

## 9. Foreign Exchange Market

### Largely Stable NT\$/US\$ Exchange Rate

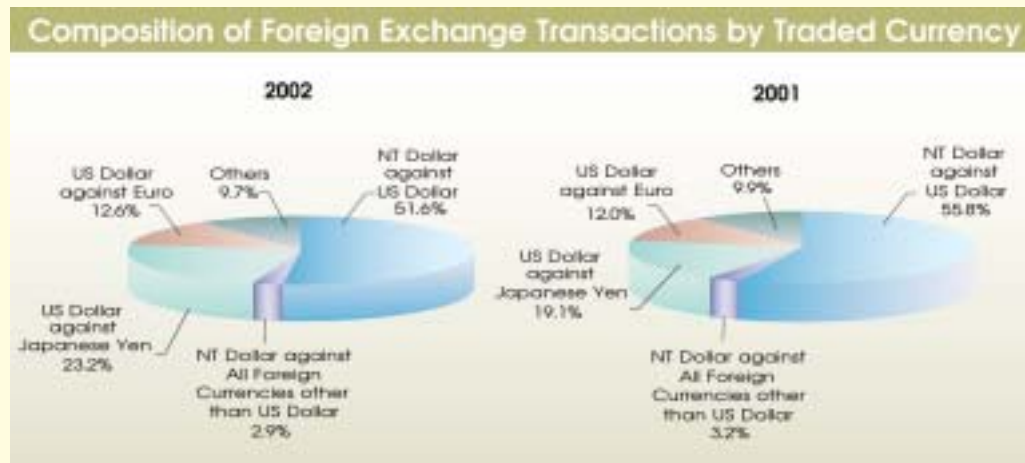
From January to mid-April, alternating bullish and bearish factors, such as inflows of foreign funds to the Taiwan stock market and the weakening Japanese yen, drove the NT\$/US\$ exchange rate up and down between 34.8 and 35.1. The NT dollar started to appreciate in late April in line with the softening US dollar as investors pulled money out of the US stock market after the outbreak of a series of corporate accounting scandals undermined investor confidence. The weakening US dollar caused local depositors to shift their money from foreign currency deposits to NT dollar deposits. Large domestic enterprises also remitted back funds raised from the issue of Euro-dollar convertible bonds (ECB) in international financial markets. Both pushed the NT dollar further up. The NT dollar appreciated sharply from 35 to the US dollar and reached 32.999 on July 17, the highest level of the year. In late July, the NT dollar, like other East Asian currencies, turned weak against the US dollar as a result of the outflows of foreign equity funds. The NT dollar continued to depreciate and reached its annual low at 35.168 on October 14. The NT dollar's depreciation during this period brought the NT\$/US\$ back to the level at the beginning of the year. The NT\$/US\$ exchange rate stabilized later and remained fluctuating between 35 and 34.4. At the end of 2002, the NT dollar closed at 34.753 against the US dollar. Compared with the rate of 34.999 registered at the end of 2001, the NT dollar slightly appreciated by 0.71 percent in 2002. On a daily average basis, the NT\$/US\$ exchange rate for 2002 was 34.575, representing a depreciation of 2.2 percent when compared with 33.8 in 2001.



With respect to other major currencies, the NT dollar depreciated against the Japanese yen and the euro by 9.14 and 14.54 percent, respectively, between the end of 2001 and 2002. When based on the trade-weighted average exchange rate including 14 major trading partners (weighted by the sum of imports and exports of commodities), the NT dollar depreciated by 4.94 percent between the end of 2001 and 2002.

### Active Trading in the Foreign Exchange Market

Trading in the Taipei foreign exchange market increased in 2002. After deducting double counting on the part of interbank transactions, total net trading volume in the market for the



year increased by 21.5 percent from the previous year to US\$1,410.37 billion. The daily average turnover stood at US\$5.61 billion, representing an increase of 19.2 percent over the previous year. The increase in turnover mainly resulted from the marked rise in third currency transactions.

In terms of trading partners, transactions between banks and non-bank customers accounted for 36.8 percent of total net turnover. Interbank transactions made up a 63.2 percent share, including 26.1 percent for deals among local banks and 37.1 percent for transactions between local banks and overseas banks.

As far as traded currencies are concerned, transactions in third currencies accounted for 45.5 percent of total trading volume, with trading in currency pairs of US dollar-Japanese yen and US dollar-euro accounting for shares of 23.2 percent and 12.6 percent, respectively. NT dollar trading against foreign currencies accounted for 54.5 percent of total trading volume, of which the share of NT dollars against US dollars was 51.6 percent.

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

Unit: US\$ Million

Year	Spot	Forward	Forex Swaps	Margin Trading	Options	Cross Currency Swaps	Total
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
2000	793,024	99,702	176,299	20,056	112,485	3,536	1,205,104
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
2001-2002 Growth Rate (%)	15.0	22.0	38.4	21.3	41.7	5.3	21.5

Source: Foreign Exchange Department, Central Bank of China.

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

Unit: US\$ Million

Year	Interest Rate-related Products				Commodity-related Products		Stock Index Options	Total
	Forward Rate Agreements	Interest Rate Swaps	Interest Rate Options	Foreign Currency Interest Rate Futures	Commodity Price Swaps	Commodity Options		
1998	586	3,828	840	1,230	0	17	0	6,501
1999	2,195	1,859	814	185	295	89	0	5,437
2000	5,417	4,097	1,471	152	1,541	201	37	12,916
2001	12,170	12,114	1,018	74	644	259	34	26,313
2002	30,518	22,488	4,479	2,458	1,826	305	556	62,630
2001-2002 Growth Rate (%)	150.8	85.6	340.0	3221.6	183.5	17.8	1535.3	138.0

Source: Foreign Exchange Department, Central Bank of China.

With respect to types of transactions, spot transactions accounted for the highest share with 61.9 percent of total turnover, followed by foreign exchange swap transactions with 16.9 percent, options transactions with 10.6 percent, forward transactions with 8.1 percent, margin trading transactions with 1.8 percent, and cross currency swap transactions with 0.6 percent. Compared with 2001, trading volume of options and swaps witnessed the highest growth of 41.7 percent and 38.4 percent, respectively.

By the end of 2002, the other forex derivatives allowed to trade in local markets included forwards, swaps and options on foreign currency interest rates, commodity and stock indices. The turnover with respect to these products amounted to US\$62.63 billion. Of this amount, interest rate-related derivatives accounted for the lion's share with US\$59.94 billion or 95.7 percent.

### **Increasing Scale in Foreign Currency Call-Loan Market**

The foreign currency call-loan market continued to grow over the course of the year. To meet banks' demand for foreign currency funds for short-term operating purposes, the Bank released an additional US\$10 billion of its international reserves from 16 August 2002 to satisfy market needs and the total amount of US dollar seed funds provided by the Bank in the call-loan market was doubled to US\$20 billion. The Bank's provision of seed funds for euro- and Japanese yen-denominated loans in the market remained unchanged at 1 billion euros and ¥15 billion, respectively.

The transaction volume in the foreign currency call-loan market in 2002 was equivalent to US\$1,046.3 billion. Of this amount, US dollar transactions accounted for US\$1,045.1 billion, a marked increase of 22 percent over 2001. The increase was mainly due to the shortening of maturities of call loans with expectation of falling US dollar interest rates, coupled with banks' active engagement in short-term lending before remitting out the funds raised from issuing structured notes denominated in foreign currencies.

### **Slight Contraction in the Assets of Offshore Banking Units**

At the end of 2002, there were 72 offshore banking units (OBUs) in operation. Domestic banks operated 42 of the OBUs, while foreign banks ran the other 30. The combined assets of all OBUs totaled US\$50.32 billion at the end of the year, representing a slight decrease of US \$0.59 billion or 1.2 percent from the previous year-end. Domestic bank OBUs accounted for US \$36.0 billion or 72 percent of these combined assets, and foreign bank OBUs accounted for US\$14.32 billion or 28 percent of the total.

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

Unit: US\$ Million

End of Month	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	Other Liabilities
2000/12	17,050	3,831	24,528	1,928	47,337	10,654	34,119	2,564
2001/12	15,721	4,206	29,773	1,206	50,906	12,429	36,522	1,955
2002/12	15,160	5,896	27,454	1,808	50,318	14,326	33,443	2,549
2002/ 1	15,681	4,466	29,697	1,390	51,234	12,645	36,649	1,940
2	15,383	4,653	30,217	1,287	51,540	12,900	36,683	1,957
3	15,484	4,844	30,705	1,511	52,544	13,191	37,178	2,175
4	15,400	4,972	28,862	1,373	50,607	13,229	35,322	2,056
5	15,445	5,108	28,968	1,377	50,898	13,170	35,621	2,107
6	15,643	5,180	28,974	1,347	51,144	13,028	36,107	2,009
7	15,797	5,371	31,066	1,509	53,743	12,732	38,586	2,425
8	15,623	5,674	24,303	1,746	47,346	13,063	31,819	2,464
9	15,567	5,701	26,218	1,457	48,943	13,214	33,544	2,185
10	15,427	5,731	25,843	1,481	48,482	13,679	32,603	2,200
11	15,379	5,884	26,491	1,807	49,561	14,181	32,770	2,610
12	15,160	5,896	27,454	1,808	50,318	14,326	33,443	2,549

Source: *Financial Statistics Monthly, Taiwan District, The Republic of China, Central Bank of China.*

The OBUs' main sources of funds were due to affiliated branches and deposits by financial institutions, which together accounted for 66 percent of total liabilities. Of these, due to affiliated branches made up 48 percent, and deposits of non-financial institutions accounted for 29 percent. OBUs have been gradually developing into capital management centers for overseas Taiwanese businesses. In terms of the geographical origin, 70 percent of funds came from Asia, and 19 percent from the Americas.

The main uses of funds were due from affiliated branches and deposits with financial institutions. These accounted for the lion's share or 54 percent of total assets. Second to it were loans extended abroad and locally with a share of 30 percent. Additionally, portfolio investments accounted for 12 percent of total assets, and its outstanding balance at the end of the year grew by 40 percent over the previous year, posting the largest growth among all types of assets. In terms of fund destination, 64 percent of funds went to Asia, and 24 percent to the Americas.

The forex-trading turnover of all OBUs in 2002 was US\$39.06 billion, of which US\$29.21 billion was for spot transactions, US\$7.82 billion for currency swap transactions, and US\$2.03 billion for forward transactions. 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 and commodity swaps, amounted to US\$31.8 billion.