## 5. Foreign Exchange Market

## Moderate Appreciation of the NT Dollar

On a daily average basis, the NT dollar appreciated against the US dollar, euro, and Japanese yen, but depreciated against the Korean won in 2005. Regarding the movement in the NT\$/US\$ exchange rate, reports that Asian central banks reduced their US dollar foreign reserve assets, coupled with foreign capital inflows to the Taiwan stock market, led the NT\$/ US\$ exchange rate to appreciate from 32.263 at the beginning of 2005 to a yearly high of 30.790 on March 10. From the middle of March onwards, the NT dollar started to depreciate, caused by a continuous rise in US interest rates, a shrinkage in Taiwan's trade surplus, and foreign capital outflows from the Taiwan stock market. The NT dollar declined to 33.770 against the US dollar on October 24, the lowest level of the year. In December, due to Japan's economic recovery, a historically high US trade deficit, and the return of international capital to Asia, the NT dollar appreciated to close the year at 32.850 against the US dollar. Compared with the end of 2004, the NT dollar depreciated by 2.84 percent against the US dollar at the end of 2005. However, on a daily average basis, the NT\$/US\$ exchange rate appreciated 3.90 percent in 2005 from the previous year.

With respect to NT dollar exchange rates against the euro and the Japanese yen, as a result of the large appreciation of the euro against the US dollar in 2004, continuously rising

## Percentage Changes of NT Dollar against Major Currencies (compared with End 2004)



[^0]US interest rates, economic weakness in the euro area and Japan, and the negative impact of higher oil prices on Japan's economy, the euro and the Japanese yen depreciated against the US dollar in 2005. Both currencies depreciated against the US dollar by a larger degree than the NT dollar. Therefore, the NT dollar appreciated against the euro and the Japanese yen by 11.16 percent and 11.30 percent, respectively, between the end of 2004 and 2005. On a daily average basis, the NT dollar appreciated against the euro and the Japanese yen by 3.66 percent and 5.75 percent, respectively, when compared with the previous year.

Due to the fact that trade with Asia exceeds 60 percent of Taiwan's total trade, the NT dollar exchange rates against other Asian currencies, such as the Chinese renminbi (RMB) and Korean won have aroused more attention in the market.

Before July 21, 2005, the RMB was pegged at 8.27 per US dollar. Therefore, the movements of the NT dollar against the RMB followed those against the US dollar. On July 21, China adopted a managed floating exchange rate regime, and the RMB appreciated by 2.1 percent from 8.27 to 8.11 against the US dollar. Afterwards, due to the rapid growth of China's economy, and expectations of a RMB appreciation, the RMB strengthened against the US dollar, and hence against the NT dollar for most of the remainder of 2005. The NT dollar depreciated 5.26 percent against the RMB between the end of 2004 and 2005. On a daily average basis, the NT dollar appreciated 2.86 percent against the RMB in 2005 when compared with the previous year.

Due to strong domestic demand, an expansion in domestic consumption, and the stock market index reaching historic highs, the Korean won mostly appreciated against the US dollar, and hence against the NT dollar in 2005. The NT dollar depreciated 5.05 percent against the Korean won between the end of 2004 and 2005. On a daily average basis, the NT dollar depreciated 7.10 percent against the Korean won in 2005 when compared with the previous year.

Based on the trade-weighted average exchange rate against major trading partners (weighted by the sum of imports and exports of goods), the NT dollar appreciated by 1.70 percent between the end of 2004 and 2005.

## Moderate Increase in Trading in the Foreign Exchange Market

Trading in the Taipei foreign exchange market increased moderately in 2005. After deducting double counting on the part of interbank transactions, total net trading volume for the year increased by 16.6 percent from the previous year to US\$3,008.66 billion. The daily average turnover stood at US\$ 12.08 billion, representing an increase of 18.0 percent over the previous
year. The increase in turnover mainly resulted from an expansion in external trade, and a marked rise in third currency transactions following the sharp depreciation of the euro and the Japanese yen against the US dollar.

In terms of trading partners, transactions between banks and non-bank customers accounted for 31.7 percent of total net turnover. Interbank transactions made up a 68.3 percent share, including 19.5 percent for transactions among local banks and 48.8 percent for those between local banks and overseas banks.

As far as traded currencies are concerned, transactions in third currencies accounted for 50.9 percent of total trading volume, with trading in currency pairs of US dollar-Japanese yen and US dollar-euro accounting for shares of 17.9 percent and 15.3 percent, respectively. NT dollar trading against foreign currencies accounted for 49.1 percent of total trading volume, of which the share of NT dollars against US dollars was 46.4 percent.

With respect to types of transactions, spot transactions accounted for the highest share with 51.6 percent of total turnover, followed by foreign exchange swaps with 27.4 percent, options with 9.8 percent, forwards with 9.1 percent, cross currency swaps with 1.3 percent, and margin trading with 0.8 percent. Compared with 2004, except for a decrease in margin trading and options transactions, the trading volumes of all the other types increased. The trading volumes of cross currency swaps and foreign exchange swaps recorded the highest growth rates of 124.0 percent and 33.3 percent, respectively. The increase was mainly because domestic insurance companies increased their overseas investments and utilized cross currency swaps and foreign exchange swaps to hedge risks, and because banks used the interbank swap market to adjust their currency composition.

Turnover of Major Products in the Taipei Foreign Exchange Market

|  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | Spot | Forward | Forex <br> Swaps | Margin <br> Trading | Options | Cross <br> Currency <br> Swaps | Total |
| 2001 | 758,827 | 93,687 | 172,551 | 21,320 | 105,609 | 8,427 | $1,160.421$ |
| 2002 | 872,844 | 114,341 | 238,807 | 25,869 | 149,630 | 8,875 | $1,410,366$ |
| 2003 | $1,058,850$ | 156,323 | 361,490 | 33,907 | 213,198 | 13,930 | $1,837,698$ |
| 2004 | $1,289,872$ | 273,931 | 617,577 | 30,299 | 350,514 | 17,764 | $2,579,955$ |
| 2005 | $1,550,731$ | 274,370 | 823,483 | 24,378 | 295,908 | 39,788 | $3,008,657$ |
| $2004-2005$ | 20.2 | 0.2 | 33.3 | -19.5 | -15.6 | 124.0 | 16.6 |

Source: Department of Foreign Exchange, the Central Bank of China.


Source: Department of Foreign Exchange, the Central Bank of China.

## Composition of Foreign Exchange Transactions by Product



Source: Department of Foreign Exchange, the Central Bank of China.
In 2005, the turnover of forwards, swaps and options based on foreign currency interest rates, stock price indices, commodity prices, and credit amounted to US\$ 162.24 billion. Of this amount, interest rate-related derivatives accounted for the lion's share of US\$ 156.67 billion or 96.6 percent, representing an annual growth rate of 0.6 percent.

## Contraction in the Foreign Currency Call-Loan Market

The transaction volume in the foreign currency call-loan market in 2005 was equivalent to US $\$ 937.21$ billion, a decrease of 37.1 percent over the previous year. Of this amount, US dollar transactions accounted for US\$ 936.41 billion, a reduction of 37.1 percent over 2004. The decrease was mainly because some banks raised interest rates on US dollar deposits to increase their sources of foreign currency funds, hence reducing demand for foreign currency call loans, and some banks used foreign exchange swaps in place of call-loan transactions. Japanese yen transactions totaled $¥ 17.55$ billion in 2005 , representing a large increase of 12.6 times the

Turnover of Other Products in the Taipei Foreign Exchange Market

| Year |  |  |  |  |  |  |  | Unit: US\$ Million |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | Commodity Price Swaps | Commodity Options |  |  |  |
| 2001 | 12,170 | 12,114 | 1,018 | 74 | 259 | 644 | 34 | - | 26,313 |
| 2002 | 30,518 | 22,488 | 4,479 | 2,458 | 305 | 1,826 | 556 | - | 62,630 |
| 2003 | 20,121 | 41,855 | 10,066 | 12,036 | 175 | 3,313 | 663 | - | 88,229 |
| 2004 | 20,020 | 77,664 | 45,635 | 12,500 | 0 | 6,733 | 1,102 | 168 | 163,823 |
| 2005 | 25,089 | 78,528 | 23,668 | 29,385 | 0 | 4,594 | 389 | 581 | 162,235 |
| $\begin{gathered} \text { 2004-2005 } \\ \text { Growth Rate (\%) } \end{gathered}$ | 25.3 | 1.1 | -48.1 | 135.1 | 0.0 | -31.8 | -64.7 | 245.4 | -1.0 |

Source: Department of Foreign Exchange, the Central Bank of China
figure recorded in 2004, but the share remained rather small at only 0.02 percent. The amount of euro transactions totaled only $€ 510$ million, decreasing 64.9 percent from 2004.

## Slight Increase in the Assets of Offshore Banking Units

At the end of 2005, there were 70 offshore banking units (OBUs) in operation. Domestic banks operated 41 of the OBUs, while foreign banks ran the other 29. The combined assets of all OBUs totaled US $\$ 70.16$ billion at the end of the year, representing a slight increase of US $\$ 939$ million or 1.4 percent from the previous year-end. This was primarily the result of an increase of US\$2.17 billion in deposits with financial institutions and US\$ 1.98 billion in securities investments, outweighing a decrease of US\$3.07 billion in other assets caused by changes in the accounting method of US dollar-RMB non-deliverable forwards and margin trading from June 2005. Domestic bank OBUs accounted for US $\$ 50.52$ billion or 72 percent of these combined

Transactions in the Taipei Foreign Currency Call-Loan Market


[^1]assets, and foreign bank OBUs accounted for US\$19.64 billion, or 28 percent of the total.

The OBUs' main sources of funds were due to affiliated branches and deposits by financial institutions, which together accounted for 63.1 percent of total liabilities. These were followed by deposits of non-financial institutions, which accounted for 29.5 percent of total liabilities. OBUs have been gradually developing into capital management centers for overseas Taiwanese firms. In terms of geographical origin, 67 percent of funds came from Asia, and 21 percent from the Americas.

The OBUs' main uses of funds were due from affiliated branches and deposits with financial institutions. These accounted for the lion's share, or 54.8 percent of total assets. Second to these were loans extended abroad and locally with a share of 26.6 percent. Additionally, portfolio investments accounted for 12.4 percent of total assets. In terms of fund destination, 62 percent of funds went to Asia, and 23 percent to the Americas.

The forex-trading turnover of all OBUs in 2005 was US\$133.67 billion, of which US\$95.57 billion was for spot transactions, US\$20.82 billion for foreign exchange swap transactions, and US\$ 17.28 billion for forward transactions. Compared with 2004, forward transactions decreased 25.2 percent, mainly because of changes in the accounting method of US dollar-RMB nondeliverable forwards and margin trading from June 2005. The total turnover of other derivative products, including margin trading, options, foreign currency interest rate swaps, financial futures, foreign currency forward rate agreements, cross currency swaps, commodity swaps, and credit derivatives, amounted to US\$90.6 billion, representing a significant increase of 43.9 percent over the previous year.

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

| Year / <br> Month | Loans to <br> Non-financial <br> Institutions | Portfolio <br> Investment | Claims on <br> Financial <br> Institutions | Other <br> Assets | Total <br> Assets= $=$ <br> Total <br> Liabilities | Deposits of <br> Non-financial <br> Institutions | Due to <br> Financial <br> Institutions | Other <br> Liabilities |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2003 / 12$ | 15,939 | 7,648 | 37,420 | 3,541 | 64,548 | 16,307 | 44,288 | 3,953 |
| $2004 / 12$ | 18,066 | 6,734 | 37,105 | 7,314 | 69,219 | 18,810 | 42,688 | 7.721 |
| $2005 / 12$ | 18,697 | 8,718 | 38,432 | 4,311 | 70,158 | 20,712 | 44,305 | 5,141 |
| $2005 / 1$ | 18,155 | 6,747 | 37,894 | 7,352 | 70,148 | 18,389 | 44,169 | 7,590 |
| 2 | 17,891 | 6,737 | 36,205 | 7,255 | 68,088 | 18,942 | 41,570 | 7,576 |
| 3 | 17,909 | 6,847 | 36,179 | 7,426 | 68,361 | 18,239 | 42,311 | 7,811 |
| 4 | 17,764 | 7,079 | 37,031 | 7,527 | 69,401 | 18,769 | 42,510 | 8,122 |
| 5 | 18,090 | 7,362 | 36,743 | 8,460 | 70,655 | 18,679 | 43,023 | 8,953 |
| 6 | 18,275 | 6,886 | 34,587 | 5,022 | 64,770 | 19,111 | 40,636 | 5,023 |
| 7 | 18,296 | 7,729 | 33,581 | 3,909 | 63,515 | 19,009 | 40,373 | 4,133 |
| 8 | 18,734 | 7,994 | 33,034 | 3,990 | 63,752 | 19,431 | 40,018 | 4,303 |
| 9 | 18,752 | 8,110 | 32,700 | 4,432 | 63,994 | 19,656 | 39,513 | 4,825 |
| 10 | 18,998 | 8,649 | 33,249 | 4,176 | 65,072 | 19,945 | 39,971 | 5,156 |
| 11 | 18,940 | 8,722 | 34,699 | 4,339 | 66,700 | 20,680 | 40,663 | 5,357 |
| 12 | 18,697 | 8,718 | 38,432 | 4,311 | 70,158 | 20,712 | 44,305 | 5,141 |

[^2]
[^0]:    Note: Before July 21, the RMB was pegged to the US dollar. Therefore, the movements of the NT dollar against the RMB followed those against the US dollar.
    Source: Department of Economic Research, the Central Bank of China

[^1]:    Source: Department of Foreign Exchange, the Central Bank of China

[^2]:    Source: Financial Statistics Monthly, Republic of China, Department of Economic Research, the Central Bank of China.

