

## 5. Foreign Exchange Market

### Slight Depreciation of the NT Dollar

In 2014, as the NT dollar slightly depreciated against most major international currencies but appreciated against the Japanese yen, the trade-weighted nominal effective exchange rate index of the NT dollar decreased by 0.35 percent on a daily average basis. The exchange rate movements of the NT dollar against the US dollar, the euro, the yen, the renminbi (RMB), and the Korean won are analyzed as follows.

The NT dollar against the US dollar slightly fluctuated before it weakened in the second half of 2014. Early in the year, as US labor market conditions improved and the Fed began to reduce its asset purchase program, the US dollar strengthened and the NT dollar reached a period low on March 21. In June, because the European Central Bank (ECB) introduced a negative deposit facility interest rate and the Fed announced it would keep its policy rate near zero, international capital flowed into Asia, and the NT dollar against the US dollar soared to a yearly high on July 2. At the end of October, as the Fed ended its asset purchase program and the Bank of Japan (BoJ) introduced further monetary easing, the yen slumped against the US dollar. In the meantime, the US economy expanded at a moderate pace, while recovery in the euro area and Japan remained weak and international oil prices dropped dramatically. Consequently, the US dollar strengthened against most currencies and the NT dollar hit a yearly low on December 24. At the end of 2014, the NT dollar depreciated by 5.57 percent 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 1.97 percent in 2014.

The NT dollar slightly depreciated against the euro in the first half of the year but then soared toward the end of the year. In the first quarter of the year, owing to an economic upturn in the euro area, the NT dollar versus the euro edged down to a yearly low on March 19. On June 5, the

### Annual Changes of NTD Exchange Rate Against Major Currencies

	NTD/USD	NTD/EUR	NTD/JPY	NTD/CNY	NTD/KRW
Exchange Rate (2014/12/31)	31.718	38.550	0.2652	5.1125	0.0291
Exchange Rate (2013/12/31)	29.950	41.288	0.2853	4.9472	0.0284
Annual Change	-5.57%	7.10%	7.59%	-3.23%	-2.40%
Average Exchange Rate (2014)	30.368	40.290	0.2866	4.9431	0.0288
Average Exchange Rate (2013)	29.770	39.527	0.3050	4.8049	0.0272
Annual Change	-1.97%	-1.89%	6.42%	-2.80%	-5.72%

Source: Department of Economic Research, CBC.

ECB introduced a negative deposit facility interest rate and the NT dollar appreciated. In the middle of July, the collapse of Banco Espirito Santo, Portugal's largest listed bank by assets, led to renewed concerns among investors about the euro area's financial stability. In addition, the European Union imposed economic sanctions against Russia over its alleged involvement in shooting down a Malaysian airliner. This prompted investors to sell the euro, sending the euro down further. From September onwards, the US economy grew at a moderate pace and the Fed ended the asset purchasing program, while euro area industrial production slowed down and the ECB expanded its monetary easing. Against this backdrop, the NT dollar against the euro soared to a yearly high on November 7. Compared with the end of the previous year, the NT dollar appreciated against the euro by 7.10 percent at the end of 2014. On a daily average basis, the NT dollar depreciated against the euro by 1.89 percent.

In 2014, the NT dollar depreciated against the yen in the first three quarters and rapidly appreciated in the final quarter. At the beginning of the year, as the global economic outlook was unclear, the yen rose on safe-haven demand and the NT dollar versus the yen reached a yearly low on February 5. Then political tension in Ukraine and the ISIS-led insurgency in the Middle East further pushed up safe-haven demand for yen. However, as the BoJ reaffirmed its expansionary monetary policy, the NT dollar against the yen fluctuated between 0.2920 and 0.2976 from April to August. Later, on October 31, the BoJ announced further quantitative and qualitative monetary easing, and the NT dollar appreciated rapidly against the yen to reach a yearly high on December 8. In all, the NT dollar appreciated by 7.59 percent against the yen at the end of 2014 compared with the previous year end. On a daily average basis, the NT dollar appreciated against the yen by 6.42 percent.

In 2014, the NT dollar strengthened against the RMB in the first half of the year but weakened in the second half. Early in the year, since the economic growth of Mainland China slowed down and exports in February declined 20 percent, the RMB depreciated against the US dollar. In March, as the People's Bank of China widened the RMB's daily trading band and the RMB weakened, the NT dollar against the RMB reached a yearly high on June 3. In the second half of the year, as Mainland China's economy grew at a moderate pace and foreign capital inflows increased to take advantage of opportunities in the newly-launched Shanghai-Hong Kong Stock Connect, the NT dollar against the RMB generally followed a downward trend and dropped to a yearly low on December 25. The NT dollar depreciated against the RMB by 3.23 percent between end-2013 and end-2014. On a daily average basis, the NT dollar depreciated by 2.80 percent against the RMB when compared with the previous year.

In 2014, the NT dollar fluctuated against the Korean won all year. At first, as the Fed tapered its stimulus package and South Korea recorded net foreign capital outflows, the Korean won

weakened. In March and April, South Korea's current account surplus attracted foreign capital inflows and the won turned to appreciation. The NT dollar against the won fell to a yearly low on July 3. Later in July, as the Bank of Korea revised down the country's economic growth forecast and investors expected a policy rate cut, the NT dollar appreciated against the won. From October onwards, the BoJ announced more monetary easing, and the won thus fell following a weaker yen. The NT dollar against the won soared to a yearly high on November 20. Compared with the end of 2013, the NT dollar depreciated by 2.40 percent against the Korean won at the end of 2014. On a daily average basis, the NT dollar also depreciated by 5.72 percent against the won in 2014.

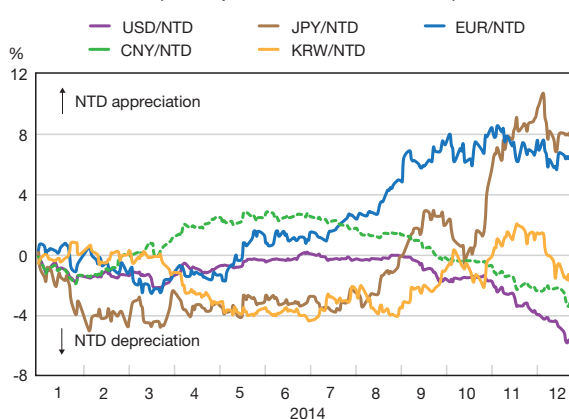
## Flourishing Foreign Exchange Market

Trading in the Taipei foreign exchange market expanded in 2014. Total net trading volume for the year reached US\$7,822.4 billion, representing a year-on-year growth rate of 9.0 percent. The daily average turnover was US\$31.3 billion. The increase in turnover reflects not only Taiwan's sustained growth in external trade but also the rise of transaction and hedging demands due to a greater volatility in major foreign currencies.

In terms of trading partners, transactions between banks and non-bank customers accounted for 25.6 percent of the total turnover, while interbank transactions made up 74.4 percent, including 23.7 percent for transactions among local banks and 50.7 percent for those between local banks and overseas banks.

As far as traded currencies were concerned, NT dollar trading against foreign currencies accounted for 40.6 percent of the total trading volume, of which trading against the US dollar

**Percent Changes of NT Dollar  
Against Major Currencies**  
(Compared with End-2013)



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

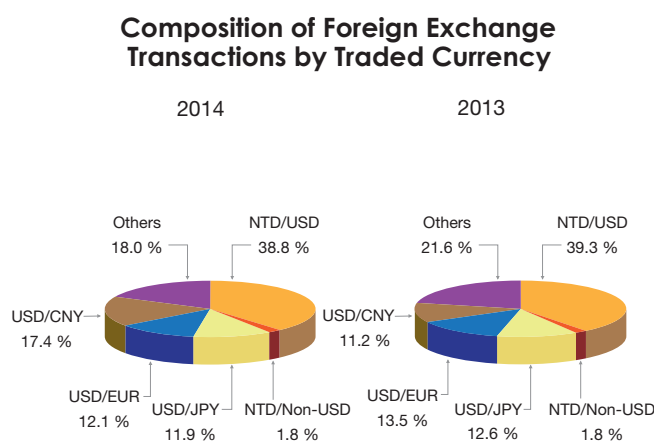
Unit: US\$ Million

Year	Spots	Forwards	Forex Swaps	Margin Trading	Options	Cross Currency Swaps	Total
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
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
2013-2014 Growth Rate (%)	7.0	9.6	12.1	-6.2	5.7	13.3	9.0

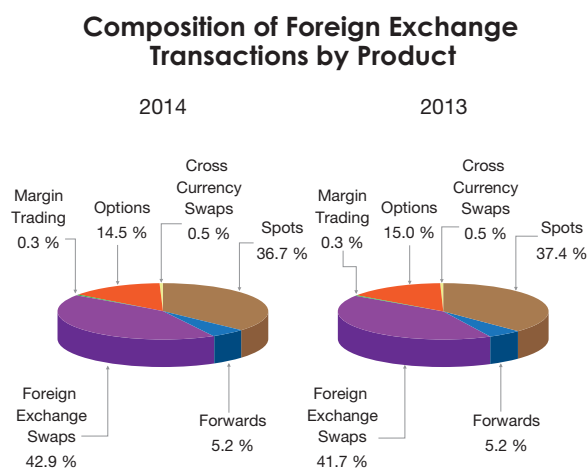
Source: Department of Foreign Exchange, CBC.

made up a dominant 38.8 percent. Transactions in third currencies contributed to 59.4 percent of the total trading volume, with trading in currency pairs of USD-RMB, USD-euro and USD-yen accounting for respective shares of 17.4 percent, 12.1 percent and 11.9 percent. Compared with 2013, NT dollar trading against foreign currencies moderately increased by 7.8 percent, and transactions in third currencies increased by 9.9 percent. The main reason for the latter increase was a steady increase in RMB business by domestic banking units (DBUs) since the cross-strait currency clearing mechanism was established.

With respect to types of transactions, the major types were foreign exchange swaps and spots, accounting for 42.9 percent and 36.7 percent of total turnover respectively. Compared with 2013, except for a decrease in margin trading, the trading volume in the total turnover of all the other types of transactions increased.



Source: Department of Foreign Exchange, CBC.



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	Subtotal	Commodity Options			
2010	842	125,541	6,043	392,368	524,794	18,060	105	10,126	553,085
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
2013-2014 Growth Rate (%)	-95.9	16.6	-45.5	5.7	-21.7	-29.5	-82.8	-7.6	4.6

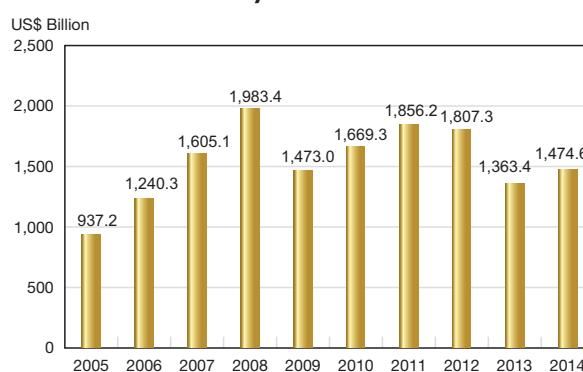
Source: Department of Foreign Exchange, CBC.

In 2014, 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\$172.7 billion. Of this amount, interest rate-related derivatives accounted for the lion's share with US\$167.1 billion, or 96.8 percent, with its turnover up by 6.9 percent from the previous year. Interest rate futures accounted for the majority of this increase, up by US\$6.6 billion. The main reason was that the Fed's tapering fueled market expectations of heightened market interest rate volatility.

### Increase in Trading in Foreign Currency Call Loan Market

The transaction volume in the foreign currency call loan market in 2014 was US\$1,474.6 billion, an increase of 8.2 percent over the previous year. Of this amount, US dollar transactions accounted for a dominant share with US\$1,426.1 billion, making up 96.7 percent of the total while increasing 6.9 percent from 2013. The rise was mainly because some banks increased short term foreign currency lending after accepting plenty of foreign currency deposits. Japanese yen transactions reached ¥1,185.4 billion in 2014, a small share of 0.8 percent of the total with a decline of 9.6 percent in the volume compared to the previous year. The amount of euro transactions totaled €1.2 billion, a share of less than 0.1 percent. Other currencies accounted for 2.4 percent of the total transaction volume.

**Transactions in the Taipei Foreign Currency Call Loan Market**



Source: Department of Foreign Exchange, CBC.

### Growing Assets of Offshore Banking Units

There were 62 offshore banking units (OBUs) at the end of 2014. Domestic banks operate 38 of these OBUs, while foreign banks run the other 24. The total assets of all OBUs grew to US\$184.0 billion at the end of the year, representing an increase of US\$14.4 billion or 8.5 percent from the previous year end. Domestic OBUs made up 84.4 percent of these combined assets with an amount of US\$155.3 billion, and the OBUs of foreign banks accounted for US\$28.7 billion, or 15.6 percent of the total.

In terms of the uses of funds, loans to non-financial institutions, at US\$87.9 billion, represented the majority share of 47.8 percent of total OBU assets. Claims on financial institutions came in second place, accounting for 15.8 percent of total OBU assets. In terms of the destination for funds, Asia accounted for the majority with 63.0 percent, followed by America at 25.0 percent.

The OBUs' main source of funds were interbank transactions, making up 43.8 percent of total liabilities. Furthermore, deposits of non-financial institutions grew sharply, accounting for 31.4 percent of total liabilities. OBUs were the main funding source of overseas Taiwanese firms, with 64.0 percent of their funds coming from Asia and 22.0 percent from America.

Owing to the increased variety of RMB-related business, forex trading turnover of all OBUs in 2014 rose by 26.4 percent and registered US\$602.0 billion, of which US\$364.3 billion went for spot transactions, US\$143.0 billion for forex swap transactions and US\$94.7 billion for forward transactions. Compared with the previous year, the growth rates of the trading of spots, forex swaps and forward transactions were 35.1 percent, 20.2 percent, and 8.1 percent, respectively.

The total turnover of other derivatives products increased to US\$1,426.1 billion, 15.7 percent higher than 2013. Of this amount, currency options and RMB options transactions registered a combined amount of US\$1,143.7 billion, making up 80.2% of the turnover.

### 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
2010	40,752	15,952	55,878	10,348	122,930	35,587	75,270	364	11,709
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
2013-2014 Growth Rate (%)	9.8	0.2	7.2	14.1	8.5	12.9	1.5	-3.7	34.9

Source: Financial Statistics Monthly, CBC.