8,791.4	92.2	7.7	25,090.7	89.7	-10.3	-1.6
5	9,075.9	88.2	7.1	25,939.9	33.7	-2.7	5.1
6	9,393.1	98.5	7.3	26,852.7	81.6	-7.8	4.3
7	9,315.9	111.5	9.2	26,662.1	31.0	-2.4	3.8
8	9,436.3	87.8	6.8	27,052.2	46.7	6.1	-1.2
9	8,966.9	75.6	6.2	25,790.1	-59.0	0.9	-19.7
10	8,974.8	79.0	6.7	25,837.4	-1.1	3.5	-6.3
11	9,187.2	73.0	5.5	26,446.8	95.8	1.7	6.9
12	9,307.3	75.8	6.8	26,891.5	-42.7	-7.6	3.9

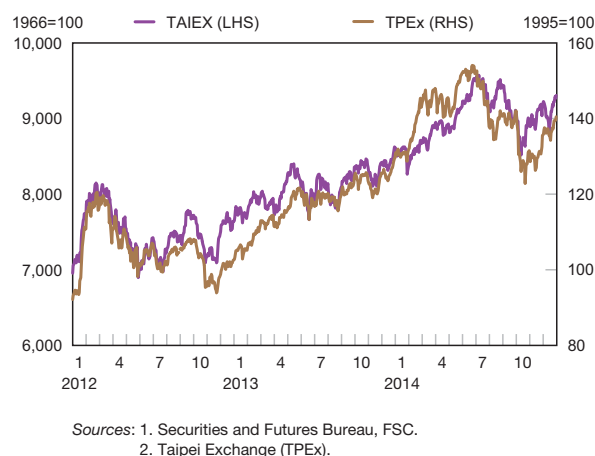
Source: Securities and Futures Bureau, FSC.

## The TWSE Market

### Listings and Capitalization Both Increased

At the end of 2014, there were a total of 854 listed companies on the TWSE, 16 more over the previous year. The total capital of listed companies issued amounted to NT\$6.8 trillion, 2.6 percent greater than the previous year. Total market capitalization grew by 9.7 percent year on year to NT\$26.9 trillion. While there was no new issuance of Taiwan Depository Receipts (TDRs) in 2014, two of the existing TDRs were de-listed, trimming the total number of TDRs on the TWSE to 26 at year end.

### TAIEX and TPEX Indices



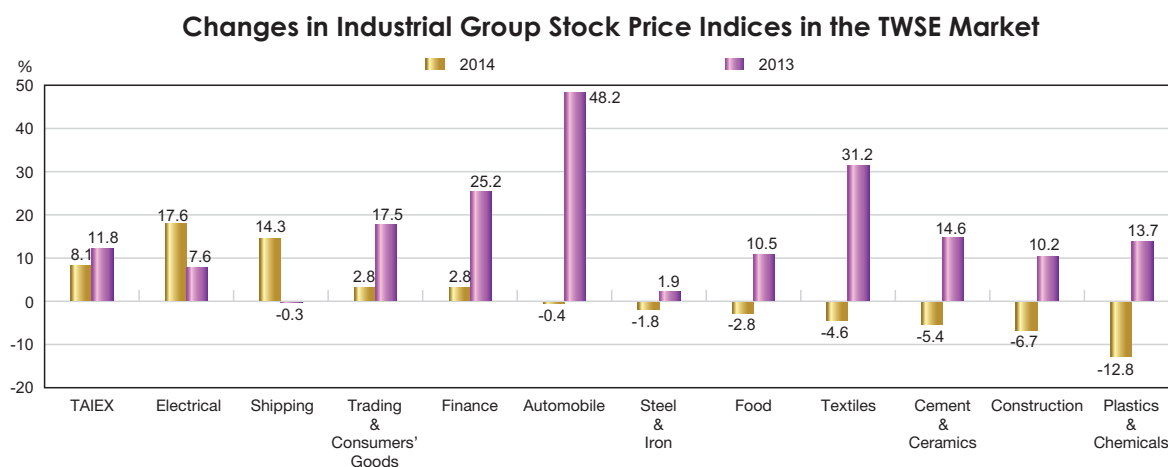
### TAIEX Trended Up in H1 and Fluctuated in H2

After extended gains following a rally at the end of the previous year, the TAIEX settled down to 8,264 points on February 5 after the market reopened after the Lunar New Year holiday, during which international stock markets plunged. Then, driven by the global economic recovery, better corporate profits, and continued net purchases by foreign investors, the TAIEX trended up to hit an all-year high of 9,569 on July 15.

In the following month, heightened international geopolitical risks, a plane crash on Taiwan's offshore island of Penghu and gas blasts in Kaohsiung combined together to send the TAIEX downwards to 9,086 on August 8. The index was able to bounce back to 9,513 as of September 1, bolstered by an upward revision of Taiwan's GDP forecast by the DGBAS and excellent corporate earnings growth.

Afterwards, the momentum of the TAIEX was sapped by a number of adverse factors, including domestic food safety concerns raised by a tainted oil scandal, a wider Ebola outbreak, and investor pullback from emerging markets. The TAIEX started a downward trend to hit 8,513 on October 17. However, encouraged by a continuing recovering of the US, improvement shown by domestic economic indicators, and the easing of some stock market investment measures, the TAIEX gradually swung upwards to close the year at 9,307 points, 8.1 percent higher than the 8,612 at the previous year end.

Broken down by subcategory, most industrial groups, except electrical, shipping and transportation, trading and consumers' goods, and finance, saw their share prices fall in 2014. Electrical stocks



posted the largest gain of 17.6 percent, as huge sales of new cellphones increased demand for memory modules and chips and boosted the profits of IC companies. Shipping shares came in second with a 14.3 percent gain owing to reduced costs amid international oil price declines. On the other hand, oil price falls led plastics and chemicals shares to drop in value by 12.8 percent, the worst among all groups.

### Market Turnover Increased

In 2014, the TWSE market turnover, measured on a daily average basis, increased to NT\$88.3 billion from the NT\$77.0 billion of the previous year, a 14.7 percent increase underpinned primarily by steady economic growth and a host of government measures to stimulate the stock market. As trading activity became robust, the turnover rate also rose from 82.6 percent the previous year to 84.6 percent.

### Significant Net Buying by Foreign Investors

In 2014, foreign investors bought a net NT\$354.6 billion in the TWSE market, and were net buyers for the third year in a row. Local securities investment trust companies and securities dealers net sold TAIEX shares valued at NT\$38.1 billion and NT\$0.4 billion, respectively.

In the months of February, September, October, and December, foreign investors were net sellers in response to declines in international markets as well as profit taking from across Asian emerging markets. In all the other months of 2014, foreign investors were net buyers, fueled by market rallies in the US and Europe, a brighter economic outlook, and continued growth in earnings of Taiwan's listed companies.

Local securities investment trust companies, on the other hand, continued to be net sellers from January to July as they took advantage of an upward trend. After August, they began bargain hunting amid an extended market fall and turned into net buyers between August and November, until they net sold again in the last month of the year in response to strong year-end demand for fund redemption as well as a need to boost their own financial statements.

Local securities dealers, with inclinations for short swing trading, net sold in January, April, August, September, and October on market slumps and net bought in the rest of the year when the TAIEX rose.

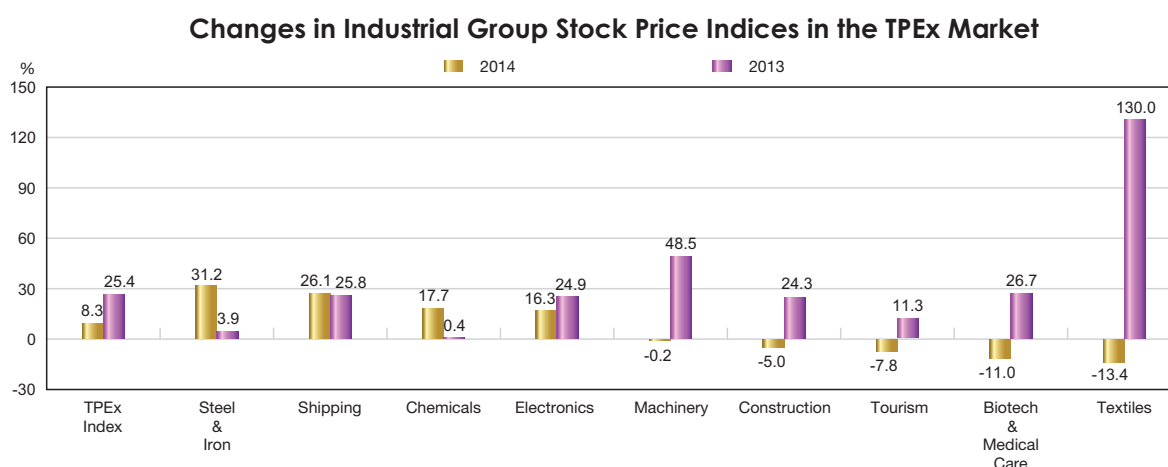
## The TPEX Market

### Listings and Capitalization Both Increased

The number of TPEX listings increased by 27 to a total of 685 at the end of 2014. The total capital amounted to NT\$679.6 billion, up by 2.7 percent from the previous year end. Market capitalization grew by 15.5 percent year on year, standing at NT\$2.68 trillion at the year end.

### Market Index Fell After Rising

Stock prices in the TPEX market generally shared a similar trend with the TWSE market, albeit with greater volatility. Taking an uptrend early in the year all the way to peak at 154.1 points on July 1, the TPEX index was then battered by negative factors, including elevated geopolitical risks, growing concerns over the Ebola outbreak, and a spate of food safety scandals. It hit an all year low of 122.7 on October 27 and then rallied along with international markets to close the year at 140.4 points, up by 8.3 percent from the 129.6 points at the previous year end.



Source: TPEX.



For the year of 2014 as a whole, foreign investors recorded a net purchase position of NT\$43.1 billion in the TPEX market, while local securities investment trust companies and local dealers net sold NT\$4.4 billion and NT\$1.0 billion, respectively. The daily average turnover in the TPEX market was NT\$25.6 billion, increasing markedly by 56.1 percent from NT\$16.4 billion in 2013.

## Key Measures for the Stock Markets

Key measures for Taiwan's stock markets in 2014 include the following:

- (1) January 6: Investors may conduct buy-then-sell day trading from this day on.
- (2) June 30: Two way (buy first or sell first) same day trading was given the green light as of this day for a total of 200 different stocks, including the component stocks of the Taiwan 50 Index, the Taiwan Mid-Cap 100 Index, and the TPEX 50 Index (formerly known as GreTai 50 Index) .
- (3) August 25: The Taiwan HC (High Compensation) 100 Index, an index compiled by the TWSE and Research Affiliates, was officially launched.
- (4) October 7: The FSC announced four measures to reinvigorate the stock markets, namely: (A) to exclude the leveraged amount used in day trading from the balance of margin purchases and short selling; (B) to raise the ceiling on the margin loan ratio for stocks traded over the counter to 60 percent (from 50 percent) ; (C) to raise the cap on margin purchasing and short selling of a single trading account and a single stock; and (D) to hold more results conferences for commendable corporate performances.
- (5) November 18: The FSC announced law amendments with the following liberalization measures:
  - A. Offshore securities units (OSUs) and offshore banking units (OBUs) are no longer required to cap their sales of Taiwan securities investment funds at under 30 percent of their net assets;
  - B. The underlying assets for the foreign currency equity derivatives business conducted by OSUs may involve TWSE or TPEX listed single stocks, TWSE or TPEX stock price indices, or exchange-traded funds on Taiwan's securities markets;
  - C. When conducting stock lending business, a securities firm may (a) accept as collateral all types of securities purchased or borrowed via margin trading and central government bonds; (b) grant a borrower another 6-month extension appropriately based on the borrower's credit standing, allowing the borrowing period to be 18 months at most; and (c) expand margin loans to a same natural person where the balance shall not exceed NT\$80 million (formerly capped at NT\$60 million) .
- (6) December 26: After an amendment to the *Income Tax Act* passed the third reading in the

legislature, a proposed capital gains tax measure for active stock market traders was put off for three years. Beginning 2018, individuals who sell more than NT\$1 billion worth of shares within the year will be levied a transactions income tax of 0.1 percent on trades beyond the NT\$1 billion threshold.

## 7. Bond Market

For the year of 2014, the total volume of bond issuance showed a significant increase. New issues of bonds amounted to NT\$1,881.7 billion, growing by NT\$617.5 billion or 48.84 percent over the previous year. At the end of 2014, the outstanding amount of bonds issued stood at NT\$9,329.6 billion, an increase of NT\$1,045.8 billion or 12.62 percent from the previous year end.

In order to support fiscal funding needs, issuance of central government bonds for 2014 increased by NT\$33.4 billion, or 5.21 percent, to NT\$675.3 billion.

Corporate bonds exhibited a downtrend in 2014 as corporations issued more corporate bonds in the previous year amid market expectations of a possible rate hike later. Therefore, issuance of corporate bonds for 2014 decreased by NT\$105.6 billion, or 22.67 percent, to NT\$360.4 billion.

With respect to bank debentures, the main purpose for banks to issue bonds was to strengthen their capital base and meet mid- to long-term operation funding needs. For the year as a whole, bank debenture issuance totaled NT\$397.5 billion, increasing by NT\$287.2 billion or 260.43 percent over the previous year.

In terms of asset securitization, only one new product was issued in 2014. Added with the volume of products on a revolving issuance basis, the outstanding balance of asset securitization products slightly increased by NT\$0.5 billion, or 6.40 percent, to NT\$8.5 billion over the previous year.

Furthermore, the Financial Supervisory Commission (FSC) announced in 2014 that insurers are allowed to invest in international bonds without them counting toward the cap on insurers' foreign investments. Therefore, market demand increased and numerous foreign institutions gradually raised funds in Taiwan. In 2014, foreign financial institutions issued 50 foreign currency-denominated bonds totaling NT\$440.0 billion, whereas foreign bonds issued in Taiwan by international financial organizations recorded no new issues during the year.

In the secondary market, owing to the Fed's gradual reduction of asset purchases and geopolitical tensions in the Middle East and Ukraine, funds flowed to US government bonds on account of risk aversion, leading US bond yields to decline. Therefore, domestic government bond yields exhibited a downward trend for the first half of 2014. Entering the second half of the year, yields on bonds with different maturities trended upward, yet later fluctuated as they were affected by the Fed's announcement of the ending of its asset purchase program, expansion of quantitative easing measures by the ECB and the BoJ, and the decline in international oil prices. Of the components, the 10-year bond yield reached 1.6015 percent at the end of 2014, down by 0.0782

percentage points from 1.6797 percent at the previous year end. As demand for repo transactions was softened by abundant market liquidity, annual transactions contracted by NT\$1,194.0 billion or 1.72 percent over the previous year to NT\$68,032.1 billion. In addition, only one fixed income fund remained in the market with a volume of NT\$3.4 billion at the end of 2014.

### **Rise in Government Bond Issuance**

On account of the rise in long-term bond yields, the amount of central government bonds issued with certain maturities was less than the amount open for bid. As a result, central government bond issuance for 2014 totaled NT\$675.3 billion, less than the expected amount of NT\$695.0 billion, yet still showing an increase of NT\$33.4 billion or 5.21 percent, compared with the previous year.

Issues of 5-year, 10-year, and 20-year government bonds were NT\$182.4 billion, NT\$215.0 billion, and NT\$125.0 billion, respectively. Moreover, there were also 2-year bond issuances worth NT\$35.0 billion and 30-year bond issuances worth NT\$117.9 billion to meet market demand.

In regard to issuing rates, the weighted average issuing rates on the central government bonds with maturities above 5 years in 2014 were all higher than the previous year on account of the Fed's decision to end asset purchases. The weighted average issuing rate on 10-year bonds rose to 1.610 percent from the previous year's 1.535 percent. However, the higher liquidity of short-term bonds led to stronger market demand. Therefore, the rate on 2-year bonds continued to fall from the previous year's 0.727 percent to 0.658 percent.

In terms of bonds issued by governments of special municipalities, new issues were nil in 2014.

In sum, the outstanding amount of government bond issuance was NT\$5,440.2 billion in 2014, an increase of NT\$230.7 billion or 4.43 percent from the previous year end.

### **Slowdown in Corporate Bond Issuance**

For the year of 2014, corporate bond issuance shrank from a year earlier exhibited a downtrend as corporations issued more bonds in 2013 amid market expectations of a possible rate hike later. Therefore, the issuing amount of corporate bonds for 2014 decreased by NT\$105.6 billion, or 22.67 percent, to NT\$360.4 billion.

State-owned enterprises issued bonds worth NT\$93.6 billion, making up 26 percent of total corporate bond issuance in 2014. In the private sector, Formosa Plastics Group topped the list with its yearly bond issuance reaching NT\$43.0 billion, while Hon Hai Precision Industry Company Ltd. accounted for the second largest share of bond issuance with an amount of NT\$39.2 billion. Additionally, the combined bond issues of steel and iron companies exceeded NT\$30.0 billion.

Owing to the rise in long-term bond yields, weighted average issuing rates on 5-year, 7-year,

## Issues and Outstanding Values in Bond Market by Category

Unit: NT\$ Billion

Year/ Month	Total		Central Government Bonds		Local Government Bonds*		Corporate Bonds		Bank Debentures		Beneficiary Securities**		Foreign & Int'l Bonds***	
	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding
2012	1,434.6	7,752.8	665.0	4,776.3	23.4	158.1	482.5	1,619.5	180.4	1,022.1	76.9	148.3	6.2	28.5
2013	1,264.3	8,283.8	641.9	5,068.2	-	141.3	466.0	1,865.3	110.3	1,029.8	8.0	135.1	38.1	44.1
2014	1,881.7	9,329.6	675.3	5,338.5	-	101.7	360.4	2,013.0	397.5	1,273.6	8.5	118.7	440.0	484.1
2014/ 1	164.4	8,342.9	100.1	5,088.3	-	141.3	41.1	1,892.6	20.7	1,038.4	-	135.8	2.5	46.6
2	79.9	8,368.1	70.0	5,128.3	-	141.3	5.9	1,892.5	2.0	1,034.2	2.0	125.3	-	46.6
3	93.1	8,341.5	40.0	5,093.3	-	126.4	24.2	1,912.0	28.9	1,046.5	-	116.8	-	46.6
4	51.8	8,370.4	35.0	5,128.3	-	126.4	3.8	1,897.7	13.0	1,054.0	-	117.5	-	46.6
5	152.8	8,478.6	60.0	5,188.3	-	118.1	52.8	1,930.0	40.0	1,081.5	-	114.3	-	46.6
6	190.3	8,625.5	72.9	5,261.1	-	118.0	45.8	1,952.3	62.1	1,124.5	-	113.3	9.6	56.2
7	176.8	8,700.0	70.0	5,261.1	-	109.1	62.2	1,992.4	-	1,124.5	6.5	118.5	38.2	94.4
8	151.0	8,816.1	35.0	5,296.1	-	109.1	19.7	1,989.7	9.7	1,121.7	-	118.5	86.6	181.0
9	251.1	8,910.5	40.0	5,226.1	-	109.1	26.0	2,000.8	42.8	1,133.9	-	117.2	142.4	323.4
10	200.0	9,044.7	64.5	5,250.6	-	109.1	27.9	2,012.2	42.7	1,166.3	-	118.1	65.0	388.4
11	198.1	9,213.4	57.9	5,308.5	-	101.8	11.5	2,008.5	71.1	1,230.7	-	117.9	57.6	446.0
12	172.4	9,329.6	30.0	5,338.5	-	101.7	39.7	2,013.0	64.6	1,273.6	-	118.7	38.1	484.1

Notes: \* Referring to bonds issued by governments of special municipalities.

\*\* Including those purchased back by originators for credit enhancement.

\*\*\* Including NT dollar and foreign currency-denominated bonds issued in Taiwan by international financial institutions.

Sources: 1. Financial Statistics Monthly, CBC.

2. Banking Bureau, Financial Supervisory Commission.

3. Department of Foreign Exchange, CBC.

10-year, and 15-year corporate bonds for 2014 were all higher than those in the previous year, reaching 1.4741 percent, 1.7316 percent, 1.9460 percent, and 2.0800 percent, respectively. At the end of 2014, the outstanding amount of corporate bonds was NT\$2,013.0 billion, rising by NT\$147.7 billion or 7.92 percent from the previous year end.

### Marked Increase in Bank Debenture Growth

A total of 27 financial institutions issued bank debentures in 2014, mainly in support of their mid-to long-term operation funding needs. For the year as a whole, bank debenture issuance totaled NT\$397.5 billion, expanding by NT\$287.2 billion or 260.43 percent over the previous year. The issuance included US dollar bank debentures worth US\$5.4 billion issued by eight domestic financial institutions and renminbi bank debentures worth RMB6.0 billion issued by three domestic financial institutions. The majority of the issuance, or 57.64 percent, went for subordinated debts to bolster capital adequacy.

In terms of the volume of issuance, the major types of bank debentures issued were 7-year and 10-year bank debentures, making up shares of 16.68 percent and 22.79 percent in total issuance, respectively. The weighted average issuing rates on 5-year, 6-year, 7-year and 10-year bank debentures were higher than the previous year because of rising long-term bond yields.

At the end of the year, the outstanding amount of bank debentures was NT\$1,273.6 billion, growing by NT\$243.8 billion or 23.67 percent from the previous year end.

### **Decline in Asset Securitization**

As housing prices remained high, enterprises became lukewarm about issuing real estate securitization products, and banks turned cautious toward financial asset securitization. As a result, only one new asset securitization product was issued in 2014. The amount of asset securitization product issuance, combined with that of revolving issuance, totaled NT\$8.5 billion for the whole year, increasing by NT\$0.5 billion or 6.40 percent.

In addition to the slightly rising issuance of asset securitization products, five financial asset securitization products matured and the principal was repaid. Therefore, the outstanding amount of asset securitization decreased by NT\$16.4 billion or 12.14 percent from the previous year end to NT\$118.7 billion.

### **Significant Growth in Foreign and International Bonds Issuance**

Foreign bonds, NT dollar-denominated bonds issued in Taiwan by international financial organizations, had been all repaid at the end of February 2013 and recorded no new issues for the year of 2014. On the other hand, international bonds refer to bonds issued in Taiwan by foreign financial institutions and are currently denominated in foreign currencies. Meanwhile, the FSC announced in June 2014 that insurers are allowed to invest in international bonds without them counting toward the cap on insurers' foreign investments. As a consequence, market demand increased and numerous foreign institutions gradually raised funds in Taiwan. Issuance by foreign financial institutions for the year of 2014 increased by NT\$401.9 billion or 1,056.28 percent from the previous year to NT\$440.0 billion. At the end of the year, the outstanding amount of international bonds and foreign bonds was NT\$484.1 billion, an increase of NT\$440.0 billion or 997.83 percent over the previous year end.

### **Fluctuation in Bond Yields and Contraction in Transactions**

For the first half of 2014, affected by the Fed's gradual reduction of asset purchases, political unrest in the Middle East and geopolitical tensions between Russia and Ukraine, funds flowed to US government bonds for risk aversion, leading the 10-year local bond yield to decline along with the US 10-year bond yield and hit a yearly low of 1.4679 percent on May 21. After June, on the back of a buoyant stock market and market expectations of possible early withdrawal of QE in the US, the yield on the benchmark government bond reached a yearly high of 1.7570 percent on September 19.

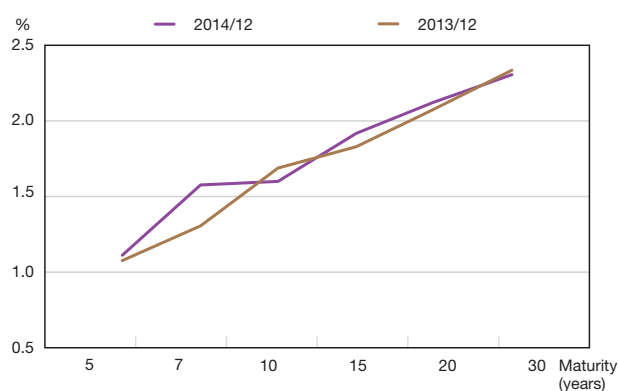
Later in the year, as the IMF revised down its global economic growth forecast and volatility in international financial markets heightened, the US bond yield trended downward, sending the 10-year bond yield to descend to 1.5976 percent on October 17. Afterwards, with the Fed's decision

to end its bond-buying program and continued expansion of monetary stimulus measures by the ECB and the BoJ, investor demand for safety was more subdued, causing the US bond yield to rebound from a slump.

In December, market concerns over intensifying deflationary pressures from the plunge in international oil prices dragged down US bond yields. Nevertheless, there was only a slight decrease in the 10-year local bond yield because of the crowding out effect triggered by increased issuance of international bonds. The 10-year bond yield mainly fluctuated between 1.57 percent and 1.65 percent, and finally ended 2014 at 1.6015 percent, 0.0782 percentage points lower than the 1.6797 percent of the previous year end. The average yield on 10-year government bonds for the year was 1.6040 percent, up by 0.1484 percentage points from 1.4556 percent over the previous year.

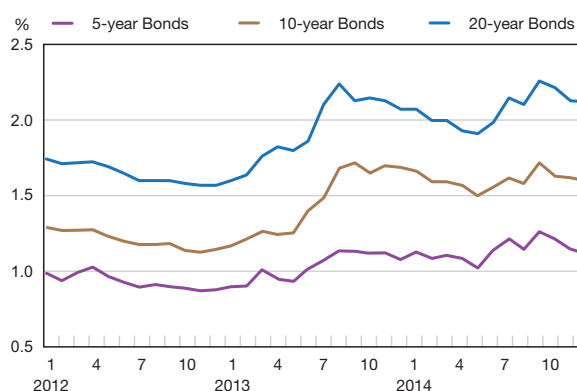
For the year of 2014, average yields on government bonds of every maturity range were similar to the previous year, except for the average yield on the 7-year bond which showed a bigger uptrend compared to 2013. The yield curve was not much different from that of the previous year.

**Yield Curve of Central Government Bonds**



Source: TPEX.

**Yield on Central Government Bonds with Different Maturities**



Source: TPEX.

In terms of transaction volume, as demand for repo transactions was softened by abundant market liquidity, the volume of repo transactions fell by NT\$2,204.6 billion or 3.97 percent for the year. On the other hand, outright transactions expanded by NT\$1,010.6 billion or 7.38 percent over the previous year owing to increased transactions of international bonds. As a result, total bond transactions for 2014 decreased by NT\$1,194.0 billion or 1.72 percent from the previous year to NT\$68,032.1 billion.

By type of bonds, government bonds accounted for 73 percent of total bond transactions with an annual trading volume of NT\$49,776.4 billion. The second most actively traded were corporate bonds, making up 22 percent of total transactions with an annual trading volume of NT\$15,050.5

billion. Bank debentures came in third, accounting for 4 percent of total transactions with an annual trading volume of NT\$2,483.4 billion. Foreign and international bonds and asset securitization products each made up marginal shares of less than 1 percent in total transactions, with their respective annual trading reaching NT\$632.3 billion and NT\$89.5 billion.

### Bond Transactions in the Over-the-Counter Market

Unit: NT\$ Billion

Year/ Month	Total	Outright Transactions		Repurchase Agreement Transactions	
		Amount	Share(%)	Amount	Share(%)
2012	86,551.7	18,435.8	21.3	68,115.9	78.7
2013	69,226.1	13,695.3	19.8	55,530.8	80.2
2014	68,032.1	14,705.9	21.6	53,326.2	78.4
2014/ 1	4,886.6	1,042.9	21.3	3,843.7	78.7
2	4,714.3	1,104.0	23.4	3,610.3	76.6
3	6,029.1	1,289.1	21.4	4,740.0	78.6
4	6,232.2	1,262.9	20.3	4,969.3	79.7
5	5,575.1	1,210.5	21.7	4,364.6	78.3
6	5,539.0	1,502.8	27.1	4,036.2	72.9
7	6,114.7	1,452.6	23.8	4,662.1	76.2
8	5,942.2	1,265.3	21.3	4,676.9	78.7
9	5,918.2	1,355.3	22.9	4,562.9	77.1
10	5,844.2	1,335.5	22.9	4,508.7	77.1
11	5,341.3	976.3	18.3	4,365.0	81.7
12	5,895.2	908.7	15.4	4,986.5	84.6

Source: TPEX.

### Turnover in Bond Market by Category

Unit: NT\$ Billion

Year/ Month	Total	Government Bonds	Corporate Bonds		Bank Debentures	Beneficiary Securities	Foreign & int'l Bonds
			Nonconvertible	Convertible			
2012	86,551.7	68,974.8	14,442.9	1,150.0	1,859.2	103.4	21.4
2013	69,226.1	51,490.5	14,860.0	806.9	1,941.4	76.4	50.9
2014	68,032.1	49,776.4	14,296.6	753.9	2,483.4	89.5	632.3
2014/ 1	4,886.6	3,586.6	1,057.0	68.7	162.4	5.5	6.4
2	4,714.3	3,649.1	863.4	60.7	129.9	5.8	5.4
3	6,029.1	4,720.8	1,019.7	62.9	207.3	9.1	9.3
4	6,232.2	4,903.3	1,038.2	60.0	218.6	7.1	5.0
5	5,575.1	4,220.5	1,055.0	51.1	238.1	6.8	3.6
6	5,539.0	4,154.5	1,091.1	57.8	213.9	7.2	14.5
7	6,114.7	4,539.4	1,242.1	71.3	194.5	8.7	58.7
8	5,942.2	4,404.3	1,187.9	64.0	177.4	9.0	99.6
9	5,918.2	4,148.1	1,276.7	70.4	229.3	10.7	183.0
10	5,844.2	4,154.6	1,361.2	60.6	185.1	8.3	74.4
11	5,341.3	3,581.7	1,361.6	54.4	235.2	6.6	101.8
12	5,895.2	3,713.5	1,742.7	72.0	291.7	4.7	70.6

Source: TPEX.