

5. Foreign Exchange Market

Moderate Appreciation of the NT dollar

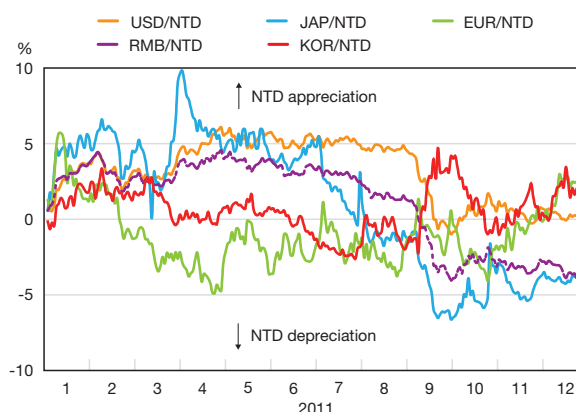
The NT dollar appreciated moderately from the beginning of 2011 until a surge of foreign capital outflow contributed to a downward swing in the exchange rate and depreciation in September. On a daily average basis, the trade-weighted nominal effective exchange rate index of the NT dollar increased by 2.26 percent in 2011.

Early in the year, the NT dollar strengthened against the US dollar because of international capital inflows and increased demand for NT dollars before the Chinese New Year. In February, due to foreign capital outflow, the NT dollar moderately depreciated. After March, attributable to the continued monetary easing in the US and its credit rating downgrade, the US dollar depreciated and the NT\$/US\$ exchange rate soared to a yearly high of 28.632 on May 5.

The NT dollar then hovered between 28.700 and 29.076 from June to August. Thereafter, international stock markets slid in September as the European sovereign debt crisis worsened. Foreign investors sold off in Taiwan's stock market, weakening the NT\$/US\$ exchange rate further to a yearly low of 30.680 on October 4. Although the crisis alleviated later for a brief period, the US dollar rallied and the NT dollar depreciated slightly on gloomy global economic sentiment in November and the protracted European debt crisis. Between year-end 2010 and 2011, the NT dollar appreciated by 0.26 percent against the US dollar. On a daily average basis, the NT\$/US\$ exchange rate strengthened by 7.39 percent in 2011.

As euro depreciation continued into 2011, the NT dollar against the euro soared to a yearly high of 38.407 on January 11. Following an interest rate hike by the European Central Bank (ECB) and smooth government bond issuances by Portugal, Spain and Italy, the euro appreciated moderately and the NT\$/€ exchange rate reached a yearly low of 42.680 on April 29. From May to early September, the NT\$/€ exchange rate fluctuated between 40.146 and 42.614. Thereafter, foreign capital outflow weakened the NT dollar against the euro. However, countries in the European Union

**Percentage Changes of NT Dollar
Exchange rate against Major Currencies
(compared with end 2010)**



Source: Department of Economic Research, CBC.

failed to agree on a solution to the debt crisis and the NT dollar strengthened against the euro towards the end of 2011. Compared to the end of the previous year, the NT dollar against the euro appreciated by 3.54 percent. On a daily average basis, the NT dollar appreciated against the euro by 2.32 percent compared with the previous year.

The NT dollar against the Japanese yen appreciated in the first half of 2011 and then declined in the following months. Entering the year, Japan had its sovereign credit rating downgraded and the yen weakened. On March 11, the devastating earthquake in the northeast caused a tsunami and a nuclear emergency. Insurance companies sold their foreign assets to cover claims payable, leading to a stronger yen. After a coordinated intervention by the Bank of Japan (BOJ) and its G7 counterparts, the yen retreated, and the NT dollar rose to a yearly high of 0.340 against the yen on April 8. In the second half of 2011, due to the prolonged European debt crisis and downside risks of the US economy, global hedge funds and speculators in search of a safe haven continued to push the yen up. The NT\$/¥ exchange rate slipped to a yearly low of 0.400 on October 4 and rebounded later owing to further intervention. At the end of 2011, the NT dollar fell by 4.37 percent against the Japanese yen compared to the end of 2010 and depreciated by 2.36 percent compared with 2010 on a daily average basis.

As for other major currencies, the RMB against the US dollar appreciated throughout 2011 because of Mainland China's strict monetary tightening in response to inflationary pressures and a large external trade surplus. On top of that, Mainland China signed currency swap agreements with Thailand and Pakistan. Japan also announced it would buy the government bonds of Mainland China. Consequently, the RMB climbed to a yearly high of 6.294 against the US dollar on December 30. Meanwhile, the NT dollar depreciated to a yearly low of 4.813 against the RMB, 4.24 percent weaker than at the end of 2010. On a daily average basis, the NT dollar appreciated by 2.50 percent against the RMB as compared with the previous year.

In the early months of 2011, the Korean won was dragged down by a foreign capital outflow and the major earthquake in Japan, and the NT dollar appreciated against the won. However, at the end of March, with the disaster in Japan under control, the Korean won strengthened on the return of foreign capital. In addition, an increase in South Korea's trade surplus in July supported its currency and the NT dollar depreciated against the won to a yearly low of 0.0274 on August 2. Thereafter, global economic slowdown concerns and falling Korean stock indices accounted for a depreciation of the won. The NT dollar surged to a yearly high of 0.0256 against the Korean won on September 26. The NT dollar against the Korean won appreciated by 1.76 percent between year-end 2010 and 2011. On a daily average basis, the NT dollar also rose by 2.95 percent against the Korean won in 2011 compared with the previous year.

Solid Growth in Foreign Exchange Trading Volume

Trading in the Taipei foreign exchange market continued to grow in 2011. Total net trading volume for the year reached US\$6,013.4 billion, representing a growth rate of 17.6 percent, while the daily average turnover was US\$24.1 billion. The increase in turnover mainly reflected expanding international trade and magnifying capital movements.

In terms of trading partners, transactions between banks and non-bank customers accounted for 25.8 percent of the total net turnover, while inter-bank transactions made up 74.2 percent, including 25.6 percent for transactions among local banks and 48.6 percent for those between local banks and overseas banks.

As far as traded currencies were concerned, NT dollar trading against foreign currencies accounted for 44.9 percent of the total trading volume, of which trading against the US dollar made up a dominant 42.9 percent. Transactions in third currencies contributed to 55.1 percent of

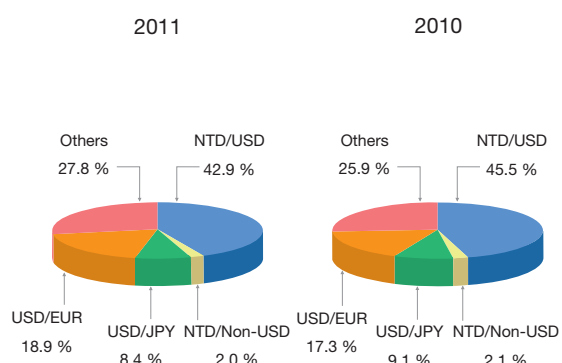
Turnover of Major Products in the Taipei Foreign Exchange Market

Unit: US\$ Million

Year	Spots	Forwards	Forex Swaps	Margin Trading	Options	Cross Currency Swaps	Total
2007	2,418,963	477,189	1,362,112	42,482	303,857	29,683	4,634,286
2008	2,455,394	459,393	1,548,763	34,871	307,857	40,097	4,846,375
2009	1,841,951	283,233	1,627,020	20,809	311,353	26,927	4,111,293
2010	2,192,719	290,075	2,166,897	18,295	423,261	23,848	5,115,095
2011	2,570,319	415,459	2,454,626	19,016	529,351	24,587	6,013,357
2010-2011 Growth Rate (%)	17.2	43.2	13.3	3.9	25.1	3.1	17.6

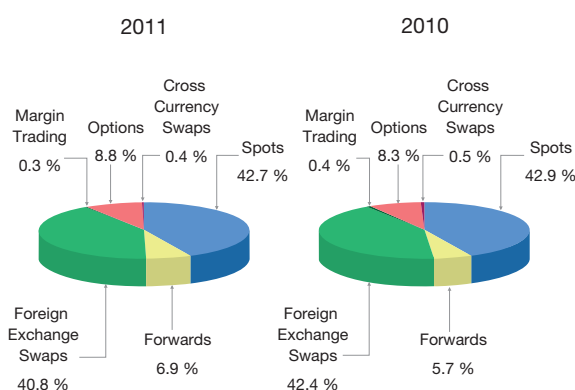
Source: Department of Foreign Exchange, CBC.

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.

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	Commodity Options			
2007	12,958	93,072	17,475	176,723	6,947	627	5,243	313,044
2008	18,799	205,911	8,860	172,918	17,875	126	3,586	428,075
2009	5,715	469,003	4,999	208,566	18,360	51	3,312	710,006
2010	842	125,541	6,043	392,368	18,060	105	10,126	553,085
2011	902	76,153	3,569	254,703	22,728	421	5,204	363,681
2010-2011 Growth Rate (%)	7.1	-39.3	-40.9	-35.1	25.9	301.4	-48.6	-34.2

Source: Department of Foreign Exchange, CBC.

the total trading volume, with trading in currency pairs of US dollar-other currencies and US dollar-euro accounting for respective shares of 27.8 percent and 18.9 percent. Compared with 2010, NT dollar trading against foreign currencies increased by 10.8 percent, and transactions in third currencies increased by 23.7 percent.

With respect to types of transactions, the major transactions were spots and foreign exchange swaps, accounting for 42.7 percent and 40.8 percent of total turnover, respectively. Compared with 2010, the trading volume of all types increased. However, in terms of the share in the total turnover, only forwards and options increased.

In 2011, the total turnover of forwards, swaps and options based on foreign currency interest rates, stock price indices, commodity prices, and credit derivatives amounted to US\$363.7 billion. Of this amount, interest rate-related derivatives accounted for the lion's share with US\$335.3 billion, or 92.2 percent, representing a negative annual growth rate of 36.1 percent. Interest rate futures accounted for the majority of this decline, with a decrease of US\$137.7 billion, reflecting investor concern over an uncertain interest rate outlook due to the European debt crisis.

Expansion in the Foreign Currency Call-loan Market

The transaction volume in the foreign currency call-loan market in 2011 was US\$1,856.2 billion, an increase of 11.2 percent over the previous year. Of this amount, US dollar transactions made up a dominant share with US\$1,834.4 billion, as high as 98.8 percent of the total and 10.9 percent higher than that in 2010. The main reason for the increase was the downward trend of the US dollar overnight call-loan rate aimed at improving US dollar liquidity conditions to relieve funding pressures of European banks. Japanese yen transactions reached ¥950.3 billion in 2011, a small share of only 0.6 percent and a slight decrease of 0.4 percent compared to 2010. The amount of euro transactions

totalled €4.3 billion, a share of just 0.3 percent.

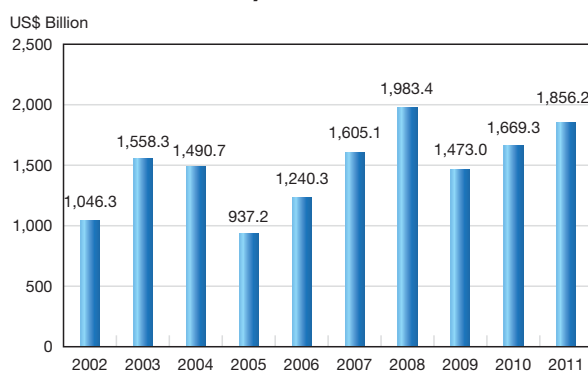
Other currencies accounted for 0.2 percent of the total transaction volume.

Increase in the Assets of Offshore Banking Units

There were 61 offshore banking units (OBUs) at the end of 2011. Domestic banks operated 36 of the OBUs, while foreign banks ran the other 25 units. Owing to larger loans to nonresidents, the total assets of all OBUs increased to US\$145.1 billion at the end of the year, representing an increase of US\$22.2 billion or 18.0 percent from the previous year-end. Domestic OBUs made up 78.7 percent of these combined assets with an amount of US\$114.3 billion, and the OBUs of foreign banks accounted for US\$30.8 billion, or 21.3 percent of the total. In terms of the uses of funds, macroeconomic control measures in Mainland China made it difficult for Taiwanese firms to raise funds from the banking system there, driving them toward OBUs. As a result, loans to non-financial institutions reached a historic high of US\$59.7 billion, representing a majority share of 41.1 percent of OBU lending. Deposits with financial institutions and affiliated branches were 39.2 percent of total assets. In terms of the destination for funds, Asia accounted for the majority with 63.0 percent, followed by America at 24.7 percent.

The OBUs' main sources of funds were deposits by financial institutions and affiliated branches, which together accounted for 63.2 percent of total liabilities. Among them, deposits of non-financial institutions reached a historic high, which increased 5.8 percent compared to the previous year. In recent years, OBUs have been the funding centers for overseas Taiwanese firms. By geographical

Transactions in the Taipei Foreign Currency Call-Loan Market



Source: Department of Foreign Exchange, CBC.

Consolidated Balance Sheet of Offshore Banking Units in Banking System

Unit: US\$ Million

Year/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	Securities Issued	Other Liabilities
2007/12	23,931	11,969	47,788	7,593	91,281	27,263	55,939	499	7,580
2008/12	32,481	10,851	48,141	7,159	98,632	31,133	60,198	724	6,577
2009/12	29,988	13,757	43,954	7,352	95,051	32,493	54,070	352	8,136
2010/12	40,752	15,952	55,878	10,348	122,930	35,587	75,270	364	11,709
2011/12	58,976	15,760	56,900	13,465	145,101	37,645	91,662	370	15,424
2010/12-2011/12 Growth Rate (%)	44.7	-1.2	1.8	30.1	18.0	5.8	21.8	1.6	31.7

Source: Financial Statistics Monthly, CBC.

origin, 70.1 percent of the funds came from Asia, and 19.9 percent from America.

Supported by official approval for OBUs to conduct RMB-related business in July 2011, the forex-trading turnover of all OBUs in 2011 increased by 37.1 percent and registered US\$269.8 billion, of which US\$141.9 billion went for spot transactions, US\$77.1 billion for forward transactions and US\$50.8 billion for foreign exchange swap transactions. Compared with the previous year, the growth rates of the trading of spots, forwards and foreign exchange swaps were 30.2 percent, 52.8 percent and 36.1 percent, respectively.

The total turnover of derivatives products amounted to US\$469.8 billion, a decrease of 10.7 percent over the previous year. Of this amount, interest rate futures accounted for US\$254.7 billion, or 54.2 percent of the total, but represented a decline of 35.1 percent from 2010. The main reason for the decline was investor conservatism due to uncertain interest rate trends. Supported by an increase in currency options trading, transactions of options registered US\$190.3 billion, 66.2 percent higher than 2010.

