

Financial Developments

II. Financial Developments

1. Overview

In 2015, market interest rates on deposits and loans both moved lower, mainly as a result of two policy rate cuts by the CBC to stimulate the domestic economy. Most money market rates exhibited a downward trend owing to ample liquidity. The average 10-year government bond yield also exhibited a downtrend, as hedging demand for NTD bonds increased in response to sluggish economic growth and a falling stock market. The economic downturn also dampened growth in loans and investments of monetary financial institutions; however, a net foreign capital inflow and an increase in foreign currency deposits boosted growth in M2.

With respect to the exchange rate, the NT dollar against the US dollar fluctuated in the first half of the year as the market reacted to the uncertainty surrounding the Fed's rate hike. In the second half of the year, renminbi devaluation by China's central bank in mid-August triggered downward pressure on Asian currencies including the NT dollar. On the whole, the NT dollar depreciated against the US dollar in 2015. In the stock market, despite favorable factors including rate cuts by several central banks and further monetary stimulus by the European Central Bank (ECB), domestic stock market indices were still dragged lower by the slowdown of global economic growth, net sales by foreign investors in the second half of the year, and the plunges of the world's major stock indices.

Growth in Monetary Aggregates Accelerated

The monetary aggregate M2, measured on a daily average basis, recorded a yearly growth rate of 6.34% in 2015. This was higher than the 5.66% in 2014 and yet remained within the CBC's 2.5% to 6.5% target range for the year. The pickup was mainly a reflection of a net foreign capital inflow and an increase in foreign currency deposits. The annual growth rate of M1B, measured on a daily average basis, decelerated to 6.10% in 2015 from 7.96% in 2014, mainly because sluggish economic growth and stock market trading lowered the demand for transaction money. Meanwhile, the annual growth rate of reserve money decreased in 2015, mainly owing to weak demand for funds, and slower growth in bank loans and investments and in demand deposits.

Growth in Bank Loans and Investments Slowed

The annual growth rate of loans and investments, compared with that at the end of 2014, decreased from 5.20% to 4.61% at the end of 2015. The decrease was due to contracted growth

in bank loans, mainly affected by weaker demand for funds by the private sector amid weakening export growth and an economic slowdown. For the year as a whole, the average annual growth rate of loans and investments of monetary financial institutions dropped from 4.96% in 2014 to 4.66% in 2015. 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 2.54% at the end of 2015, lower than the 4.14% recorded a year earlier.

Bank Asset Quality Improved

The asset quality of Taiwan's banks remained sound, thanks to their limited exposure to highly uncertain global financial markets. The overall non-performing loan ratio of monetary financial institutions decreased from 0.27% at the end of 2014 to 0.25% at the end of 2015. In contrast to steady increases in net interest revenue and net fee income during the year, the pre-tax profits of monetary financial institutions slightly decreased mainly owing to a decrease in investment revenues resulting from declined valuations of portfolio investments. In addition, their average return on assets and return on equity were both lower than those of the previous year, dropping from 0.68% and 11.80% to 0.65% and 10.84%, respectively.

Average Rates on Deposits and Loans Decreased Slightly

The CBC cut the policy rate twice in 2015 and, as a result, the posted interest rates on deposits and loans of banks went lower during the year. At the end of 2015, the average fixed rate on one-year time deposits and base lending rates of the five major domestic banks were all lower than those of 2014. Meanwhile, the weighted average rate on their new loans decreased slightly because of a downswing in rates on loans for current operations resulting from increases in low-interest loans of local governments and government enterprises.

The weighted average interest rates on deposits moved downward, mainly because the CBC lowered the policy rate twice and because the share of time deposits in total deposits shrank from the previous year. Meanwhile, the weighted average interest rates on loans also declined slightly, mainly because of increases in low-interest loans of local governments and government enterprises.

Bills Market Rates and 10-Year Government Bond Yields Declined

Reflecting the CBC's rate cuts, the interbank overnight call loan rate began to decline from the third quarter onwards. With regard to the bills market, weak demand for funds and easy funding conditions led money market rates to exhibit downtrends.

During the beginning months of 2015, the yield on the benchmark 10-year government bond

trended downward, mainly influenced by increased hedging demand for NTD bonds against the economic slowdown and stock market declines. The yield continued to move downwards as the CBC lowered policy rates twice in the later months of 2015. In terms of issuance, as tax revenue increased and issuance was approaching the statutory limit, the total amount of government bonds issued decreased from the previous year.

Exchange Rate Depreciated

At the beginning of 2015, the US dollar became stronger, supported by a steady US economic recovery. Yet, the discontinuation of the Swiss franc/euro exchange rate floor in mid-January gave rise to capital flight into emerging Asia including Taiwan, leading the NTD/USD exchange rate to fluctuate. Afterwards, the NT dollar appreciated as the US dollar weakened on the news of unsatisfactory first quarter GDP and the resulting market anticipation of the Fed postponing interest rate normalization; the NT dollar against the US dollar reached a yearly high on May 22. In mid-August, Asian currencies softened as the People's Bank of China lowered the central parity of the renminbi against the US dollar. Meanwhile, Taiwan's exports continued to contract and the CBC announced policy rate cuts. These combined to send the NT dollar lower towards a yearly low on September 25. At the end of 2015, the NT dollar depreciated against the US dollar by 4.08% compared to that at the end of the previous year. On an annual average basis, the NT dollar depreciated by 4.80% in 2015.

Stock Index Swung to Decline

During early 2015, the domestic stock market's mainboard index, the TAIEX, trended up to hit an all-year high at 9,973 on April 27, mainly driven by rises across major international stock markets following rate cuts by several central banks and the start of the ECB's new QE program. Afterwards, the TAIEX reached a yearly low of 7,410 points on August 24, mainly affected by the global economic slowdown, net sales by foreign investors, and international stock market crashes. In the following months, the TAIEX swung upwards owing to share buying by the National Financial Stabilization Fund to bolster the domestic stock market and the stabilization in major international stock markets. The TAIEX was 8,338 points at the end of the year, decreasing by 10.41% compared with the previous year end.

2. Monetary Aggregates

The CBC has selected the monetary aggregate M2 as the intermediate target since 1992. For the year 2015, M2 recorded an annual growth rate of 6.34%, higher than the previous year's 5.66% but still within the CBC's target range of 2.5% to 6.5%. Overall, there was sufficient liquidity to support economic activity.

The annual growth rate of the narrow monetary aggregate M1B decelerated to 6.10% in 2015 from the previous year's 7.96%. The decline in M1B mainly resulted from a shift of funds from transaction deposits to non-transaction deposits, the shrinking trading value in the stock market during the second half of the year, and a higher base effect.

Growth in Reserve Money Decelerated

Reserve money grew at a slower pace for the year 2015, recording a growth rate of 5.79%, and was 1.15 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 2015, they posted a combined growth rate of 4.67% during this period. The annual growth rate reached a yearly high of 7.53% in March and trended down to 5.22% in July. In subsequent months, growth rates remained relatively stable.

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. For banks, slower expansion of loans and the shift of money from transaction deposits to non-transaction deposits both reduced banks' demand for 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

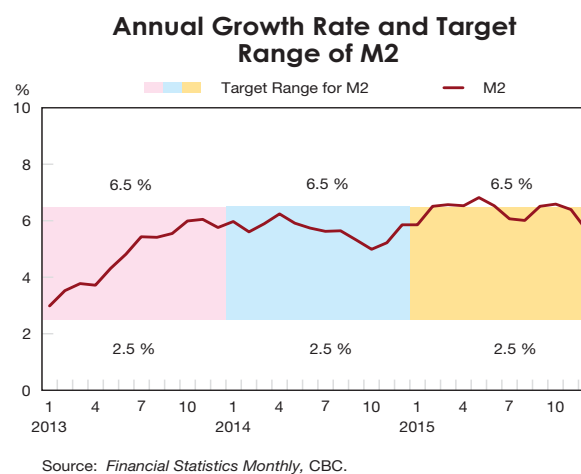


Source: *Financial Statistics Monthly*, CBC.

Accelerated 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 2015 was 6.34%, up by 0.68 percentage points from the previous year and slightly lower than the upper limit of the CBC's target range.

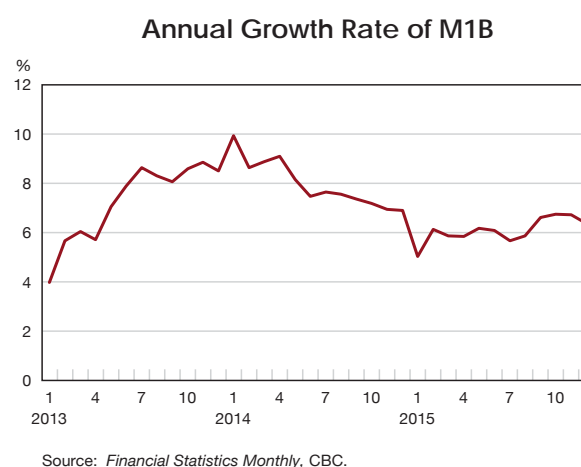
In terms of M2's monthly movements in 2015, the M2 growth rate trended up from January onwards owing to net foreign capital inflows, and reached its yearly high of 6.81% in May. The M2 growth rate moved downward between June and August on account of net foreign capital outflows and slowing growth of bank loans and investments. The annual growth rates rose in September and October, respectively, because of an increase in bank loans and investments and net foreign capital inflows. In the following months, the M2 growth rate trended down and recorded a yearly low of 5.68% in December as a result of net foreign capital outflows.



Decline in M1B growth

In 2015, the average annual growth rate of M1B recorded 6.10%, 1.86 percentage points lower than the previous year's figure. The decline mirrored, in large part, the shift of funds from transaction deposits to non-transaction deposits, the stock trading volume declined during the second half of the year, and the higher base in the previous year.

As for the monthly movements of M1B, the annual growth rate reached its yearly low of 5.03% in January because of a higher base effect, and then rose to 6.12% in February. In March and April, the M1B growth rates exhibited a downtrend, mainly owing to the shift of funds from transaction deposits to non-transaction deposits and the decrease in bank loans and investments. The M1B growth rate rose to 6.18% in May on account of net capital inflows. Subsequently, affected by slower growth in bank loans and investments and net foreign



capital outflows, the M1B growth rate dropped to 5.66% in July. The M1B growth rate gradually trended up in the following months and hit a yearly high of 6.75% in October. However, the bearish stock market and net foreign capital outflows both contributed to falling M1B growth from November onwards.

3. Banking Sector

Number of Monetary Financial Institutions

At the end of 2015, the number of monetary financial institutions (defined hereafter in this chapter as excluding the central bank) amounted to 403. The number of credit departments of farmers' and fishermen's associations increased by three owing to new openings, while the other types of institutions all remained unchanged.

Number of Monetary Financial Institutions by Category

Types of institutions	End of 2015	End of 2014	Annual Change
Total Number of Main Offices	403	400	3
Domestic Banks	40	40	0
Foreign and Mainland Chinese Banks	30	30	0
Credit Cooperatives	23	23	0
Credit Departments of Farmers' and Fishermen's Associations	309	306	3
Chunghwa Post	1	1	0
Total Number of Branches	6,119	6,113	6
Local Branches	5,925	5,932	-7
Overseas Branches	132	119	13
Offshore Banking Units	62	62	0

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 shares of deposits, domestic banks accounted for 77.76% at the end of 2015, while the market share of foreign and Mainland Chinese banks grew to 2.21%. Both ratios were higher than the previous year, mainly owing to a significant increase in transaction and non-transaction deposits caused by net foreign capital inflows at the end of 2015 and repatriation of firms' receivables amid international financial turmoil during the second half of the year. Chunghwa Post's market share shrank to 14.69%, affected by lower interest rates on deposits than other financial

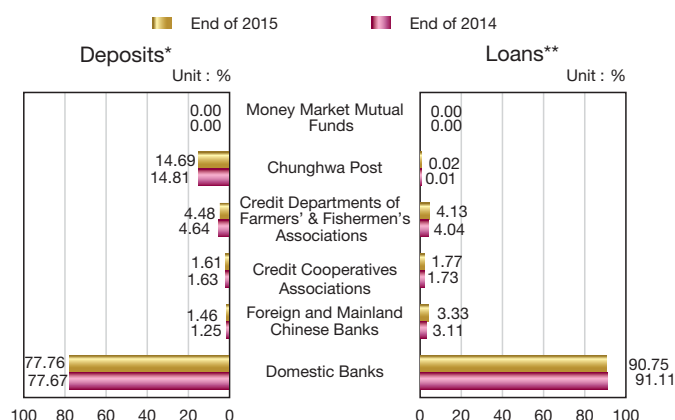
institutions. The market share of credit departments of farmers' and fishermen's associations also became smaller owing to deposits outflows, while credit cooperatives' market share slightly contracted.

In terms of loans, the market share of domestic banks shrank to 90.75% for the year, owing to sizable decreases in borrowings by the government, thanks to increased tax revenue, and by more profitable public enterprises, caused by cost reductions reflecting the continued slump in international oil prices.

The share of foreign and Mainland Chinese banks slightly went up to 3.33%.

Chunghwa Post's market share of loans ascended marginally. The market share of credit departments of farmers' and fishermen's associations increased to 4.13% with three new openings. Additionally, the share of credit cooperatives rose to 1.77%.

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 2015, the total amount of funds in monetary financial institutions was NT\$44,703 billion, increasing by NT\$2,618 billion compared to the end of 2014. Despite the CBC's rate cuts in September and December, the combined share of transaction deposits and non-transaction deposits reduced slightly to 85% as a result of a sharp decline in net foreign capital inflows. As some savers switched to transaction deposits and insurance products in response to a narrowing spread between long- and short-term rates, growth in non-transaction deposits became slower.

As for foreign currency deposits, the expectation of the Fed lifting interest rates and the significant depreciation of the renminbi (RMB) not only led to a shift between RMB deposits and USD deposits but also caused the share of foreign currency deposits to increase compared to the previous year. Meanwhile, the increase in other items largely came from banks' profits, capital increases by cash, and more issuance of bank debentures.

In the case of fund uses, except for foreign currency loans by the corporate sector, which decreased owing to the expectation of USD appreciation, all items increased at the end of 2015 compared to the end of 2014. Among them, the share of bank loans slid mainly owing to weaker demand from private enterprises amid a sluggish economy. Furthermore, both the balance and the share of net foreign assets increased because of a stronger USD over the end of the previous year.

Sources and Uses of Funds in Monetary Financial Institutions¹

Unit: NT\$ Billion

	End of 2015		End of 2014		Annual Change	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Sources:						
Transaction Deposits ²	13,727	30.71	12,849	30.53	878	0.18
Non-transaction Deposits ³	24,400	54.59	23,387	55.57	1,013	-0.98
NT Dollar Deposits	19,895	44.51	19,226	45.68	669	-1.17
Foreign Currency Deposits	4,505	10.08	4,161	9.89	344	0.19
Government Deposits	846	1.89	772	1.83	74	0.06
Other Items	5,730	12.81	5,077	12.07	653	0.74
Total	44,703	100.00	42,085	100.00	2,618	0.00
Uses:						
Net Foreign Assets ⁴	4,080	9.13	3,198	7.60	883	1.53
Loans	24,242	54.23	23,473	55.78	769	-1.55
NT Dollar Loans	23,409	52.37	22,502	53.47	907	-1.10
Foreign Currency Loans ⁴	833	1.86	970	2.31	-1.38	-0.45
Portfolio Investments ⁵	5,129	11.47	4,638	11.02	491	0.45
Purchases of CDs Issued by CBC	7,412	16.58	7,020	16.68	392	-0.10
Deposits with CBC	3,840	8.59	3,757	8.92	83	-0.33

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 of ample liquidity in the banking system, both portfolio investments and banks' purchases of CDs issued by the CBC rose at the end of 2015 compared to the end of 2014. The share of portfolio investments by monetary financial institutions grew higher mainly because banks increased bond investments in response to the rate cuts by the CBC and global financial turmoil. In addition, diversified uses of funds resulted in the continuously declining share of banks' purchases of CDs issued by the CBC during recent years.

Downtrend in Deposit Growth

At the end of 2015, total deposits of monetary financial institutions stood at NT\$39,164.6 billion, registering an annual growth rate of 5.83%, lower than last year's 5.99%. This was mainly attributable to unstable international financial conditions, weak global economic growth, and sluggish domestic export growth in the second half of the year.

With the Chinese New Year holidays boosting demand for currency in February, the annual growth rate of deposits lowered to 6.36%. Currency demand of the general public remained strong through to March owing to a long weekend 228 Peace Memorial Day holiday, so the deposit growth rate declined further to 6.24%.

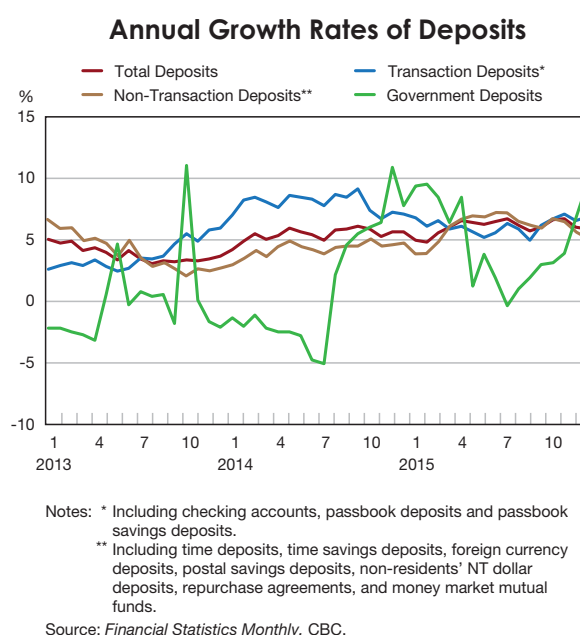
The deposit growth rate trended up in April and May, reflecting increases in transaction deposits and foreign currency deposits caused by larger net capital inflows and a buoyant stock market. However, the growth rate of total deposits slid to 6.15% and 5.68% in June and July, respectively, owing to decreases in transaction deposits and non-transaction deposits caused by weakened domestic economic growth and larger net foreign capital outflows. Afterwards, with significant growth in loans and investments and an increase in foreign currency deposits pushed up by the expectation of the Fed's rate hike, the deposit growth rate went up to 6.64% in September.

The uptrend continued in October, because of larger net foreign capital inflows and a stabilized stock market. However, it turned into a downtrend in November and December, with the deposit growth rate falling to 5.96% and 5.83%, respectively. The decline was because foreign capital registered a net outflow and because some people moved their deposits to insurance products after another policy rate cut.

Transaction deposits posted a higher annual growth rate of 6.83% for the whole year, up from 5.83% the year before, with its share in total deposits climbing to 35.05% from 34.72%. The faster growth was mostly caused by a booming stock market in the first half of the year and a shift in some non-transaction deposits into transaction deposits following policy rate cuts in the second half of the year.

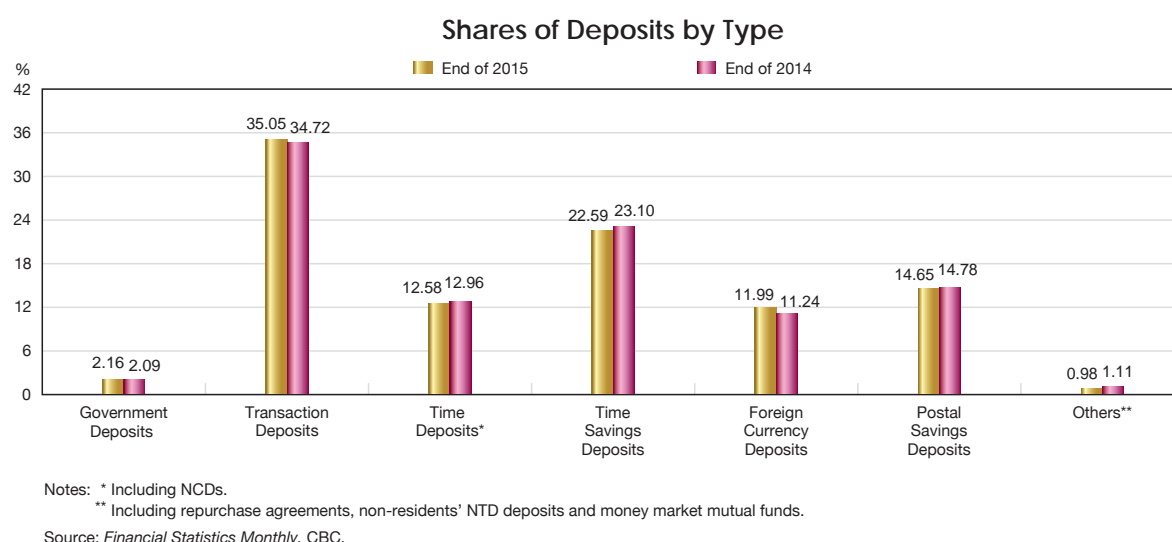
Moreover, there was a notable rise in foreign currency deposits on account of increases in firms' sales revenue from overseas markets from the beginning of the year; therefore, the annual growth rate of non-transaction deposits showed an uptrend in the first half of the year. Afterwards, with a significant net outflow of foreign capital and a partial switch from non-transaction to transaction deposits, the annual growth rate of non-transaction deposits dropped to 5.15% from 6.07% the previous year. Its share in total deposits fell to 62.79% at the year end, from 63.19% at the end of the previous year.

By type of non-transaction deposit, the share of foreign currency deposits went up to 11.99% owing to market expectation of a Fed rate hike at the end of the year; however, a higher base



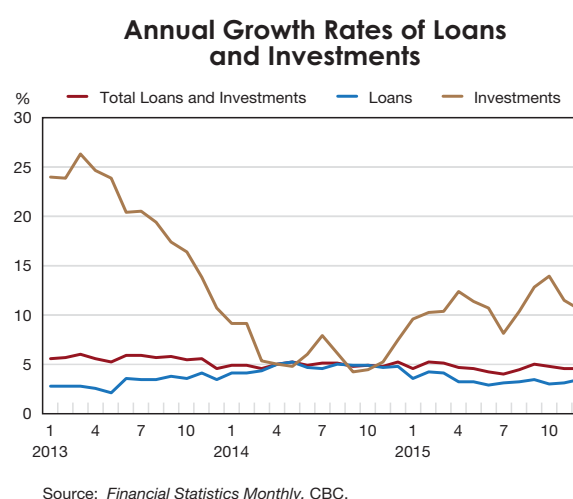
effect and the significant depreciation of the RMB led the growth rate of foreign currency deposits to slide substantially to 12.87%. The shares of time deposits and time savings deposits both continually declined, whereas the share of postal savings deposits grew slightly to 14.65%.

Owing to a higher comparison base in the corresponding period of the previous year, the annual growth rate of government deposits trended down in the first half of the year. However, with greater tax revenues and less expenditure in the second half of the year, it exhibited an uptrend, climbing to 9.62%. Its share in total deposits edged up to 2.16% at year end.



Lower Growth in Bank Loans and Investments

The annual growth rate of loans and investments of monetary financial institutions was 4.61% at the end of 2015, decreasing from 5.20% at the end of 2014. Growth in loans decelerated to 3.43% at the end of 2015 from 4.77% at the end of the previous year, mainly owing to weaker demand from private enterprises amid a sluggish economy. In contrast, growth in portfolio investment accelerated to 10.59% at the end of 2015 from 7.46% a year earlier, mainly owing to higher growth in investments in securities issued by non-financial institutions.



Loans by Sector

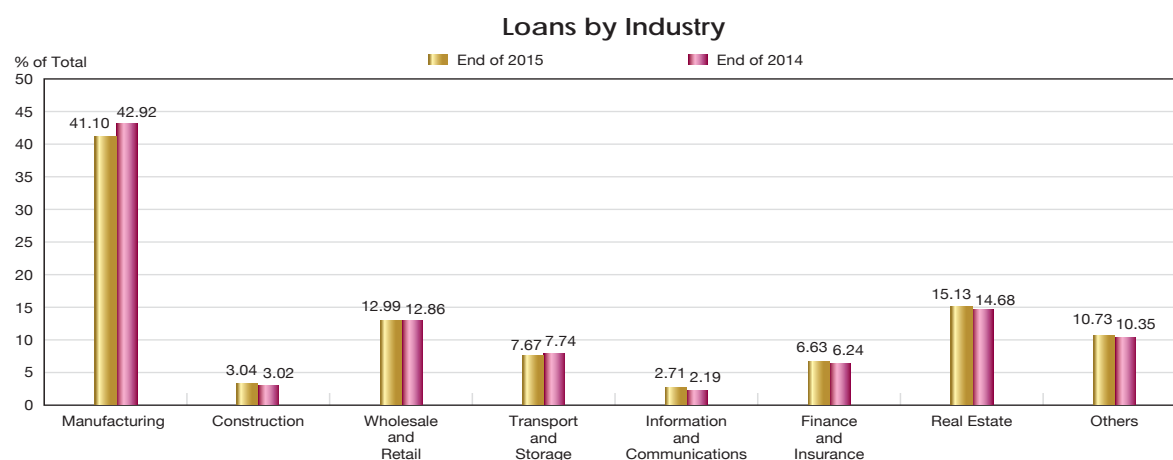
The annual growth rate of private sector loans by banks (defined hereafter in the following paragraphs as including domestic banks and local branches of foreign and Mainland Chinese

banks) fell to 3.80% at the end of 2015 from 5.52% at the end of 2014. The downturn was mainly due to decreasing demand from private enterprises. In terms of loans to public enterprises, the amount of total outstanding loans to this group shrank in 2015, as the Taiwan Power Company reduced its borrowing from banks, largely reflecting the considerable gains in annual profits resulting from lower oil prices. However, due to a low base effect, the annual decline in loans to public enterprises slowed from -10.25% at the end of 2014 to -3.40% at the end of 2015. Meanwhile, the annual growth rate of loans to government agencies declined to -4.56% at the end of 2015 from -0.74% at the end of 2014, mainly on account of the decrease in borrowing resulting from increased income tax revenues thanks to solid economic growth in 2014.

In terms of loan composition, loans extended to the private sector accounted for 91.22% of total loans at the end of 2015, higher than the 90.56% recorded at the end of 2014. Loans extended to government agencies and public enterprises accounted for 6.08% and 2.70% at the end of 2015, respectively, lower than 6.56% and 2.88% 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 41.10% at the end of 2015, decreasing from 42.92% at the end of 2014. This decrease was mainly due to slower growth and the decreasing shares in loans extended to petroleum and coal products manufacturing, chemical material manufacturing, electronic parts and components manufacturing, fabricated metal products manufacturing, and basic metal manufacturing at the end of 2015. Meanwhile, compared with the share of loans extended to the construction industry at the end of 2014, the change in the share at the end of 2015 was quite negligible, slightly increasing from 3.02% to 3.04%. However, compared with that at the end of 2013, the share shrank from 3.11% to 3.04%, reflecting a conservative outlook for the housing market.



Note: Figures include the data of domestic banks and local branches of foreign and Mainland Chinese banks but exclude their data on securities acquired under reverse repurchase agreements.

Source: *Financial Statistics Monthly*, CBC.

Both the share and the annual growth rate of loans extended to the transport and storage industry decreased at the end of 2015, mainly reflecting the slowdown in international trade. The shares of loans extended to the remaining industries exhibited uptrends. To take the information and communication industry as an example. The second-stage release of 4G licenses and the policy initiated by the Financial Supervisory Commission to assist creative industries to get business loans both contributed to the increase in loans extended to the information and communication industry.

Consumer Loans

The annual growth rate of consumer loans extended by banks increased from 2.81% at the end of 2014 to 3.42% at the end of 2015. Among them, house-purchasing loans increased NT\$265.3 billion in 2015 with an annual increase of 4.52%, representing higher growth for the year, mainly because home sales increased before the commencement of the integrated housing and land tax in January 2016. As for the shares of various consumer loans, house-purchasing loans remained the largest component, with its share rising from 81.46% at the end of 2014 to 82.32% at the end of 2015. Car loans accounted for 1.60%, decreasing from 1.62%, mainly because car sales were dampened by weaker economic conditions as well as a higher base in the previous year. Meanwhile, house-repairing loans and revolving credit for credit cards accounted for 2.47% and 1.44%, respectively, both decreasing from the end of the previous year.

Investments

Portfolio investments by monetary financial institutions, measured on a cost basis, showed higher growth with an annual increase of 10.59% in 2015, mainly because banks increased bond investments in response to the rate cuts by the CBC and global financial turmoil.

Among the investment instruments, government bonds accounted for the largest share with 61.46%, higher than the 60.97% a year ago, mainly bolstered by massive purchases of government bonds by banks and the Department of Savings and Remittances of Chunghwa Post to hedge against market risks. Meanwhile, as the CBC cut the policy rates to keep monetary conditions accommodative, banks turned to corporate bonds instead of commercial paper in order to raise the rate of return. At the end of 2015, corporate bonds accounted for a share of 15.58%, larger than a year ago. Commercial paper accounted for a share of 13.67%, decreasing from the end of 2014.

In terms of annual growth trends, portfolio investments by monetary financial institutions, measured at fair value, recorded a year-on-year increase of NT\$476.5 billion, while the increase was larger, at NT\$491.3 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,

Direct Finance vs. Indirect Finance*

Unit: NT\$ Billion

Year	Direct Finance (1)	Indirect Finance (2)			Total Funds Raised (3)=(1)+(2)
		Loans	Investments	Subtotal	
2006	-151.3	820.6	537.1	1357.7	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	234.3	1,248.6	217.8	1,466.4	1,700.7
2015	64.5	865.1	144.3	1,009.4	1,073.9

Notes: * Measured in terms of flow data.

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

(2) 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.

Source: Financial Statistics Monthly, CBC

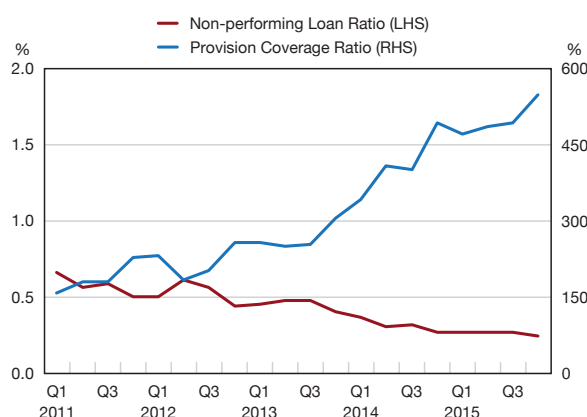
referring respectively to issuing securities in the markets and borrowing from financial institutions. The annual increase in direct finance and indirect finance combined shrank in 2015 from the previous year's NT\$1,700.7 billion to NT\$1,073.9 billion. Direct finance increased NT\$64.5 billion during 2015, lower than the previous year's increase of NT\$234.3 billion. Indirect finance decreased from the previous year's NT\$1,466.4 to NT\$1,009.4 billion, which was mainly due to slower growth in loans by financial institutions.

Based on the outstanding balance, the share of direct finance in total funds raised decreased from 20.63% at the end of 2014 to 20.53%, while the share of indirect finance increased from 79.34% to 79.47%.

Decline in Non-performing Loan (NPL) Ratio

With improved asset quality, the average NPL ratio of monetary financial institutions as a whole declined further to 0.25% at the end of 2015 from the previous year's 0.27%. Among the different types of financial institutions, community financial institutions continued to show the biggest improvement in the average NPL ratio in 2015.

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



Note: * Including 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.

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 547.47% at the end of 2015 from 491.81% the previous year.

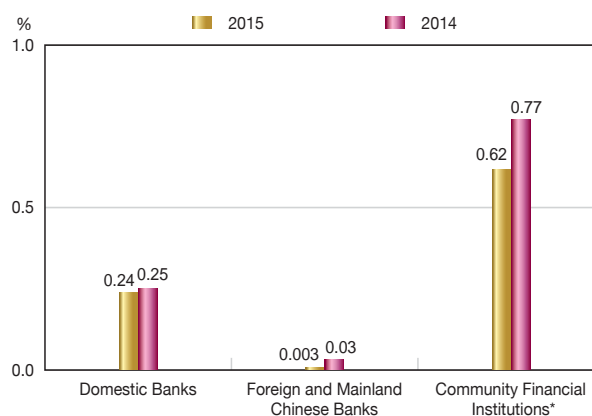
Decline in Bank Interest Rates

In view of downward revisions of the domestic growth forecast since the second quarter of 2015 amid a slowing global recovery, as well as subdued inflation expectations, the CBC lowered the policy rates twice on September 25 and December 18 to stimulate the economy. As a result, bank interest rates on deposits and loans went down from September onwards. 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% and 1.36% prior to the end of August 2015, and then decreased to 0.74% and 1.21% at the end of 2015. Moreover, the average base lending rate decreased to 2.83% at the end of 2015 from 2.88% at the previous year-end.

During the first half of the year, the weighted average interest rate on total deposits of domestic banks remained broadly steady. In the third quarter, the weighted average deposit rate slightly declined to 0.77% owing to the decrease in the share of time deposits in total deposits. In the fourth quarter, the CBC's rate cut led the weighted average deposit rate to decrease to 0.74%. On the whole, the weighted average interest rate on total deposits of domestic banks was 0.77% in 2015, which was 0.01 percentage points lower than that recorded in the previous year.

With respect to the weighted average interest rate on new loans of the five major domestic banks, it fluctuated within a narrow range between 1.58% and 1.81% during the January to October period. Then it decreased to 1.64% in November owing to decreases in base lending rates and the index rates on adjustable-rate mortgages. In December, it declined further to 1.60%. On the whole,

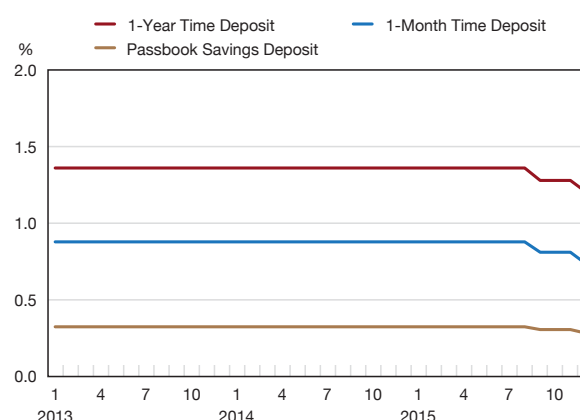
Non-performing Loan Ratios by Type of Monetary Financial Institutions



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

Source: Department of Financial Inspection, CBC.

Average Deposit Rates of the Five Major Domestic Banks*



Note: * The five major domestic banks are Bank of Taiwan, Taiwan Cooperative Bank, First Commercial Bank, Hua Nan Commercial Bank and Land Bank of Taiwan.

Source: Financial Statistics Monthly, CBC.

the weighted average interest rate on new loans slightly decreased from 1.68% in 2014 to 1.67% in 2015, down by 0.01 percentage points. Excluding central government loans, the weighted average interest rate on new loans decreased from 1.74% in 2014 to 1.73% in 2015, down by 0.01 percentage points.

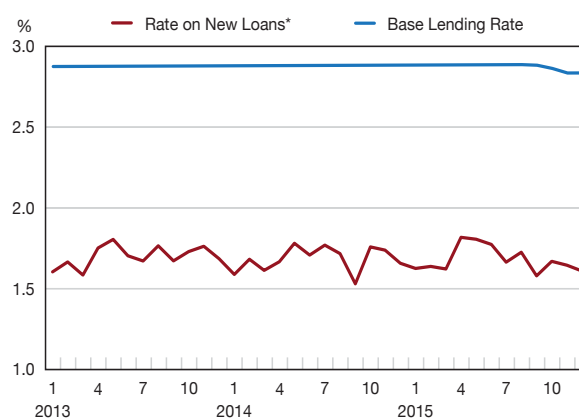
In the first quarter of the year, owing to higher growth in bank claims on local governments, the weighted average interest rate on total loans of domestic banks moved downward from 2.22% in the fourth quarter of 2014 to 2.20%. In the second quarter, the weighted average lending rate moved slightly upward to 2.21% owing to the increase in the weighted average interest rate on new loans. In the third quarter, because some enterprises repaid their low-interest rate loans and some banks' interest rates on consumer loans and long-term loans rose, the weighted average lending rate moved upward to 2.23%. In the fourth quarter, as a result of the CBC's rate cut and an increase in bank claims on local governments and government enterprises, the weighted average interest rate on loans declined to 2.18%. For the year as a whole, the weighted average interest rate on loans of domestic banks was 2.20%, which was 0.01 percentage points lower than that recorded in the previous year.

Because the decreases in deposit rates were as much as those in lending rates, the interest rate spread between deposits and loans remained at 1.43 percentage points.

Slight Reduction in Profitability

Affected by weaker economic growth, the pre-tax profits of monetary financial institution slightly decreased by NT\$0.1 billion in 2015. Those of domestic banks slightly decreased by NT\$0.1 billion to NT\$320.6 billion, mainly owing to a decrease in investment revenues resulting from the decline in the valuation of portfolio investments. The pre-tax profits of Chunghwa Post decreased by NT\$0.3 billion, while the pre-tax profits of foreign and Mainland Chinese banks slightly increased by NT\$0.1 billion.

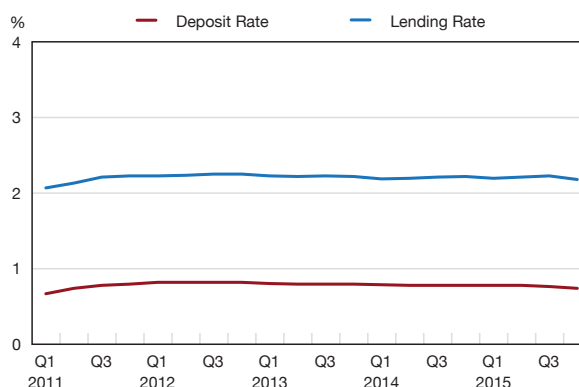
Average Lending Rates of the Five Major Domestic Banks



Note: * Including housing loans, capital expenditure loans, current operations loans and consumer loans.

Source: Financial Statistics Monthly, CBC.

Weighted Average Interest Rates of Domestic Banks



Source: Financial Statistics Monthly, CBC.

Profits of Monetary Financial Institutions

Unit: NT\$ Billion

	Pre-tax Profits			Return on Assets (%)*			Return on Equity (%)**		
	2015	2014	Annual Change	2015	2014	Annual Change	2015	2014	Annual Change
Domestic Banks	320.6	320.7	-0.1	0.73	0.77	-0.04	10.65	11.62	-0.97
Foreign and Mainland Chinese Banks	25.8	25.7	0.1	0.57	0.60	-0.03	22.45	25.55	-3.10
Credit Cooperatives	2.5	2.5	0.0	0.37	0.39	-0.02	5.54	5.72	-0.18
Credit Departments of Farmers' and Fishermen's Associations	5.8	5.6	0.2	0.31	0.30	0.01	4.90	4.93	-0.03
Chunghwa Post	13.5	13.8	-0.3	0.23	0.25	-0.02	12.46	13.92	-0.83
Total	368.2	368.3	-0.1	0.65	0.68	-0.03	10.84	11.80	-0.96

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

** Return on Equity = Pre-tax Profits / Average Equity

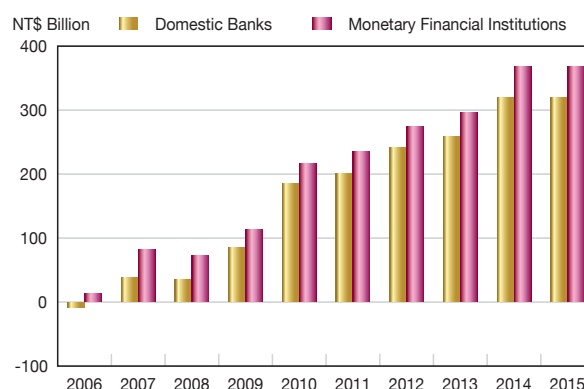
Source: Department of Financial Inspection, CBC.

Decreases in ROA and ROE

The average return on assets (ROA) of monetary financial institutions in 2015 decreased to 0.65% from 0.68% the previous year, and their return on equity (ROE) also went down to 10.84% from 11.80% a year earlier. Among monetary financial institutions, domestic banks were the best performers in terms of ROA, and foreign and Mainland Chinese banks posted the highest ROE.

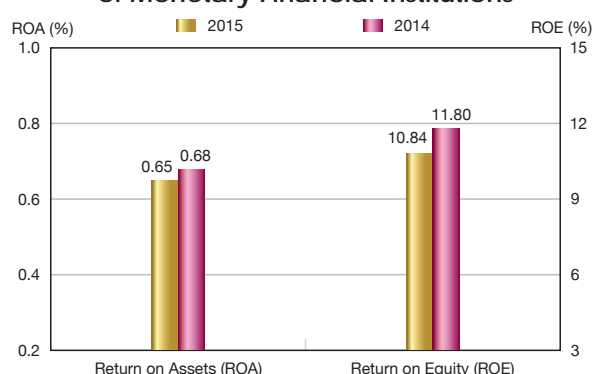
With regard to capital adequacy ratios, the average ratio for domestic banks increased to 12.93% at the end of the year from 12.35% a year before, mainly owing to capital increases by some domestic banks.

Pre-tax Profits



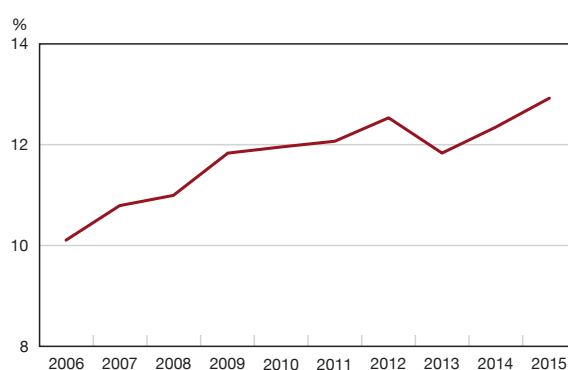
Source: Department of Financial Inspection, CBC.

ROA and ROE of Monetary Financial Institutions



Source: Department of Financial Inspection, CBC.

Capital Adequacy Ratio of Domestic Banks



Source: Department of Financial Inspection, CBC.

4. Money Market

In 2015, the total turnover in the interbank call loan market increased by 1.59%, whereas that in the short-term bills market decreased by 6.76%. Interest rates in both markets remained broadly stable in the first half of the year, but then had exhibited a downtrend as the CBC lowered policy rates in the third quarter.

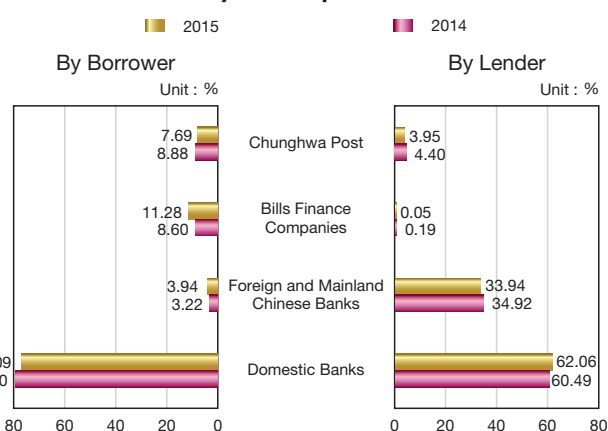
Slight Increase in Interbank Call Loans

For the year 2015, as the domestic economy slowed down, growth in bank loans and investments moderated, weakening banks' demand for call loans. Therefore, total annual turnover of interbank call loans for 2015 only slightly increased by NT\$762.1 billion, or 1.59%, to NT\$48,696.6 billion.

With regard to borrowers, domestic banks were still the largest player during the year, accounting for 77.09% of total transactions, followed by bills finance companies, Chunghwa Post, and foreign and Mainland Chinese banks, with shares of 11.28%, 7.69% and 3.94%, respectively. The amount borrowed by domestic banks decreased by NT\$474.0 billion, or 1.25%, compared with the previous year, mainly because banks had ample liquidity, which reduced their funding needs. On the other hand, the amount borrowed by bills finance companies increased by NT\$1,369.1 billion or 33.22% during the year because of their stronger demand for funds, which was associated with increased profits from short-term bill transactions resulting from lower bills market rates. However, the borrowed amount of Chunghwa Post decreased by NT\$509.9 billion, or 11.98%, while that of foreign and Mainland Chinese banks increased by NT\$376.9 billion or 24.45%.

With respect to lenders, domestic banks continued to be the largest supplier of funds, accounting for 62.06% of total transactions in 2015. Following domestic banks were foreign and Mainland Chinese banks, Chunghwa Post and bills finance companies with respective shares of 33.94%, 3.95% and 0.05%. The amount lent by domestic banks increased by NT\$1,229.3 billion, or 4.24%, compared with the previous year because the amount lent to bills finance companies rose, reflecting their higher funding needs. With a decline in net foreign capital inflows, the lending amount of foreign and

Composition of Interbank Call Loan Market by Participant



Source: Financial Statistics Monthly, CBC.

Mainland Chinese banks decreased by NT\$212.8 billion or 1.27%. The amount lent by Chunghwa Post fell by NT\$188.7 billion, or 8.94%, compared with the previous year, attributable to an increase in its holdings of government bonds.

In terms of maturity, interbank overnight call loans remained the most actively traded instrument in the market with a predominant share of 63.72%, up by 5.34 percentage points from that of the previous year. Second were those with a maturity of 1 week, accounting for 29.62%, down by 5.11 percentage points from that of the previous year. The share of loans with a 2-week maturity decreased by 0.30 percentage points to 5.37%. Shares for the trading of interbank call loans with maturities of 3 weeks, 1 month, 2-6 months, and above 6 months were negligible.

Rise in Short-Term Bill Issuance, yet Decrease in Transactions

In 2015, newly issued short-term bills totaled NT\$11,512.8 billion. Of the new issues, commercial paper continued to account for the lion's share of 90.56%. Second were negotiable certificates of deposit with a share of 7.23%, showing an increase of 1.31 percentage points over the previous year. The growth was largely because banks started to issue foreign currency-denominated negotiable certificates of deposit in August in order to increase foreign currency funding channels, to diversify investment tools for corporate and individual investors, and to expand the domestic market of foreign currency bills. As market interest rates remained at low levels, private and government enterprises were more willing to issue commercial paper instead of borrowing from banks. Consequently, compared with the previous year, the amount of commercial paper issued grew by NT\$506.4 billion. On the contrary, the Ministry of Finance decreased the issues of treasury bills by NT\$11.2 billion owing to increased tax revenue. Meanwhile, the amount of city treasury bills and bankers acceptances

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
2006	7,004.0	1,092.4	45.0	25.0	-	-	5879.8	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
2015	11,512.8	1,677.7	233.7	90.0	0.0	0.0	10,426.0	1,346.6	20.8	3.5	832.3	237.6
2015-2014 Change	672.2	36.5	-11.2	-40.0	-10.0	0.0	506.4	39.8	-3.3	-0.7	190.2	37.4

Source: Financial Statistics Monthly, CBC.

decreased by NT\$10.0 billion and NT\$3.3 billion, respectively, compared with the previous year. As of the end of 2015, total outstanding short-term bills amounted to NT\$1,677.7 billion, 2.22% more than that of the previous year end.

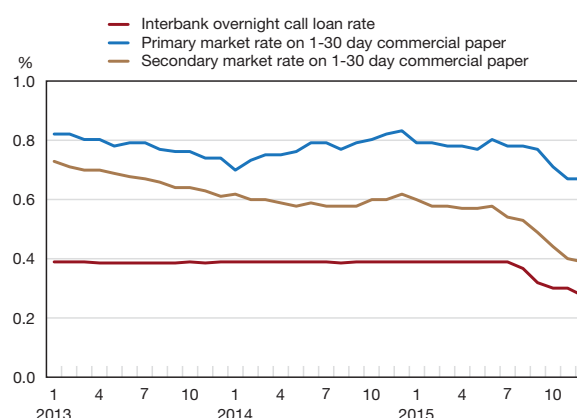
The total turnover of short-term bills in 2015 decreased by 6.76% to NT\$33,263.3 billion. Of the total transactions, commercial paper still made up the largest share of 93.79%, representing an increase of 0.99 percentage points compared with the previous year. It was followed by negotiable certificates of deposit with a share of 5.41%, representing a decrease of 0.69 percentage points over 2014. 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 49.32%, followed by banks with a share of 25.29%.

Downtrend in Money Market Rates

In 2015, as the domestic economy posted slower growth, the CBC continued to manage market liquidity to maintain excess reserves of banks at an appropriate level. On September 25 and December 18, the CBC lowered policy rates twice by a total of 25 basis points, guiding the weighted average interbank overnight call loan rate to gradually move downward from 0.387% to 0.275%.

The primary market rate on commercial paper with a maturity of 1-30 days trended down from 0.79% in January of 2015 to 0.67% in December of the same year. The secondary market rate on commercial paper with a maturity of 1-30 days also descended from 0.60% in January to 0.39% in December of the same year.

Money Market Interest Rates



Source: Financial Statistics Monthly, CBC.

Growth in Money Market Funds

At the end of 2015, there were a total of 45 money market funds in Taiwan with total assets reaching NT\$993.5 billion, an increase of NT\$252.1 billion or 34.00% over the previous year. With regard to portfolio composition, the largest use of the funds was bank deposits with a share of 65.95% at the end of the year. The second largest was repurchase agreements, with a share of 16.67%, a 4.48 percentage points increase resulted from a need by institutional investors, a major client group, to boost their financial performance. Meanwhile, short-term bills made up 16.23% of total money market funds. In addition, the bond holding ratio of all money markets funds slightly increased from 0.29% in January to 1.14% in December of the same year.

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 (%)
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
2015	993.5	655.2	65.95	161.2	16.23	165.6	16.67	11.4	1.14
2015/ 1	814.6	557.5	68.44	141.0	17.31	113.7	13.96	2.4	0.29
2	814.1	566.0	69.52	130.7	16.05	114.9	14.11	2.6	0.32
3	769.1	548.3	71.28	121.3	15.77	97.4	12.67	2.1	0.28
4	860.4	592.4	68.85	149.6	17.38	116.6	13.55	1.9	0.22
5	869.0	594.0	68.35	142.9	16.44	130.4	15.01	1.7	0.20
6	791.3	558.1	70.54	125.8	15.90	105.9	13.39	1.4	0.17
7	842.8	592.8	70.34	118.7	14.08	129.0	15.30	2.3	0.27
8	879.1	626.1	71.22	106.4	12.10	143.6	16.33	3.1	0.36
9	890.4	644.5	72.38	105.7	11.87	136.8	15.36	3.5	0.39
10	994.9	677.9	68.13	128.3	12.89	181.3	18.22	7.5	0.76
11	1,061.2	678.7	63.96	157.7	14.86	213.4	20.11	11.4	1.07
12	993.5	655.2	65.95	161.2	16.23	165.6	16.67	11.4	1.14

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

5. Foreign Exchange Market

Appreciation of the NT Dollar in trade-weighted terms

In 2015, the NT dollar depreciated against the US dollar and the renminbi (RMB), but appreciated against most major international currencies including the euro, the Japanese yen, and the Korean won. The trade-weighted nominal effective exchange rate index of the NT dollar increased by 2.64% on a daily average basis. The exchange rate movements of the NT dollar against the US dollar, the euro, the yen, the RMB, and the Korean won are analyzed as follows.

The NT dollar against the US dollar slightly appreciated before it weakened in the second half of 2015. Early in the year, the US dollar strengthened as the US economy expanded at a moderate pace, while the economic growth rates of Japan, the euro area and China all slowed down. After the Swiss National Bank (SNB) discontinued the minimum exchange rate of the Swiss Franc (CHF) per euro on January 15, international hedge funds flowed into emerging Asia including Taiwan, and the NT dollar turned to appreciation. A softer US dollar at the end of April, owing to sluggish first quarter GDP performance in the US and growing market expectations for the Fed to postpone rate normalization after the FOMC Statement noted that underutilization of labor resources was little changed, and inflows of foreign capital into Taiwan's financial markets combined to lead the NT dollar higher, soaring to a yearly high against the US dollar on May 22. In July, the Fed chairperson's speech about a possible rate hike within 2015 caused the US dollar to strengthen, while foreign capital inflows turned into a net outflow from Taiwan, resulting in NT dollar depreciation against the US dollar. On August 11, the People's Bank of China (PBOC) devalued the RMB exchange rate against the US dollar, leading most major Asian currencies to fall. Meanwhile, Taiwan's exports continued to contract and the CBC announced a rate cut in its September Board Meeting. Consequently, the NT dollar hit a yearly low on September 25. From October onwards, the US economic indicators were mixed; however, Taiwan's economic growth rate slipped into negative territory in the third quarter. In December, the Fed announced its rate hike, while the CBC decided to cut policy rates to boost economic growth, leading the NT dollar to depreciate against the US dollar. At the end of 2015, the NT dollar depreciated by 4.08% 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 4.80% in 2015.

The NT dollar appreciated against the euro in the first half of the year but then depreciated in the third quarter and slightly appreciated in the last quarter. The NT dollar against the euro fell to a yearly low on January 5. As oil prices steadily declined, and investors worried about a deflation risk in the euro area, the euro faced depreciation pressures. This was exacerbated by the ECB's

expansion of its asset purchase program and the SNB's discontinuing the minimum exchange rate of CHF per euro. As a result, the NT dollar against the euro soared to a yearly high on April 14. In May, the euro area's CPI rose, and German factory orders increased more than anticipated and the GDP growth rate was revised up; therefore, the consequent euro strength led the NT dollar to depreciate against the euro. Later in June, Greece defaulted on its International Monetary Fund (IMF) loans and conducted a bailout referendum on July 5, sending the euro down against the NT dollar. On August 11, the PBOC devalued the RMB exchange rate against the US dollar, leading most major Asian currencies to fall, and the NT dollar turned into depreciation against the euro. After late October, the continuous fall in international commodity prices and growing downside risks to economic growth posed bigger challenges to achieve the ECB's inflation target. These concerns built up expectations that the ECB would expand its monetary easing, and therefore the NT dollar appreciated against the euro. In December, the ECB cut the interest rate on the deposit facility and extended its asset purchase program, but kept its overall asset purchases unchanged. Against this backdrop, the NT dollar against the euro depreciated. Compared with the end of the previous year, the NT dollar appreciated against the euro by 6.69% at the end of 2015. On a daily average basis, the NT dollar appreciated against the euro by 13.89%.

The NT dollar appreciated against the yen in the first half year and rapidly depreciated in the second half of 2015. In the first half year, Japan revised down not only its economic growth rate of the last quarter of 2014 but also the outlook for economic growth and inflation, and the Bank of Japan (BOJ) maintained its monetary easing policy stance. The NT dollar against the yen reached a yearly high on June 2. On June 10, the BOJ governor's comments that the real exchange rate of the yen was low enough and further depreciation would not improve the economic situation sent the yen higher. Moreover, the Greek default crisis and China's slowdown also led the yen to soar on safe-haven demand. In turn, the NT dollar against the yen hit a yearly low on September 24. After that, the yen trended down on account of weak economic conditions. In December, with international commodity and oil prices staying low, capital flowed into the yen, and the NT dollar against the yen depreciated. In sum, the NT dollar depreciated by 3.47% against the yen at the end of 2015 compared with the previous year end. On a daily average basis, the NT dollar appreciated against the yen by 8.77%.

In 2015, the NT dollar appreciated against the RMB in the first half year and depreciated in the second half. Early in the year, downside risks to China's growth remained significant, weighing down on domestic demand and exports. With the CPI and the PPI rising less than anticipated, the PBOC lowered its reserve requirement ratio in February and April, and cut RMB benchmark loan and deposit interest rates in March and May. As a result, the NT dollar against the RMB reached a yearly high on May 22. On August 11, the PBOC devalued the RMB exchange rate against the US dollar, and major Asian currencies thus fell following a weaker RMB. After that, the PBOC cut its reserve

Annual Changes of NTD Exchange Rate Against Major Currencies

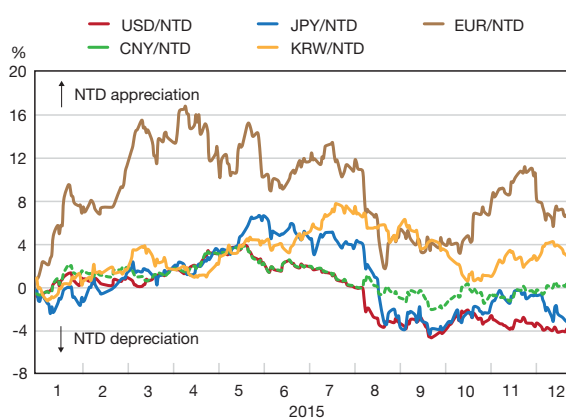
	NTD/USD	NTD/EUR	NTD/JPY	NTD/CNY	NTD/KRW
Exchange Rate (2015/12/31)	33.066	36.131	0.2747	5.0921	0.0281
Exchange Rate (2014/12/31)	31.718	38.550	0.2652	5.1125	0.0291
Annual Change	-4.08%	6.69%	-3.47%	0.40%	3.42%
Average Exchange Rate (2015)	31.898	35.377	0.2635	5.1222	0.0282
Average Exchange Rate (2014)	30.368	40.290	0.2866	4.9431	0.0288
Annual Change	-4.80%	13.89%	8.77%	-3.50%	2.27%

Source: Department of Economic Research, CBC.

requirement ratio and RMB benchmark loan and deposit interest rates several times on concerns of slower economic growth, while Taiwan also experienced economic moderation. The NT dollar against the RMB dropped to a yearly low on September 25 and fluctuated toward the end of 2015. The NT dollar appreciated against the RMB by 0.40% between end-2014 and end-2015. On a daily average basis, the NT dollar depreciated by 3.50% against the RMB when compared with the previous year.

In 2015, The NT dollar slightly appreciated against the Korean won in the first half of the year but then trended down toward the end of the year. Early in 2015, as the Greek debt crisis and a weak euro led to international capital flows into emerging Asia, and South Korea posted robust export growth in December 2014, the NT dollar against the won fell to a yearly low on January 12. In March, the Bank of Korea (BOK) lowered the base rate, and South Korea's consumption growth was dampened by the spread of the Middle East Respiratory Syndrome (MERS) in the second quarter, leading to another BOK rate cut. The won weakened, and the NT dollar against the won soared to a yearly high on July 23. On August 11, the PBOC devalued the RMB exchange rate against the US dollar, leading the NT dollar and the won both to fall. The NT dollar against the won fluctuated between 0.0272 and 0.0281. After October, South Korea recorded net foreign capital outflows, and the NT dollar against the won turned into appreciation. As the Fed raised the federal funds rate in December and induced foreign capital outflows from South Korea, the won turned to depreciation. Compared with the end of 2014, the NT dollar appreciated by 3.42% against the won at the end of 2015. On a daily average basis, the NT dollar also appreciated by 2.27% against the won in 2015.

**Percent Changes of NT Dollar
Against Major Currencies**
(Compared with End-2014)



Source: Department of Economic Research, CBC.

Growing Foreign Exchange Market

Trading in the Taipei foreign exchange market expanded in 2015. Total net trading volume for the year reached US\$8,204.6 billion, representing a year-on-year growth rate of 4.9%. The daily average turnover was US\$33.4 billion. The increase in turnover reflected expanded trading by local banks with overseas banks as major foreign currencies fluctuated wildly.

In terms of trading partners, transactions between banks and non-bank customers accounted for 25.1% of the total turnover, while interbank transactions made up 74.9%, including 20.0% for transactions among local banks and 54.9% for those between local banks and overseas banks.

As far as traded currencies were concerned, NT dollar trading against foreign currencies accounted for 36.0% of the total trading volume, of which trading against the US dollar (USD) made up a dominant 34.4%. Transactions in third currencies contributed to 64.0% of the total trading volume, with trading in currency pairs of USD-RMB, USD-euro and USD-yen accounting for respective shares of 20.7%, 15.1% and 10.6%. Compared with 2014, NT dollar trading against foreign currencies decreased by 7.0%. Transactions in third currencies increased by 13.0% over a year earlier, mainly because local banks increased trading with overseas banks amid more volatile fluctuations of major foreign currencies.

With respect to types of transactions, the major types were spots and foreign exchange swaps, accounting for 41.5% and 40.1% of total turnover, respectively. Compared with 2014, the trading volumes of spots, forwards and margin trading increased, whereas the other types decreased.

For other foreign currency derivatives including forwards, swaps, and options based on foreign currency interest rates, stock price indices, commodity prices, and credit derivatives, the total turnover amounted to US\$111.6 billion. Of this amount, interest rate-related derivatives accounted for the lion's share with US\$105.9 billion, or 94.9%, with its turnover down by 36.6% from the previous year. Interest rate futures accounted for the majority of this decrease, down by US\$66.2 billion.

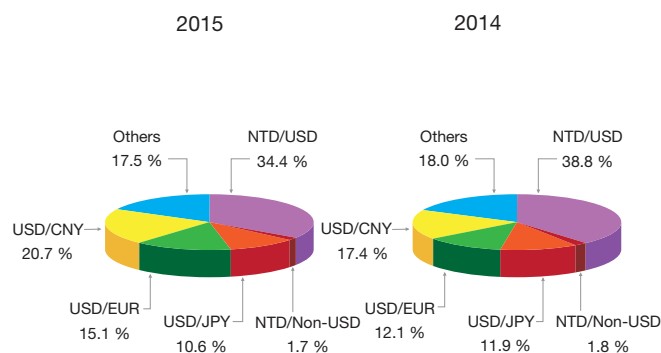
Turnover of Major Products in the Taipei Foreign Exchange Market

Unit: US\$ Million

Year	Spots	Forwards	Forex Swaps	Margin Trading	Options	Cross Currency Swaps	Total
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
2015	3,405,177	475,473	3,292,799	25,055	973,082	33,023	8,204,608
2014-2015 Growth Rate (%)	18.7	16.3	-1.8	22.9	-14.2	-11.6	4.9

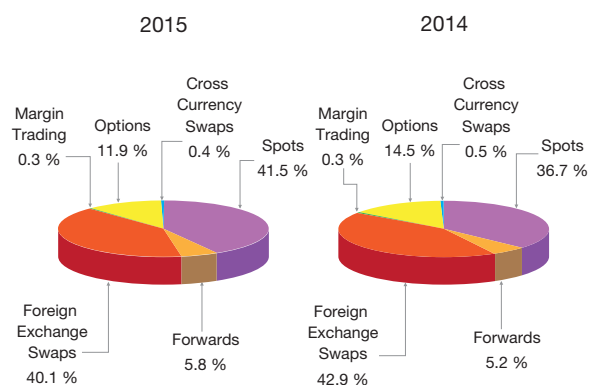
Source: Department of Foreign Exchange, CBC.

Composition of Foreign Exchange Transactions by Traded Currency



Source: Department of Foreign Exchange, CBC.

Composition of Foreign Exchange Transactions by Product



Source: Department of Foreign Exchange, CBC.

Decrease in Trading in Foreign Currency Call Loan Market

The transaction volume in the foreign currency call loan market in 2015 was US\$1,407.1 billion, a decrease of 4.6% over the previous year. Of this amount, US dollar transactions accounted for a dominant share with US\$1,325.5 billion, making up 94.1% of the total while decreasing 7.1% from 2014. In view of rising market expectations for the Fed's rate hike before the end of 2015, some banks increased long term currency lending and reduced short term trades, which caused the turnover rate to fall. Japanese yen transactions reached ¥872.1 billion in 2015, a small share of 0.5% of the total with a decline of 35.8% in the volume compared to the previous year. The amount of euro transactions totaled €0.5 billion, a low share of 0.1%. Other currencies accounted for a combined 5.2% of the total transaction volume.

Turnover of Other Products in the Taipei Foreign Exchange Market

Unit: US\$ Million

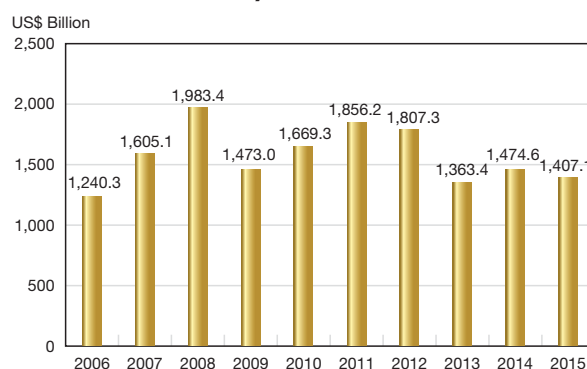
Year	Interest Rate-Related Products					Commodity-Related Products	Stock Index Options	Credit Derivatives	Total
	Forward Rate Agreements	Interest Rate Swaps	Interest Rate Options	Foreign Currency Interest Rate Futures	Subtotal	Commodity Options			
2011	902	76,153	3,569	254,703	335,327	22,728	421	5,204	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
2015	4,928	42,763	2,152	56,088	105,930	4,058	486	1,122	111,596
2014-2015 Growth Rate (%)	22,609.2	-1.0	29.9	-54.1	-21.7	4.9	61.0	-20.0	-35.4

Source: Department of Foreign Exchange, CBC.

Slight Reduction in Assets of Offshore Banking Units

There were 62 offshore banking units (OBUs) at the end of 2015. Domestic banks operate 37 of these OBUs, while foreign banks run the other 25. The total assets of all OBUs decreased to US\$181.9 billion at the end of the year, representing a decline of US\$2.1 billion or 1.1% from the previous year end owing to lower lending to non-financial institutions. Domestic OBUs made up 86.4% of these combined assets with an amount of US\$157.2 billion, and the OBUs of foreign banks accounted for US\$24.7 billion, a 13.6% share of the total.

Transactions in the Taipei Foreign Currency Call Loan Market



Source: Department of Foreign Exchange, CBC.

In terms of the uses of funds, loans to non-financial institutions, at US\$81.2 billion, represented the majority share of 44.6% of total OBU assets. Due from banks came in second place, accounting for 18.7% of total OBU assets. In terms of the destination for funds, Asia accounted for the majority with 59.0%, followed by America at 27.0%.

The OBUs' main source of funds was interbank transactions, making up 41.7% of total liabilities. Furthermore, deposits of non-financial institutions accounted for 36.4% of total liabilities. The main funding origins of OBUs were Asia, accounting for the majority with 60.0%, and America, with a share of 28.0%.

Since most major foreign currencies fluctuated more wildly in 2015, forex trading turnover of

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
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
2015	81,198	29,547	52,790	18,388	181,924	66,137	97,087	0	18,700
2014-2015 Growth Rate (%)	-7.6	33.9	10.7	-30.3	-1.1	14.4	-4.5	-100.0	-22.6

Source: Financial Statistics Monthly, CBC.

all OBUs rose by 77.3% and registered US\$1,067.3 billion, of which US\$753.7 billion went for spot transactions, US\$187.9 billion for forex swap transactions and US\$125.8billion for forward transactions. Compared with the previous year, the growth rates of trading of spots, forex swaps and forward transactions were 106.9%, 31.4%, and 32.8%, respectively.

The total turnover of other derivatives products decreased to US\$768.6 billion, a decrease of 17.2% over the previous year. Of this amount, currency options transactions registered an amount of US\$681.3 billion, making up 88.6% of the turnover.

6. Stock Markets

Taiwan's primary stock index, the Taiwan Stock Exchange (TWSE) weighted stock price index (TAIEX), trended up in the first few months of 2015 and exceeded the 10,000-point mark at the end of April, supported by an environment of policy rate cuts by several central banks and quantitative easing (QE) measures by the ECB. The surge was then reversed in the subsequent months, affected by unfavorable economic conditions at home and abroad, continued net-selling by foreign investors, China's economic slowdown, and the global stock market turbulence. As a result, the TAIEX hit its yearly low in late August before gradually climbing back up afterwards, thanks to the support from the National Financial Stabilization Fund and abating turmoil in major stock markets around the world.

At the end of 2015, the TAIEX dropped by 10.4% compared to one year earlier. Share prices in many industrial groups suffered, while shares in Oil, Gas & Electricity, Food, Biotechnology & Medical Care, Textile, and Plastics enjoyed price rose. The largest two declines went to Glass & Ceramics and Cement, falling by 42.4% and 31.5%, respectively. The TAIEX daily average trading value was NT\$82.8 billion, a 6.3% decrease compared to the previous year.

In Taiwan's over-the-counter market, the weighted stock price index of the Taipei Exchange (TPEx) closed the year down by 8.1% over the previous year end. All but Textile and Biotechnology & Medical Care groups posted share price declines, with construction shares falling the most by 35.8% amid the housing market slump. In 2015, the TPEx daily average trading value was NT\$23.3 billion, decreasing significantly by 9.0% 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
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
2015	8,338.1	82.8	77.5	24,503.6	46.2	-35.2	-56.6
2015/ 1	9,361.9	86.1	6.4	27,081.4	64.2	-0.6	-3.3
2	9,622.1	78.7	3.7	27,859.5	96.6	-1.3	-2.8
3	9,586.4	91.6	7.3	27,787.1	-42.8	-14.2	5.6
4	9,820.1	98.0	6.9	28,480.9	100.2	-5.3	13.9
5	9,701.1	87.9	6.3	28,150.4	31.1	-1.7	-3.9
6	9,323.0	83.8	6.5	27,135.0	-84.7	-3.0	-15.8
7	8,665.3	79.6	6.9	25,275.5	-50.7	3.5	-26.1
8	8,174.9	85.6	7.5	23,860.3	-57.1	1.8	-14.3
9	8,181.2	74.6	6.3	23,896.9	-6.2	-4.8	-3.2
10	8,554.3	80.4	6.8	25,013.8	66.3	1.5	-4.0
11	8,320.6	79.7	6.9	24,387.8	-43.2	-6.0	-7.3
12	8,338.1	67.4	6.3	24,503.6	-27.5	-5.1	4.6

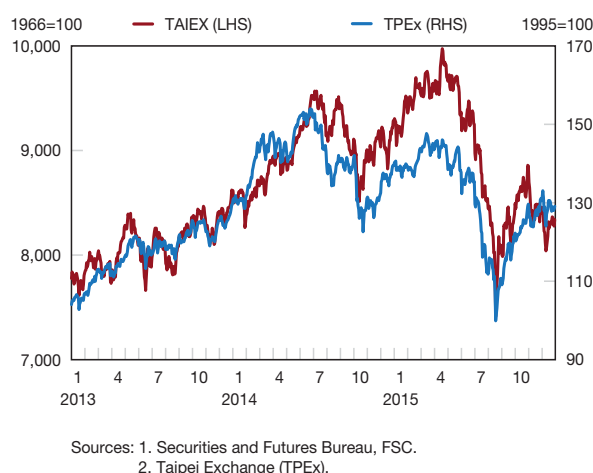
Source: Securities and Futures Bureau, FSC.

The TWSE Market

More Listings, Lower Capitalization

At the end of 2015, the number of TWSE listings grew by 20 during the year to a total of 874. The par value of total shares issued amounted to NT \$7.0 trillion, 2.5% greater than the end of the previous year. Total market capitalization decreased by 8.9% year on year to NT\$24.5 trillion. While there was no new issuance of Taiwan Depository Receipts (TDRs) in 2015, four of the existing TDRs were de-listed. The total number of TDRs on the TWSE became 22 at the end of the year.

TAIEX and TPEX Indices

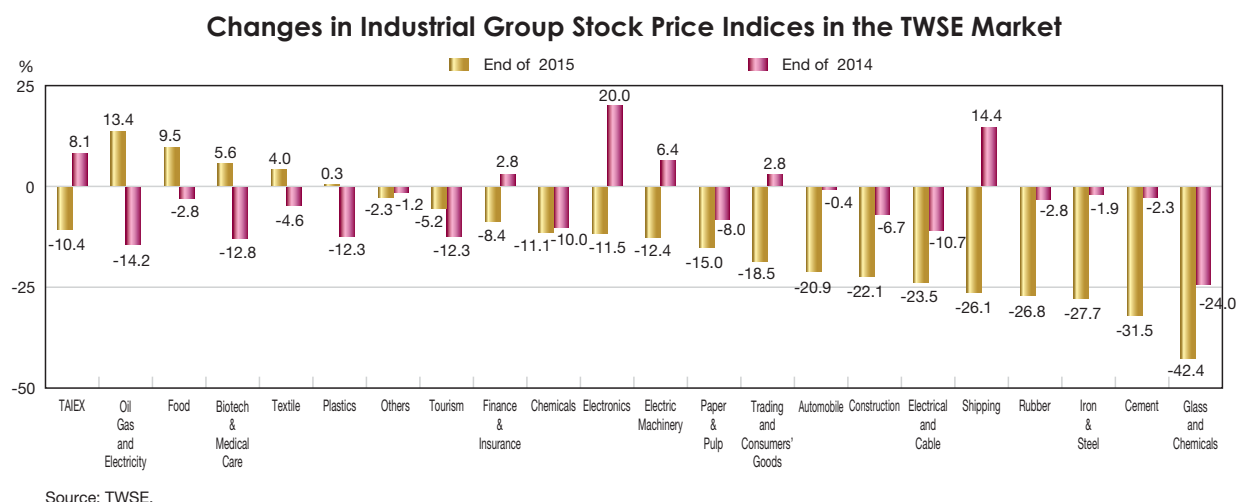


TAIEX Climbed Before Falling, Showing Greater Volatility

Entering 2015, several factors combined to boost Taiwan's equities. Internationally, major stock markets rallied as central banks reduced their policy rates and the ECB unveiled QE measures. Foreign investors turned into net buyers of TAIEX shares, followed by the Financial Supervisory Commission's (FSC's) stock market stimulus program. The TAIEX was driven up consequently, hitting the 10,000-point mark intraday on April 27 and closing the day at 9,973 points.

Afterwards, Taiwan's export growth continued to slow and the domestic economy slackened, while expectations of an upcoming US Fed rate hike prompted investors to withdraw from Asian markets, and China's growth momentum eased and its stock crash spread into an international market meltdown. Reflecting the above, the TAIEX suffered successive declines toward the yearly low of 7,410 points on August 24. With government funds deployed to shore up the stock market and major foreign markets stabilized, the TAIEX rose up to 8,857 points on November 4 before entering several weeks of price consolidation. At the end of the year, the TAIEX closed at 8,338 points, down by 10.4% compared to 9,307 points a year ago.

Broken down by subcategory, five industrial groups, namely Oil, Gas & Electricity, Food, Biotechnology & Medical Care, Textile, and Plastics, saw their share prices increase, while the rest slid down. The worst performers were Glass & Ceramics, with a 42.4% drop, and Cement, with a 31.5% fall, affected mainly by weak demand for cement amid sluggish housing markets on both sides of the Strait. The international commodity price slump eroded profit earnings of Iron & Steel and Rubber groups, whose stock prices fell 27.7% and 26.8%, respectively. Shipping shares dropped 26.1% as the world trade slowdown caused sea freight rates to plunge.



Market Turnover Decreased

In 2015, the TWSE market turnover, measured on a daily average basis, decreased to NT\$82.8 billion from the NT\$88.3 billion of the previous year. This represented a 6.2% decline, as investors turned cautious amid a weaker stock market in the second half of the year and lingering uncertainty prior to the presidential and parliamentary elections in January 2016. As trading activity lost momentum, the turnover rate also dropped from 84.6% in the previous year to 77.5%.

Foreign Investors Net-Buying Sharply Contracted

In 2015, foreign investors bought a net NT\$46.2 billion in the TWSE market, a sizable decrease compared to the NT\$354.6 billion of 2014. Local securities investment trust companies and securities dealers net sold TAIEX shares valued at NT\$35.2 billion and NT\$56.6 billion, respectively.

In the months of January, February, April and May, foreign investors were net-buyers in the TAIEX market, encouraged by a steady domestic recovery and rising corporate profits, while in March they net sold in the local bourse for profit taking. Afterwards, international stock market slumps and a slow domestic economy led to net-selling from June to December, except October when a global rally and the expectation of the Fed postponing the expected rate hike attracted foreign capital inflows back to Asian emerging markets including Taiwan.

Taking into consideration an elevated TAIEX, local securities investment trust companies recorded a net selling position in the first half of 2015. They net bought in July, August, and October, increasing holdings of bargain stocks after a considerable fall of the TAIEX. Then they net sold again in the last two months of the year to meet the year-end demand for fund redemption and to boost their own financial statements.

Local securities dealers, with tendencies for short swing trading, net bought in March, April, and December on market uptrends and net sold in the rest of the year when the TAIEX weakened.

The TPEX Market

Listings and Capitalization Both Increased

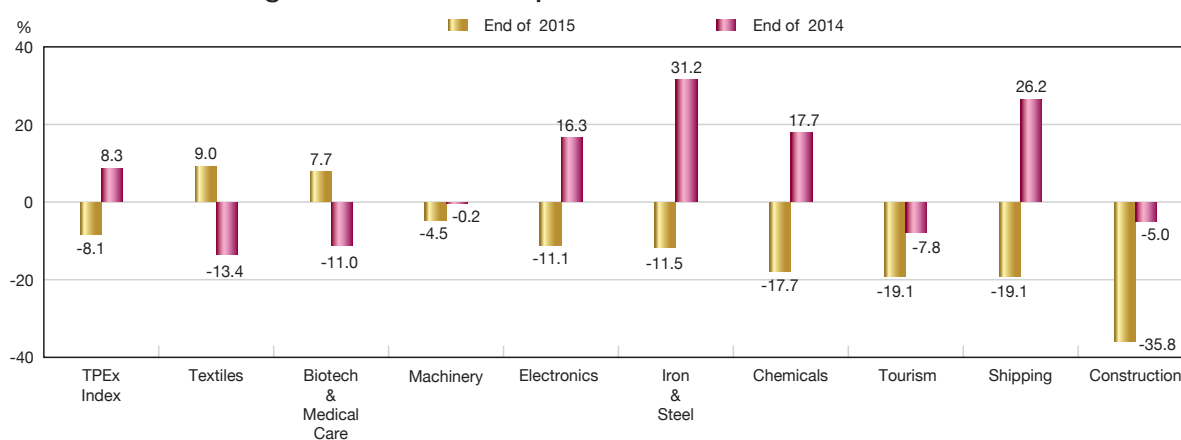
The number of TPEX listings increased by 27 to a total of 712 at the end of 2015. The total par value amounted to NT\$706.2 billion, up by 3.9% from the previous year end. Market capitalization grew by 1.9% year on year, amounting to NT\$2.73 trillion at the year end.

TPEX Index on Mixed Trend Before Rebounding

Stock prices in the TPEX market generally tracked the TWSE in 2015. The TPEX index began the year with an uptrend to peak at 147.7 points on March 20, before swinging down toward an all-year low of 100.0 points on August 24, hit by China's and international stock market plunges, economic downturns at home and abroad, and foreign investor sell-off. Later, the TPEX recovered some of the losses thanks to bio-tech share gains. At the end of the year, the TPEX closed at 129.1 points, down by 8.1% from the 140.4 points at the previous year end.

For the year of 2015 as a whole, foreign investors and local securities investment trust companies made net purchases of NT\$53.3 billion and NT\$6.4 billion in the TPEX market, while local dealers net sold NT\$5.2 billion. The daily average turnover in the TPEX market decreased by 9.0% from the previous year's NT\$25.6 billion to NT\$23.3 billion.

Changes in Industrial Group Stock Price Indices in the TPEX Market



Source: TPEX.

Key Measures for the Stock Markets

Key measures for Taiwan's stock markets in 2015 included the following:

- (1) January 1: In line with the implementation of the new integrated income tax system, only 50% (originally 100%) of the imputed tax credit of shareholders' dividends can be used to offset their individual income tax liability, effective January 1, 2015.
- (2) June 1: The FSC announced that (A) the price rise/fall limit would be increased to 10% from the previous 7% cap, (B) the account collateral maintenance ratio for securities margin transactions would be raised from the current 120% to 130%, and (C) the scope of securities eligible for day trading would be expanded to 435 stocks (from 150 TWSE stocks to 275; from 50 TPEX stocks to 160).
- (3) August 12: the FSC announced (A) adjustment to the maintenance margin requirement for short trading of TWSE- or TPEX-listed securities from 90% to 120% and (B) expanding the range of collateral that an investor can use to make up the shortfall for margin purchases or short sales.
- (4) August 25: The government announced it would deploy the National Financial Stabilization Fund by as much as NT\$500 billion, authorizing its fund managers to buy equities in a move to stabilize the stock market.
- (5) September 21: the FSC lifted the ban prohibiting short selling of stocks below the closing prices of the previous trading session.
- (6) October 16: The FSC readjusted the maintenance margin requirement for short trading from 120% back to 90% and discontinued the scope expansion of collateral used to make up the shortfall for margin purchases or short sales.
- (7) November 17: The amendment to the *Income Tax Act* passed the third reading in the parliament, revoking the capital gains tax levied on income from securities transactions, effective January 1, 2016.

7. Bond Market

For the year 2015, the total volume of bond issuance showed a slight increase. New issues of bonds amounted to NT\$2,090.2 billion, growing by NT\$116.1 billion or 5.88% over the previous year. At the end of 2015, the outstanding amount of bonds issued stood at NT\$10,467.0 billion, an increase of NT\$1,041.7 billion or 11.05% from the previous year end.

In order to meet fiscal funding needs, issuance of central government bonds for 2015 was NT\$605.3 billion, a decrease of NT\$70.0 billion or 10.37% from the previous year.

Corporate bonds exhibited a downtrend in 2015 as corporations issued more bonds in the previous year amid market expectations of a possible rate hike later. Therefore, issuance of corporate bonds for 2015 fell by NT\$92.0 billion, or 25.53%, to NT\$268.4 billion.

In terms of 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\$196.3 billion, decreasing by NT\$201.3 billion or 50.62% over the previous year.

With regard to asset securitization, no new issues were recorded during the year.

Furthermore, the Financial Supervisory Commission (FSC) announced in 2014 that international bonds would not be included in insurers' overseas investment ceilings. Therefore, market demand increased and numerous foreign institutions raised funds in Taiwan. In 2015, foreign institutions issued 139 foreign currency-denominated international bonds in Taiwan totaling NT\$1,006.6 billion, a marked increase of NT\$480.2 billion or 91.21% over the previous year. On the other hand, foreign institutions issued 11 NT dollar-denominated foreign bonds amounting to NT\$5.5 billion, a decrease of NT\$0.5 billion or 8.40% compared to the previous year.

In the secondary market, the Fed's rate hike in 2015 coupled with other countries' expansions of their monetary easing measures caused international financial market turmoil, and thus funds flowed to bond markets to avoid risk. Apart from 30-year government bonds, yields on bonds with different maturities all trended downward. Among the components, the 10-year bond yield reached 1.015% at the end of 2015, down by 59 basis points from 1.602% at the previous year end. Because of abundant liquidity and soft funding demand, repo transactions of bonds fell by NT\$306.7 billion or 0.45% over the previous year to NT\$67,725.7 billion.

Decrease in Government Bond Issuance

With respect to central government bonds, owing to the rise in tax revenues and approaching the ceiling of government bond issuance, central government bond issuance for 2015 contracted by NT\$70.0 billion or 10.37% over the previous year to NT\$605.3 billion.

Taking into account the term structure of government bond maturities, 5-year, 10-year, and 20-year government bonds continued to be issued in 2015, and their issuances were NT\$130.0 billion, NT\$195.0 billion, and NT\$91.8 billion, respectively. In addition, there were also 2-year bond issuances and 30-year bond issuances totaling NT\$62.5 billion and NT\$91.0 billion, respectively, to meet market demand.

In regard to issuing rates, on account of a slowdown in domestic economic growth and successive policy rate cuts announced by the CBC in September and December, the weighted average issuing rates in 2015 on central government bonds with different maturities were all lower than the previous year except 30-year bonds. The weighted average issuing rates on 5-year bonds and 10-year bonds dropped to 0.957% and 1.383% from the previous year's 1.177% and 1.610%, respectively. As 30-year bonds were issued before the announcements of the CBC's rate cuts and were also affected by market expectations of the Fed's rate hike in the middle of 2015, the issuing rate on 30-year bonds rose from the previous year's 2.227% to 2.376%.

Broken down by institutional investors, bonds held by the insurance industry accounted for the largest share at 36.64% in 2015, a decrease of 6.01% over the previous year. Meanwhile, the shares of bonds held by Chunghwa Post, the banking industry, and bills finance companies increased by 1.97%, 2.60%, and 0.46%, respectively, to 30.59%, 26.89%, and 2.67% in 2015. The decline in the share of government bonds held by the insurance industry was because of the crowding out effect triggered by international bonds, which had a higher rate of return. As of the end of 2015, the outstanding amount of government bond issuance was NT\$5,478.8 billion, an increase of NT\$140.3 billion or 2.63% from the previous year end.

In terms of bonds issued by governments of special municipalities, the government of Kaohsiung Special Municipality issued a new bond in 2015 with an amount of NT\$8.2 billion. At the end of 2015, the outstanding amount of bonds issued by governments of special municipalities stood at NT\$90.6 billion, down by NT\$11.1 billion or 10.93% from the previous year end.

Contraction in Corporate Bond Issuance

For the year 2015, the issuing amount of corporate bonds shrank by NT\$92.0 billion, or 25.53%, to NT\$268.4 billion. The contraction was mainly due to faltering demand for funds from relevant industries amid the slide in domestic exports and the plunge in international raw material prices.

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
2013	1,268.6	8,289.1	641.9	5,068.2	-	141.3	466.0	1,865.3	110.3	1,029.8	8.0	135.1	42.4	49.4
2014	1,974.1	9,425.3	675.3	5,338.5	-	101.7	360.4	2,013.0	397.5	1,273.6	8.5	118.7	532.4	579.9
2015	2,090.2	10,467.0	605.3	5,478.8	8.2	90.6	268.4	2,004.2	196.3	1,285.9	-	94.5	1,012.0	1,513.0
2015/ 1	155.4	9,465.9	66.8	5,325.3	-	101.7	16.5	2,016.2	10.6	1,273.1	-	108.2	61.5	641.3
2	245.8	9,662.5	63.5	5,348.8	-	101.7	8.5	2,018.1	13.2	1,283.8	-	108.1	160.7	801.9
3	248.2	9,744.9	75.0	5,293.8	-	101.7	24.4	2,025.4	35.8	1,301.8	-	107.9	113.0	914.3
4	96.2	9,780.6	30.0	5,323.8	8.2	109.9	8.9	2,015.1	10.6	1,279.1	-	100.0	38.6	952.7
5	201.6	9,944.5	60.0	5,383.8	-	109.9	25.5	2,022.7	17.9	1,278.7	-	98.8	98.2	1,050.6
6	230.9	10,095.7	60.0	5,443.8	-	99.3	39.7	2,040.1	52.9	1,286.4	-	98.2	78.3	1,127.9
7	167.3	10,125.7	60.0	5,393.8	-	99.3	32.9	2,047.4	2.7	1,288.0	-	98.0	71.7	1,199.1
8	175.2	10,220.1	30.0	5,393.8	-	99.3	52.8	2,076.6	13.6	1,297.6	-	97.8	78.9	1,255.0
9	182.1	10,278.3	35.0	5,353.8	-	99.3	22.9	2,078.9	20.2	1,314.0	-	97.7	104.1	1,334.7
10	188.9	10,418.5	65.0	5,418.8	-	99.3	12.6	2,077.8	5.8	1,311.1	-	94.9	105.5	1,416.6
11	55.1	10,430.2	30.0	5,448.8	-	90.6	18.1	2,073.8	1.2	1,300.4	-	94.5	5.8	1,422.2
12	14.3	10,467.0	30.0	5,478.8	-	90.6	5.8	2,004.2	11.9	1,285.9	-	94.5	95.8	1,513.0

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.

As the policy rates were lowered twice in 2015, the weighted average issuing rates on 3-year, 5-year, 7-year, and 10-year corporate bonds all decreased by 16, 10, 10, and 13 basis points from a year earlier to 1.106%, 1.373%, 1.634% and 1.815%, respectively. At the end of 2015, the outstanding amount of corporate bonds was NT\$2,004.2 billion, falling by NT\$8.8 billion or 0.44% from the previous year end.

Significant Slide in Bank Debenture Issuance

A total of 26 financial institutions issued bank debentures in 2015 in support of their funding needs, with an issuance amount of NT\$196.3 billion, showing a decrease of NT\$201.3 billion or 50.62% over the previous year. The decline was accounted for by the following factors: (1) the amendment of the Insurance Act in 2014, whereby insurance companies' investments in international bonds issued in Taiwan would no longer be included in the overseas investment ceiling, stimulated substantial issuance of US dollar bank debentures in Taiwan during that year, leading to a higher base effect; (2) domestic economic downturn lowered demand for funds.

Regarding the purpose of issuance, the issuance of NT dollar bank debentures was to bolster capital adequacy and support mid- to long-term operation funding needs. The majority of the issuance, or 97.67%, went for subordinated debts. With respect to the issuance of foreign currency bank debentures, the main purpose was to meet rising demand for foreign currency loans and support mid- to long-term foreign currency funding needs. Senior bank debentures with lower issuing rates made up the largest share of 96.37% in total issuance.

In terms of the volume of issuance, the major types of NT dollar bank debentures issued were 10-year debentures and debentures without maturity ranges, accounting for shares of 41.76% and 34.75% in total issuance, respectively. The share of bank debentures without maturity ranges went up by 11.12% from the previous year. As for foreign currency bank debentures, 30-year bank debentures accounted for the lion's share of 64.34%. At the end of 2015, the outstanding amount of bank debentures was NT\$1,285.9 billion, expanding by NT\$12.3 billion or 0.97% from the previous year end.

No New Issues in Asset Securitization

As the housing market posted a downtrend, enterprises were less willing to issue real estate securitization products, and banks turned cautious toward financial asset securitization. As a result, new issues of asset securitization products were nil in 2015.

Two financial asset securitization products matured and the principal was repaid. In addition, the net worth of real estate securitization products changed. Therefore, the outstanding amount of asset securitization decreased by NT\$24.2 billion or 20.40% from the previous year end to NT\$94.5 billion.

Slight Decrease in Foreign Bond Issuance and Marked Increase

in International Bond Issuance

Foreign bonds refer to NT dollar-denominated corporate bonds issued in Taiwan by foreign institutions. The foreign bonds currently in circulation are convertible corporate bonds issued by offshore companies listed on the stock exchange market or over-the-counter market in Taiwan. For the year 2015, issuance of foreign bonds amounted to NT\$5.5 billion, showing a decrease of NT\$0.5 billion or 8.40% from a year earlier. At the end of the year, the outstanding amount of foreign bonds was NT\$9.6 billion, increasing by NT\$0.3 billion or 3.64% over the previous year end.

On the other hand, international bonds refer to corporate bonds issued in Taiwan by foreign institutions and are currently denominated in foreign currencies. Issuance of international bonds in 2015 grew by NT\$480.2 billion or 91.21% from the previous year to NT\$1,006.6 billion. This was mostly because the market had been expecting a rate hike by the Fed since the beginning of the year, which enhanced the willingness for US dollar-denominated bond issuance. In terms of the currency composition of international bonds, issuance of US dollar-denominated, RMB-denominated, and AUD-denominated bonds amounted to NT\$858.4 billion, NT\$139.3 billion and NT\$8.9 billion, respectively, making up shares of 85.28%, 13.83% and 0.88% in total issuance in 2015. At the end of the year, the outstanding amount of international bonds was NT\$1,503.4 billion, an increase of NT\$932.9 billion or 163.50% over the previous year end.

Downtrend in Bond Yields and Contraction in Transactions

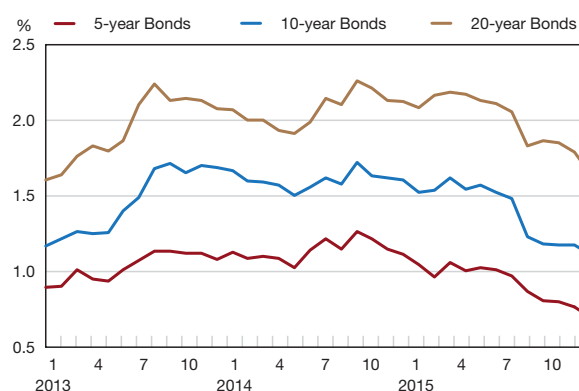
For the second half of 2015, the slowdown in the domestic economy and a tumbling stock market enhanced investors' risk aversion, inducing higher demand for domestic bonds, and leading the 10-year local bond yield to decline, which reached 1.1858% on September 24. Subsequently, on the back of sluggish domestic economic growth and successive policy rate cuts, the 10-year local bond yield continued to trend downward, and ended 2015 at 1.015%, 59 basis points lower than the 1.602% of the previous year end. The average yield on 10-year government bonds for the year was 1.3522%, down by 24 basis points from 1.5904% over the previous year.

Furthermore, average yields on 5-year, 7-year, 10-year, 15-year, and 20-year government bonds for the year 2015 dropped by 18, 8, 24, 35, and 5 basis points, respectively, compared to the previous year. As for 30-year bonds, their poor liquidity and the crowding out effect triggered by international bonds weakened the demand for 30-year government bonds. Consequently, the average yield on 30-year government bonds moved up by 17 basis points over the previous year.

In terms of transaction volume, as demand for funds softened and market liquidity was abundant, the volume of repo transactions exhibited a downtrend, falling by NT\$1,015.0 billion or 1.90% for the year. Conversely, outright transactions expanded by NT\$708.3 billion or 4.82% over the previous year owing to increased transactions of international bonds. As a result, total bond transactions for 2015 decreased by NT\$306.7 billion or 0.45% from the previous year to NT\$67,725.7 billion.

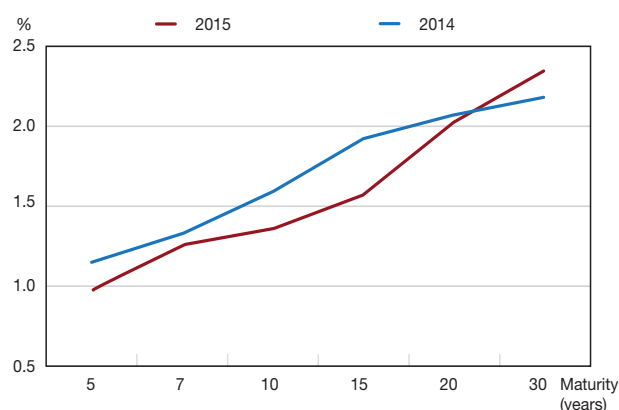
By type of bonds, government bonds accounted for 67.59% of total bond transactions with an annual trading volume of NT\$45,778.7 billion. The second most actively traded were corporate bonds, making up 26.65% of total transactions with an annual trading volume of NT\$18,047.4 billion.

Yield on Central Government Bonds with Different Maturities



Source: TPEX.

Yield Curve of Central Government Bonds



Source: TPEX.

Bank debentures came in third, accounting for 3.80% of total transactions with an annual trading volume of NT\$2,574.3 billion. Foreign and international bonds and asset securitization products made up marginal shares of 1.91% and 0.05% in total transactions, with their respective annual trading reaching NT\$1,290.7 billion and NT\$34.7 billion.

Bond Transactions in the Over-the-Counter Market

Unit: NT\$ Billion

Year/ Month	Total	Outright Transactions		Repurchase Agreement Transactions	
		Amount	Share(%)	Amount	Share(%)
2013	69,226.1	13,695.3	19.8	55,530.8	80.2
2014	68,032.4	14,706.0	21.6	53,326.4	78.4
2015	67,725.7	15,414.3	22.8	52,311.4	77.2
2015/ 1	6,159.0	1,569.5	25.5	4,589.4	74.5
2	3,885.4	824.7	21.2	3,060.7	78.8
3	6,369.7	1,717.4	27.0	4,652.3	73.0
4	5,325.9	1,166.4	21.9	4,159.4	78.1
5	5,048.6	1,235.2	24.5	3,813.4	75.5
6	5,184.2	1,288.2	24.8	3,896.0	75.2
7	5,587.6	1,337.6	23.9	4,250.0	76.1
8	6,601.4	1,680.6	25.5	4,920.9	74.5
9	6,105.7	1,264.0	20.7	4,841.7	79.3
10	5,885.3	1,105.1	18.8	4,780.2	81.2
11	5,460.4	1,117.3	20.5	4,343.1	79.5
12	6,112.5	1,108.2	18.1	5,004.3	81.9

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			
2013	69,226.1	51,490.5	14,863.4	807.0	1,948.5	76.4	40.3
2014	68,032.1	49,776.5	14,296.9	753.9	2,483.3	89.5	632.4
2015	67,725.7	45,778.7	17,396.9	650.5	2,574.3	34.7	1,290.7
2015/ 1	6,159.0	4,340.2	1,502.1	63.9	189.4	3.5	59.9
2	3,885.4	2,422.1	1,099.0	38.6	158.4	2.9	164.4
3	6,369.7	4,299.5	1,609.6	68.3	250.6	5.2	136.5
4	5,325.9	3,593.8	1,384.6	61.3	210.9	2.7	72.5
5	5,048.6	3,299.5	1,309.2	58.4	243.7	2.1	135.7
6	5,184.2	3,307.1	1,461.3	56.2	249.1	3.2	107.3
7	5,587.6	3,687.5	1,500.3	56.0	213.2	4.3	126.2
8	6,601.4	4,679.3	1,532.9	49.3	248.5	2.2	89.3
9	6,105.7	4,186.8	1,514.1	47.5	226.1	3.2	128.0
10	5,885.3	3,978.6	1,534.2	47.4	199.5	1.6	124.0
11	5,460.4	3,778.4	1,403.5	49.7	185.4	1.6	41.7
12	6,112.5	4,205.8	1,546.1	53.9	199.4	2.1	105.2

Source: TPEx.