## 9. Foreign Exchange Market

## NT D ollar Appreciated by 2.62 Percent in 1999

At the beginning of 1999, the NT\$/US\$ exchange rate was 32.195 . It then stabilized at between 32.149 and 32.288 from January to February 12, the date before Chinese New Year's Eve. As the foreign exchange market reopened after the Chinese New Year holiday, the NT dollar began to depreciate against the US dollar. The main reason was that the Japanese yen depreciated sharply against the US dollar when the Bank of Japan successively reduced the overnight call-loan rate to near zero from midFebruary to early March in order to deal with the credit crunch problem. The local market usually expects the NT dollar to follow the trend of the Japanese yen. As a consequence, the NT dollar exchange rate depreciated from 32.278 to 33.257 or by 2.94 percent within two consecutive days, hitting the lowest level for the year on February 20.

Shortly afterwards, due to the increase in the trade surplus as well as the surge of foreign capital inflows, the NT dollar began to appreciate until the end of 1999. From late February to December, some incidents, such as crossstrait tension in July and the earthquake in September, put pressure on the NT dollar to depreciate. Nevertheless, strong fundamentals compared to those of 1998, such as high economic growth, low inflation, and a huge balance of payments surplus, overwhelmed the incidents, while the downward trend of the US dollar continued to push up the NT dollar exchange rate. Furthermore, during the same period, because the Japanese yen and most crisis-hit Asian countries' currencies appreciated against the US dollar, the market expected the NT dollar to appreciate as well. Thus, the NT dollar kept on rising and reached 31.395 per dollar on December 30, the highest level of the year. The NT dollar consequently appreciated by 6.27 percent from February 20 to December 30.

Compared with the NT\$/US\$ exchange rate of 32.216 as of the end of 1998, the NT dollar appreciated by 2.62 percent in 1999. In addition, the daily average of the NT\$/U S\$ exchange rate for 1999 was 32.2661 , compared with 33.4447 in 1998. On this basis, the NT dollar appreciated by 3.65 percent against the US dollar. In respect of other major currencies, the NT dollar depreciated by 9.97 percent against the Japanese yen and appreciated by 8.81 percent against the euro. When based on the tradeweighted average exchange rate involving fifteen major trading partners
(weighted by the sum of imports and exports), the NT dollar appreciated by 0.94 percent between the end of 1998 and the end of 1999.

Spot Exchange Rate 1998-1999


## Shrinkage of Trading in the Foreign Exchange Market

Trading in the Taipei foreign exchange market declined in 1999. After deducting double counting on the part of interbank transactions, total net trading volume in the market for the year decreased by 11.0 percent from the previous year and amounted to US\$1,043 billion. The average daily turnover was US $\$ 4.2$ billion, representing a decrease of 11.3 percent over the previous year. The sharp decline in total net turnover mainly resulted from the contraction of forex transactions in third currencies. Two reasons may explain this contraction. First, the European single currency, the euro, replaced the Deutsche mark (DM) as a major trading currency on January 1, 1999. The introduction of the euro dismantled the trading pairs of the DM to the other ten European currencies, such as the French franc and Italian lira. Second, forex settlements were deterred due to the conservative attitude of forex traders who feared that the upcoming new millennium could possibly result in a computer shut-down.

In terms of trading partners, transactions between banks and customers accounted for 42.1 percent of total net turnover, with interbank transactions making up the remaining 57.9 percent. Of the latter, local interbank transactions accounted for 18.5 percent and transactions between local banks and overseas banks for the remaining 39.4 percent.

In terms of traded currencies, transactions in third currencies accounted for 50.6 percent of total trading volume, with trading in currency pairs of US dollar-Japanese yen and US dollar-euro accounting for shares of 28.7 percent and 9.3 percent, respectively. NT dollar trading against foreign currencies accounted for 49.4 percent of total trading volume, of which the share of NT dollars against US dollars was 45.5 percent.

Composition of Foreign Exchange Transactions by Traded Currencies


With respect to types of transactions, spot transactions accounted for the lion's share with 67.1 percent of total turnover, followed by foreign exchange swap transactions with 15.0 percent, forward transactions with 7.8 percent, options transactions with 6.6 percent, margin trading transactions with 3.2 percent, and cross currency swaps transactions with $0.3 \%$.

Compared with 1998, options grew by 43.8 percent in 1999. The rapid growth in options transactions showed that people have increasingly used options as an instrument to hedge foreign exchange risk or to profit from exchange rate fluctuations since options were introduced in May 1997. During the year, spot transactions, forward transactions, swap transactions and margin trading each decreased by 6.2 percent, 18.3 percent, 5.6 percent and 69.5 percent, respectively. These decreases, in general, resulted from the start of euro trading in the market as well as the approach of the millennium year. In addition, the marked decline in forward and margin trading was due to the Bank's strict measures to suppress speculation in relation to the NT dollar exchange rate since May 1998.


Turnover of Major Products in the Taipei Foreign Exchange Market

| Year | Spot <br> Transactions | Forward <br> Transactions | Forex <br> Swaps | Margin <br> Trading | Options | Cross <br> Currency | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1995 | 673,806 | 62,805 | 187,027 | 66,967 | 20,898 | 385 | $1,011,888$ |
| 1996 | 692,135 | 71,153 | 187,649 | 87,433 | 15,558 | 1,128 | $1,055,056$ |
| 1997 | 750,089 | 106,876 | 152,496 | 150,497 | 26,621 | 2,198 | $1,188,777$ |
| 1998 | 746,334 | 99,108 | 166,224 | 109,886 | 47,818 | 2,472 | $1,171,842$ |
| 1999 | 700,233 | 80,945 | 156,967 | 33,484 | 68,768 | 2,711 | $1,043,109$ |
| 1998-1999 | -6.2 | -18.3 | -5.6 | -69.5 | 43.8 | 9.7 | -11.0 |
| Growth Rate (\%) |  |  |  |  |  |  |  |

Note : * Cross currency swaps were reclassified as an item in major products instead of other products in September 1999.
Source : Foreign Exchange Department, Central Bank of China.

At the end of 1999, the Bank allowed other forex products to be traded including foreign currency interest rate-related products such as swaps, futures, options, commodity options and trust funds for foreign securities investment. The turnover in respect of these new products amounted to U S $\$ 28.3$ billion in 1999, an increase of US $\$ 6.1$ billion or 27.7 percent over the previous year. Of this amount, trust funds for foreign securities investment accounted for the lion's share with US $\$ 22.8$ billion, followed by foreign currency forward rate agreements with US $\$ 2.2$ billion.

## Slight Contraction in the Foreign Currency Call-Loan Market

Since the introduction of the euro in 1999, the Bank converted Deutsche marks into euros as a seed fund. The transactions in the foreign currency call-

Turnover of Other Products in the Taipei Foreign Exchange Market
Unit: US\$ Million

*Cross currency swaps were reclassified as an item in major products instead of other products in September 1999.
Source: Foreign Exchange Department, Central Bank of China.
loan market decreased slightly during the year. Total transactions in 1999 amounted to the equivalent of US\$843.8 billion, a decrease of US\$11.6 billion or 1.4 percent over the previous year. Of this total, US dollar transactions amounted to US\$840.7 billion, reflecting a decrease of 1.2 percent over 1998, and Japanese yen transactions totaled $¥ 332.6$ billion, a decrease of 24.4 percent. The amount of euro transactions was rather small, totaling only 5 million euros.

## Continued Expansion in 0 ffshore Banking U nits

At the end of 1999, there were 69 offshore banking units (OBUs) in operation, 3 units less than at the end of the previous year. The decrease in the number of OBUs was due to two mergers, Nationsbank with Bank of America, Bankers Trust with Deutsche Bank, and the closedown of Canadian Imperial Bank of Commerce. The combined assets of all OBUs amounted to US\$41.3 billion at the end of the year, having increased by US\$0.6 billion or 1.6 percent over the previous year. Domestic bank OBU s accounted for US $\$ 28.2$ billion or 68.2 percent of these combined assets, and foreign bank OBU s accounted for US\$13.1 billion or 31.8 percent of the total.

From the balance sheet analysis, the OBUs' main sources of funds were due to related offices (see the footnote in the related table) and deposits by financial institutions that accounted for 74 percent of total liabilities. Of these, due to related offices accounted for 42 percent, deposits by financial institutions located overseas accounted for 12 percent of total liabilities, those by other financial institutions situated locally for 16 percent and inter-OBU deposits for 4 percent. In terms of the areas of origin, the main source of funds
was from Asia that accounted for 76 percent, followed by America with 16 percent, Europe with 7 percent, and other areas with 1 percent. The main use of funds was due from related offices and deposits with financial institutions that accounted for the lion's share or 46 percent of total assets, of which 29 percent was due from related offices, 11 percent was deposited overseas, 2 percent with other domestic financial institutions, and 4 percent with domestic OBUs. Asia was the main destination of funds accounting for 64 percent, followed by America with 25 percent, Europe with 8 percent and other areas with 3 percent.

Consolidated Balance Sheet of Offshore Banking Units

| Year <br> Month | Loans to <br> Nonfinancial Institutions | Portfolio Investment | Claims on <br> Financial <br> Institutions | Other <br> Assets | Total <br> Assets= <br> Total <br> Liabilities | Deposits of <br> Non- <br> financial <br> Institutions | Due to Financial Institutions* | Securities Issued** | Other <br> Liabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997/12 | 11,736 | 3,885 | 19,944 | 3,561 | 39,126 | 4,551 | 29,239 | 1,177 | 4,159 |
| 1998/ 12 | 14,549 | 4,223 | 19,174 | 2,686 | 40,632 | 6,241 | 29,470 | 1,382 | 3,539 |
| 1999/ 12 | 15,813 | 4,273 | 18,911 | 2,271 | 41,268 | 8,004 | 30,670 | -- | 2,594 |
| 1999/ 1 | 14,655 | 4,170 | 19,697 | 2,761 | 41,283 | 6,246 | 30,410 | 1,382 | 3,245 |
| 2 | 14,479 | 4,230 | 18,582 | 3,043 | 40,334 | 6,341 | 29,062 | 1,382 | 3,549 |
| 3 | 14,553 | 4,253 | 17,881 | 2,850 | 39,537 | 6,547 | 28,886 | 1,354 | 2,750 |
| 4 | 14,655 | 4,276 | 19,284 | 2,817 | 41,032 | 6,729 | 29,885 | 1,309 | 3,109 |
| 5 | 14,803 | 4,248 | 17,300 | 2,617 | 38,968 | 6,844 | 27,964 | 1,309 | 2,851 |
| 6 | 15,125 | 4,084 | 17,797 | 2,378 | 39,384 | 6,862 | 28,528 | 1,309 | 2,685 |
| 7 | 15,428 | 3,937 | 17,957 | 2,555 | 39,877 | 7,352 | 28,502 | 1,309 | 2,714 |
| 8 | 15,357 | 3,788 | 19,199 | 3,183 | 41,527 | 7,253 | 29,575 | 1,309 | 3,390 |
| 9 | 15,367 | 3,707 | 20,718 | 2,519 | 42,311 | 7,367 | 30,795 | 1,309 | 2,840 |
| 10 | 15,323 | 3,656 | 19,894 | 2,872 | 41,745 | 7,661 | 29,634 | 1,309 | 3,141 |
| 11 | 15,628 | 3,549 | 21,257 | 2,721 | 43,155 | 7,733 | 30,919 | 1,329 | 3,174 |
| 12 | 15,813 | 4,273 | 18,911 | 2,271 | 41,268 | 8,004 | 30,670 | -- | 2,594 |

* Due to financial institutions includes due to related offices, which was seperated from due to and deposits by
other financial instituions as an item since December 1999
${ }^{* *}$ The statistics related to securities issued has been reclassified as an item in the due to financial institutions.
Source : Financial Statistics Monthly, Taiwan District, the Republic of China, January 2000, Central Bank of China.

The forex trading turnover of all OBUs in 1999 was US\$73.8 billion. Of this amount, spot transactions accounted for US\$43.6 billion, followed by currency swap transactions with U $\$ \$ 20.9$ billion, and forward transactions with US $\$ 9.3$ billion. The total trading turnover of the other new products, including margin trading, options, foreign currency interest rate swaps, financial futures, foreign currency forward rate agreements and cross currency swaps, amounted to U S $\$ 9.7$ billion.

