

III. Financial sector assessment

3.1 Financial markets

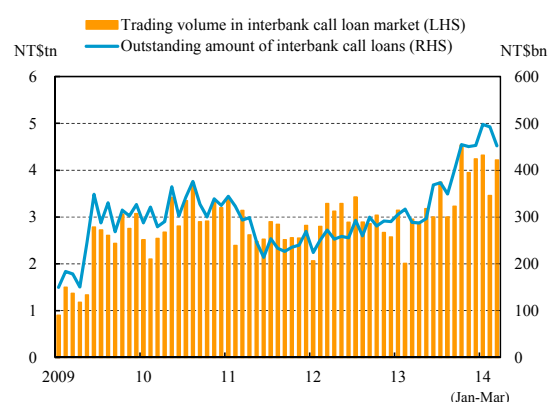
As for the money and bond markets, the trading volume in interbank call loans expanded in 2013. The outstanding amount of bill and bond issuance in the primary markets also rose significantly, although the trading volume in the secondary markets remained contracted. However, the yield spread between long-term and short-term market rates saw a rebound. With regard to the stock markets, stock indices trended up, while volatility regained stability after ascending and the annual turnover ratio continued to hit a new low. In the foreign exchange market, the NT dollar exchange rate against the US dollar turned to depreciation but remained relatively stable compared to the exchange rates of other major currencies, while trading volume continued to increase.

3.1.1 Money and bond markets

Trading volume of interbank call loans expanded remarkably

In 2013, the average daily outstanding amount of interbank call loans increased remarkably by 34.55% year on year. It was primarily because a continued funding surplus in the interbank call-loan market led to increasing interbank call loans provided by domestic banks, and a gradual increase in inward remittances by foreign portfolio investors after September onwards resulted in more funds being parked in the market by foreign banks that serve as custodian banks for foreign portfolio investors. Meanwhile, the trading volume of interbank call loans also expanded with an annual increase of 14.24% in the same period. In 2014 Q1, the trading volume and outstanding amount of interbank call loans mostly remained at a recent high level (Chart

Chart 3.1 Interbank call loan market



Note: Outstanding amount is the monthly average of daily data.
Source: CBC.

3.1).

Bill issuance in the primary market significantly rose, but trading volume in the secondary market remained contracted

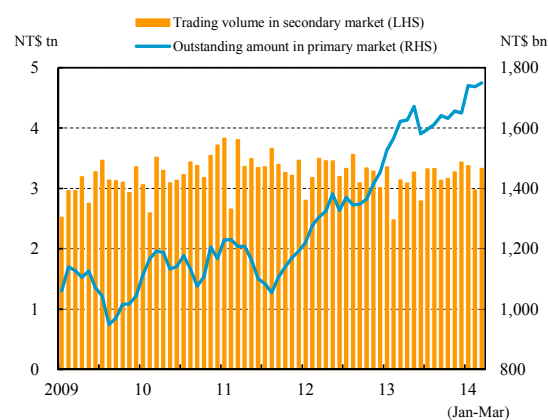
The outstanding amount of bill issuance at the end of 2013 remarkably rose by 13.50% year on year in 2013, with commercial paper posting the highest increase of NT\$175.6 billion or 17.15%. The main reason behind this was that interest rates of commercial paper issuance remained at low levels which attracted large private and state-owned enterprises to raise funds through commercial paper issuance. In March 2014, the outstanding amount of bill issuance remained at a high level (Chart 3.2).

Although bill issuance in the primary market rose, trading volume in the secondary market contracted by 3.65% year on year in 2013. The reason was primarily because bills finance companies replaced repurchase transactions with outright transactions to avoid interest rate risk, and most banks actively employed a buy and hold strategy toward investing in commercial paper.⁴⁶ In 2014 Q1, the trading volume of bills in the secondary bill market remained at a low level (Chart 3.2).

Bond issuance in the primary market expanded, but the turnover of outright transactions in the secondary market further shrank

In 2013, the outstanding amount of bond issuance ascended by 6.85% year on year, with corporate bonds posting the highest growth of 13.67% due to additional issuance by some large high-tech corporations to meet their funding requirements for capacity expansion. Government bonds also registered a year-on-year increase of 5.58% in 2013, affected by treasury funds management and the implementation of the policy to a regular and moderate issuance of government bonds. Nevertheless, the outstanding amount of financial debentures kept at a similar level compared with the previous year, while that of beneficiary securities, foreign bonds and foreign currency-denominated international bonds remained low (Chart

Chart 3.2 Primary and secondary bill markets



Sources: CBC and FSC.

⁴⁶ At the end of 2013, bank-held commercial paper accounted for 44.34% of total outstanding of issuance, rising by 2.59 percentage points over the previous year.

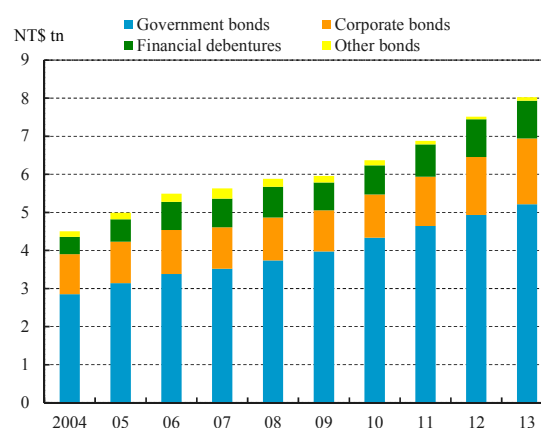
3.3). Although the transactions of RMB-denominated international bonds (Formosa Bonds), among others, were small, it is expected that their market scale will gradually amplify in the future on the back of active development of the offshore RMB market in Taiwan (Box 3).

In 2013, the bond market was still sluggish, and trading volume declined by 20.02% year on year (Chart 3.4). Of the components, outright transactions dropped significantly by 25.71% owing to less bonds being traded in the market as banks actively employed a buy and hold strategy toward investing in government bonds.⁴⁷ This, together with a significant rise in bond yields from May 2013, resulted in a further shrinkage in the trading volume in the bond market and lowered the average monthly bond turnover in 2013. Especially due to bond traders' lack of willingness to trade by the end of the year, outright transactions dropped sharply and the monthly turnover ratio descended to a 10-year low of 4.52% in December 2013. In 2014 Q1, the monthly turnover ratio remained flat (Chart 3.5).

Short-term market rates stabilized, long-term market rates slightly dropped after trending up

As for short-term market rates, in 2013, the CBC's decision to keep policy rates unchanged, coupled with market liquidity standing at an appropriate level, resulted in the yield on 90-day commercial paper remaining broadly stable at around 0.86% in the first three quarters. From October onwards, owing to the increase of inward remittances by foreign portfolio investors

Chart 3.3 Outstanding amount of bond issuance in the primary market

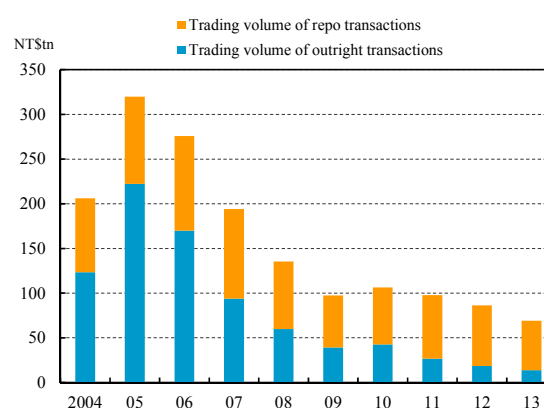


Notes: 1. Other bonds include beneficiary securities, foreign bonds and foreign currency-denominated international bonds.

2. The ratio of other bonds to total outstanding volume was only 1.2% at the end of 2013.

Source: FSC.

Chart 3.4 Outright and repo transactions in the bond market



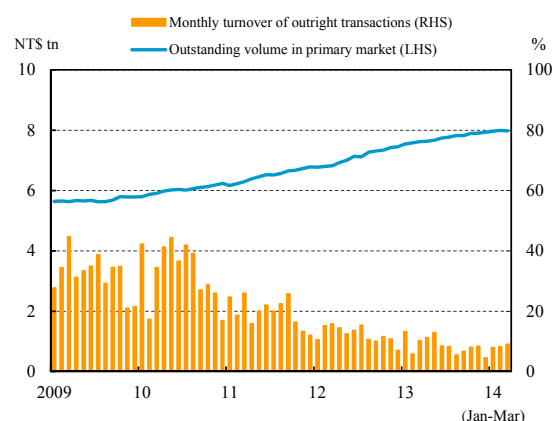
Source: CBC.

⁴⁷ Based on the CBC data, the average share of central government bonds held by banks accounted for 47.25% in 2013, increasing by 1.65 percentage points over the previous year.

and the lack of short-bills sources, short-term market rates slightly declined. In 2014 Q1, the short-term market rates remained relatively stable at a low range.

As for long-term market rates, spurred by brisk trading in the domestic stock markets and a marked hike in US government bond (US bonds) yields, the yield on 10-year government bonds (Taiwan bonds) followed an upward trend in 2013 Q1. However, the yield on Taiwan bonds reversed to trend downwards in response to a drop in US bond yields following the US and Japan both adopting further quantitative easing in April. It dipped to an annual low of 1.17% in early May, with the yield spread between short-term and long-term rates down to 29 basis points. From the middle of May onwards, owing to concerns about the Fed's tapering of asset purchases, the yield on Taiwan bonds reversed to trend up and reached an annual high of 1.79% in September. Afterwards, contrary to market expectations, the Fed decided to leave their monthly asset purchases unchanged. As a result, the yield on Taiwan bonds reversed to trend down, and the yield spread reached 85 basis points at the end of 2013, posting a relative high for the year. In early 2014, the yield on Taiwan bonds fluctuated following the movement of US bonds, and the yield spread slightly dropped to 77 basis points in March (Chart 3.6).

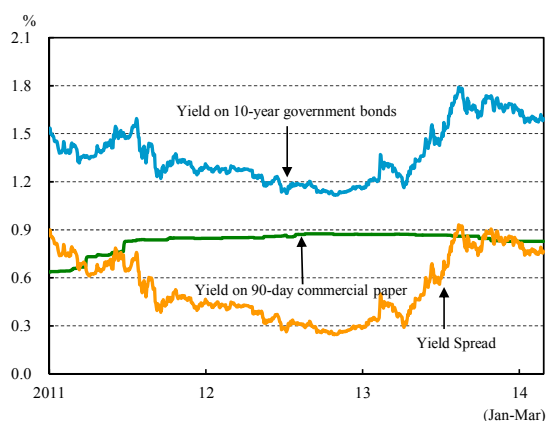
Chart 3.5 Primary bond market and turnover



Notes: 1. Primary bonds include government bonds, corporate bonds and financial debentures.
2. Monthly turnover = trading value in the month / average bonds issued outstanding.
Average bonds issued outstanding = (outstanding at the end of the month + outstanding at the end of last month) / 2.

Source: FSC.

Chart 3.6 Yield spread



Note: Yield spread refers to yield on 10-year government bonds minus yield on 90-day commercial paper.

Source: Bloomberg.

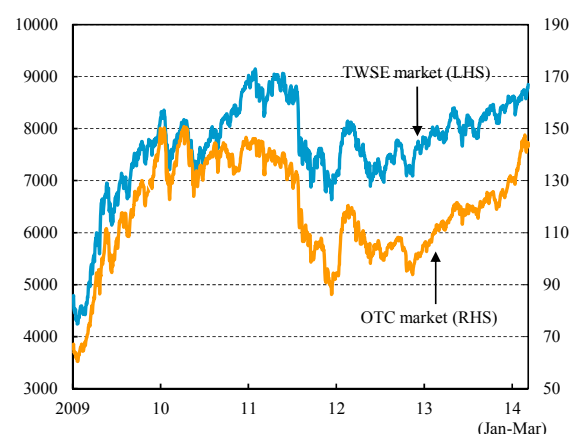
3.1.2 Equity markets

Stock indices trended up, while volatility initially amplified then dampened

Due to massive net buying by foreign portfolio investors in early 2013 spurred by the robust performance of global stock markets, smooth progress of cross-strait financial cooperation and the release of the revised capital gains tax on securities transactions, the TAIEX of the TWSE market kept tracking on an upward path and hit a new high of 8,399 on 22 May. However, subdued by market fear over the downsizing of the Fed's QE program, political turmoil in the Middle East and the repatriation of foreign capital from emerging markets, the TAIEX dipped to 7,814 on 22 August. From September onwards, the FSC announced several stock market support measures, including allowing securities dealers to purchase or sell securities at the limit-up or limit-down price, loosening restrictions on short selling at a price lower than the previous trading day's closing price, and allowing investors to execute day trades where the purchase precedes the sale, etc. Furthermore, the Fed decided to maintain the pace of its monthly bond purchases. All these propelled the TAIEX to soar up to an annual high of 8,623 on 30 December and register 8,612 at year-end 2013, an increase of 11.86% year on year. During 2014 Q1, the TAIEX continued on its upward path and reached 8,849 at end-March, increasing by 2.76% from the end of 2013 (Chart 3.7).

Taiwan's GreTai Securities Market (GTSM) Index of the OTC market trended up from 104 posted in early 2013 and closed at a year high of 130 at end-December, for an annual rise of 25.44%. The index climbed further and reached 145 at the end of March 2014, rising by 11.52% compared to the end of the previous year. The rise was higher than that of the TAIEX (Chart 3.7).

Chart 3.7 Taiwan's stock market indices



Sources: TWSE and GTSM.

Comparing major stock markets around the world, most markets showed positive performances in 2013 except for the Thai Index and the Shanghai Composite Index, though the stock index of Tokyo outperformed others with a rise of 56.72%. The TAIEX climbed by 11.86% year on year, slightly higher than Kuala Lumpur's Composite Index (Chart 3.8).

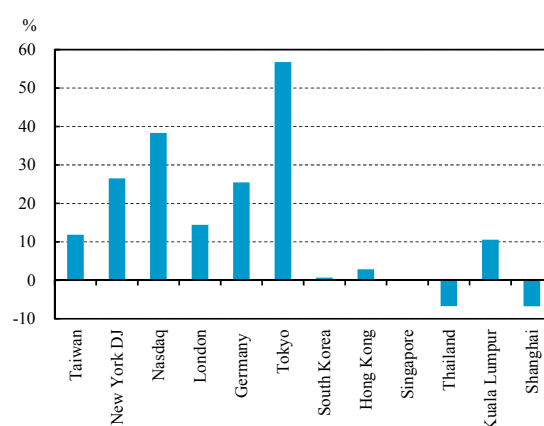
Broken down by sector, most sector indices in the TWSE market entered bullish territory in 2013, except the Shipping and Transportation, Oil, Gas and Electricity, Optoelectronic, Communications and Internet, and Electronic Products Distribution Industry indices, which were all negative performers. The indices for Automobiles and Electric Machinery performed the best, increasing by 48.25% and 42.93%, respectively.

In 2013, the volatility in the TWSE and OTC markets declined after trending up, standing at 9.45% and 10.37%, respectively, at the end of December. At the beginning of 2014, the volatility in the TWSE and OTC markets reversed to increase gradually as the local stock indices rebounded, standing at 10.38% and 12.66%, respectively, at the end of March (Chart 3.9).

Annual turnover ratio kept hitting new lows in the TWSE market but rose slightly in the OTC market

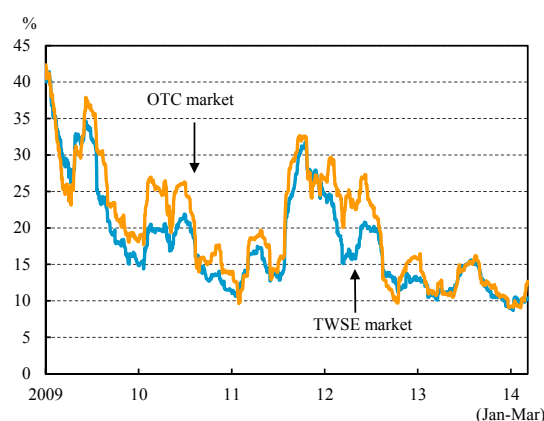
The TWSE market experienced sluggish trading in 2013, with the average monthly trading value registering NT\$1.58 trillion, a contraction of 6.41% year on year, while its turnover ratio in terms of trading value in the same year continuously declined to 82.64%, touching a 10-year low. However, the transaction volume in the OTC market showed a better

Chart 3.8 Comparison of major stock market performances



Notes: 1. Figures are for 2013.
2. Taiwan's data is for the TWSE market.
Source: TWSE.

Chart 3.9 Stock price volatility



Note: Volatility refers to the annualized standard deviation of 60-day daily index returns.
Sources: TWSE, GTSM, and CBC.

performance. Its average monthly trading value was NT\$336 billion in 2013, an increase of 36.55% year on year. Reflecting this, the annual turnover ratio of the OTC market rose to 198.87% from 174.80% a year earlier, but still remained at a low level (Chart 3.10).

Comparing major stock markets around the world, the annual turnover ratios in Shenzhen, Tokyo and Shanghai ranked the highest in 2013, while the TWSE market ranked in the middle, approximately equal to the stock market in New York, but higher than those in London, Germany, Hong Kong, Singapore and Kuala Lumpur (Chart 3.11).

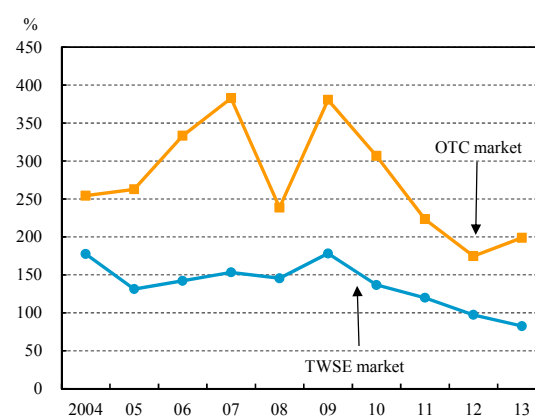
3.1.3 Foreign exchange market

The NT dollar exchange rate followed a depreciating trend and the trading volume increased

In the first half of 2013, the NT dollar exchange rate turned to depreciation, reaching 30.350 against the US dollar on 24 June, owing to an increase in purchases of US dollars by firms and capital outflows by foreign investors caused by the BOJ implementing additional quantitative monetary easing, the worsening European debt crisis, political confrontations on the Korean peninsula, and the possible shocks from an exit from quantitative easing announced by the US. Afterwards, it fluctuated within a narrow range (Chart 3.12).

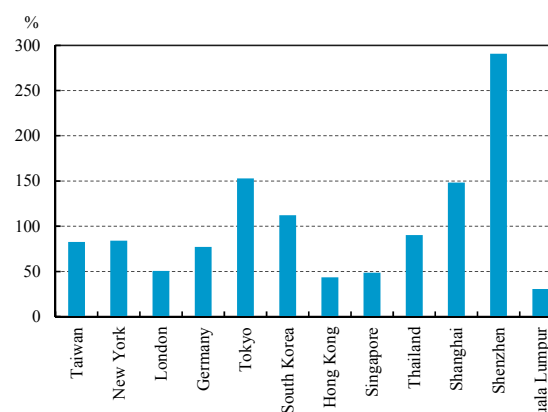
The NT dollar exchange rate reversed to appreciate and reached 29.425 on 23 October in virtue of foreign capital inflows arising from the weakening of the US dollar caused by the fact that the Fed decided to keep the size of its bond purchases unchanged in September 2013. Afterwards, the market expected capital to flow back to the US, and in turn, the US dollar

Chart 3.10 Annual turnover ratios in Taiwan's stock markets



Sources: TWSE and GTSM.

Chart 3.11 Comparison of turnover ratios in major stock markets



Notes: 1. Figures refer to accumulated turnover ratios in 2013.
2. Taiwan's data is for the TWSE market.

Source: TWSE.

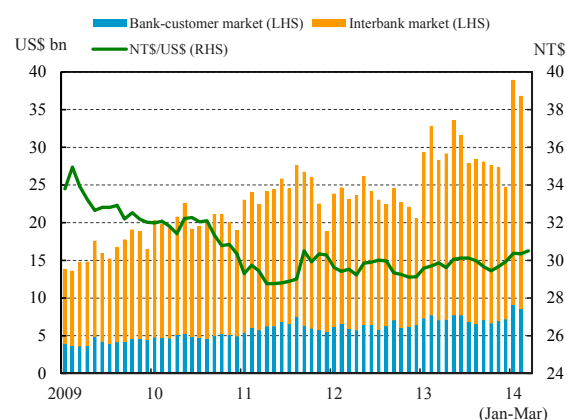
turned to strengthen again as the ECB cut its policy rate, and the Fed announced a gradual tapering of its monthly bond purchases from January 2014. As a result, the NT dollar exchange rate reversed to depreciate and stood at 29.950 against the US dollar at the end of December, with an annual depreciation of 2.72%. In early 2014, the US dollar stayed stronger, whereas the NT dollar exchange rate continued to depreciate and fell to 30.510 against the US dollar at the end of March (Chart 3.12).

Compared to other major currencies in Asia, the depreciation of the NT dollar against the US dollar at 2.72% was lower than the Japanese yen's 17.77%, the Malaysian ringgit's 6.54% and the Singapore dollar's 3.33%, while only the renminbi and the Korean won appreciated, rising by 2.91% and 1.44%, respectively, in 2013. In 2014 Q1, the NT dollar continued to depreciate, falling by 1.84% from the end of 2013, less than the drop of the renminbi but more than that of Korean won, while the Japanese yen appreciated by 1.95% (Chart 3.13).

As for the NT dollar against other key international currencies, as a result of the significant depreciation of the yen, the NT dollar appreciated against the yen by 18.31% in 2013. Conversely, the NT dollar depreciated by 6.49%, 5.11% and 4.10% against the euro, the British pound and the Korean won, respectively, over the same period (Chart 3.14).

In 2013, owing to export growth and relatively large domestic and international capital movements, the transactions in the foreign exchange market became more active than a year earlier. The average daily trading volume of the foreign exchange market reached US\$29 billion, increasing by 24.10% compared to US\$23.4 billion a year earlier, primarily because

Chart 3.12 NTD/USD exchange rate and foreign exchange market trading volume

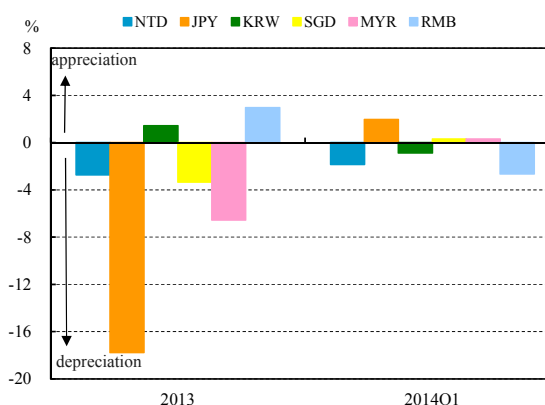


Notes: 1. Trading volume is the monthly average of daily data, while exchange rate is end-of-period data.

2. Latest data for trading volume is as of February 2014.

Source: CBC.

Chart 3.13 Appreciation and depreciation percentages of major Asian currencies against the US dollar



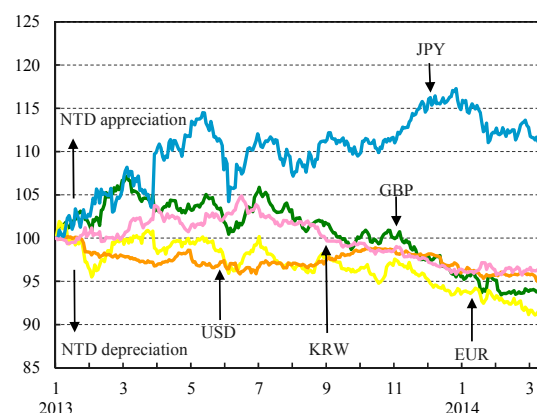
Source: CBC.

of an increase in the trading volume of the interbank market (Chart 3.12). A breakdown by counterparty showed that the average daily trading volume in the interbank market accounted for 75.23% of the total in 2013, while the retail bank-customer market made up a 24.77% share. As for types of transactions, foreign exchange swaps accounted for 41.62% of the total, followed by spot trading with 37.47%. Taiwan's active development of the offshore RMB market is likely to be beneficial to expanding the foreign exchange market (Box 3).

NT dollar exchange rate volatility remained relatively stable

The volatility in the NT dollar exchange rate against the US dollar fluctuated between 0.8% and 6% in 2013, and registered an annual average of 3.18%. In early 2014, with the effect of international capital outflows from emerging markets caused by declining bond purchases by the Fed, the volatility in the NT dollar exchange rate against the US dollar trended upwards, but fell below 3% from the middle of February. From 2013, the NT dollar exchange rate was relatively stable compared to the volatility in the exchange rates of major currencies such as the Japanese yen, euro, Korean won and Singapore dollar against the US dollar (Chart 3.15).

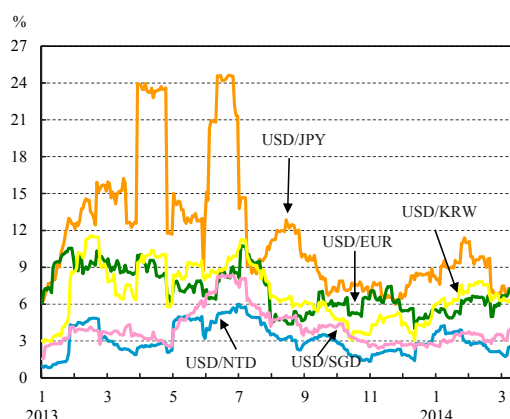
Chart 3.14 Movements of NT dollar exchange rate against key international currencies



Note: 2 January 2013 = 100.

Source: CBC.

Chart 3.15 Exchange rate volatility of various currencies against the US dollar



Note: Volatility refers to the annualized standard deviation of 20-day daily returns.

Source: CBC.

Box 3

Taiwan offshore RMB market– developments and future prospects

1. Background of the offshore RMB market

With the expansion of Mainland China's economy, its influence in Asia and even the world has grown day by day. Consequently, with consideration to its own benefit, the Chinese government started to actively promote policies that encourage the internationalization of the RMB in 2009, which garnered international attention. Among them, cross-border RMB trade settlement was one of the policies most actively promoted in the earlier stages. Following this were the introduction of the RMB foreign direct investment (RFDI) mechanism, allowing RMB qualified foreign institutional investors (RQFIIs) to invest in Mainland China's capital markets, and the signing of currency swap agreements with other central banks.

The share of RMB's usage in trade settlement grew to 18% of Mainland China's global trade volume in 2013, from 2.5% in 2010. With its close trade ties to Mainland China, how Taiwan will develop its offshore RMB market has drawn worldwide attention.

2. The development of the offshore RMB market in Taiwan

The development of Taiwan's offshore RMB market can be separated into two stages:

(1) First stage: from June 2008 to August 2012

There were two notable measures in this stage: (i) in response to flourishing tourism across the Strait, the CBC authorized financial institutions in Taiwan to exchange RMB banknotes in 2008; (ii) to facilitate cross-border trade settlements for Taiwanese companies operating in Mainland China, in July 2011, the CBC, along with the Financial Supervisory Commission, gave the green light to the OBUs and overseas branches of Taiwanese banks to conduct RMB business.

(2) Second stage: After the signing of the *Memorandum on Cross-Strait Currency Clearing Cooperation* on 31 August 2012

After the signing of the *Memorandum on Cross-Strait Currency Clearing Cooperation between Taiwan and Mainland China*, the main policies promoted include: (i) the Taipei Branch of the Bank of China was designated as the RMB clearing bank in Taiwan in December 2012; (ii) the CBC amended the *Regulations Governing Foreign Exchange Business of Banking Enterprises* in January 2013, allowing DBUs to conduct RMB business, and formally implemented the regulation

on 6th February 2013. This opened a new chapter for the development of the RMB market in Taiwan.

3. Current market development

Financial institutions in Taiwan are allowed to offer a variety of RMB services and products, including deposits and loans, remittances, cross-border trade settlements, currency exchange, derivatives, insurance, and mutual funds. As of the end of March 2014, there were 66 DBUs and 57 OBUs that conducted RMB business, the overview of which is in Table B3-1.

Table B3-1: Overview of RMB business conducted in Taiwan

Unit: RMB bn	
Type of Business	Amount
Outstanding of RMB deposits (2014/3)	268.4
RMB remittances volume (2013/2 - 2014/3)	739.6
Total amount of 15 issues of RMB-denominated bonds (2014/3)	12.1
RMB settlement through the Taipei Branch of the Bank of China (2013/2 - 2014/3)	2,495.7

Source: CBC.

4. Measures already in place and under preparation by the CBC

To develop Taiwan's offshore RMB market, the CBC has undertaken and will undertake the following measures:

4.1 Including RMB into the foreign currency clearing platform

RMB settlement has been integrated into the new foreign currency clearing platform mapped out by the CBC. Beginning 30 September 2013, the platform started to process RMB clearing and settlement of domestic and cross border remittances and funds transfers, including transactions with Mainland China, Hong Kong and other foreign markets. It helps to raise the processing efficiency of the flow of RMB funds.

4.2 Expanding RMB transaction volume and offering liquidity support

4.2.1 Encouraging participation by foreign banks

- (1) Encouraging Taiwan's RMB clearing bank to actively introduce Taiwan's financial environment and the RMB clearing mechanism to other countries in order to attract foreign financial institutions to become participating banks.
- (2) Encouraging Taiwan's leading banks to leverage the OBU tax concessions to attract

more foreign banks to open RMB interbank accounts in Taiwan, as well as encouraging overseas branches of Taiwanese banks to cooperate actively with local financial institutions abroad to grow their RMB business.

4.2.2 Encouraging cooperation between domestic and foreign currency brokerages to enlarge RMB liquidity and transaction volume

The CBC encourages cooperation between Taiwanese FX brokerage houses and their counterparts from other offshore RMB markets such as Hong Kong, Singapore, and London. This will not only expand the size of the global offshore RMB market, but also stimulate the growth of Taiwan's RMB transactions and bolster market liquidity.

4.2.3 Establishing RMB foreign exchange and interest rate fixing mechanisms to facilitate the offering of RMB financial products

The CBC is considering to establish fixing mechanisms for the CNT exchange rate and CNT Taibor (Taipei Interbank Offered Rate) as a benchmark for RMB financial products offered in Taiwan.

4.2.4 Closely cooperating with other offshore markets

The CBC will actively cooperate with other offshore RMB markets, such as Hong Kong, London, and Singapore. In the meantime, the CBC will exchange views and seek opportunities for collaboration with other countries interested in developing their own offshore RMB markets, such as France and Australia.

4.3 Actively negotiating with Mainland China to expand the channels for Taiwan's RMB funds to flow back to Mainland China

4.3.1 Allowing Taiwanese financial institutions to make loans to firms in Mainland China directly

In September 2013, the CBC issued a circular, allowing banks to grant RMB loans to Taiwanese corporate subsidiaries in Kunshan, China, based on lending contracts between the parent companies and their Kunshan subsidiaries. As a result, it not only expands the channels for Taiwan's RMB funds to flow back to Mainland China, but also can lower Taiwanese companies' funding costs. Moreover, in future talks with the Chinese authorities, the CBC will try to gain support to allow onshore RMB lending by Taiwanese banks directly to Taiwanese firms in Kunshan, and to those in Shanghai,

Shenzhen, Xiamen, etc. in the longer term.

4.3.2 Investing in Mainland China's stock and bond markets through RQFII

If Taiwan's legislature passes the cross-strait service trade agreement, the RQFII scheme will also apply to Taiwanese financial institutions wishing to invest their offshore RMB funds in Mainland China's stock and bond markets. The CBC will also express its desire during cross-strait talks to obtain a larger quota for RQFII investment.

4.3.3 Encouraging both domestic and foreign companies to issue RMB bonds in Taiwan

The CBC also encourages both domestic and foreign businesses to issue RMB-denominated bonds in Taiwan, and hopes that in the future the issuers will be more diversified so as to retain RMB financial services in Taiwan and further increase RMB flows back to Mainland China.

5. Outlook and prospects

Taiwan's offshore RMB market has several advantages that would be beneficial to future development, including:

- (1) Huge cross-strait trade and remittances bring banks tremendous RMB business opportunities to provide companies with better and more RMB-related services such as trade settlements, funds management, etc. It also helps build up a larger pool of RMB liquidity.
- (2) The appointed RMB clearing bank here in Taiwan certainly helps to handle RMB clearing even more efficiently.
- (3) Taiwan is also equipped with advanced financial infrastructure, for example the foreign currency clearing platform. It has streamlined clearing procedures and helps to expand RMB liquidity in Taiwan. Moreover, it can be linked with the China National Advanced Payment System (CNAPS) and the Bank of China's international information system through relayed connections. RMB remittance is thus more convenient time-wise and, in turn, facilitates RMB fund allocation in Mainland China and around the world.
- (4) The tax concessions for Taiwan's OBUs have created a niche access to Taiwan's offshore RMB market.

(5) Taiwan has an established role as an offshore USD market, supported by a well-developed trading mechanism and regulatory environment, as well as years of experience. Such a strong foundation certainly helps consolidate Taiwan's position as an important offshore RMB market.

Taiwan's development of the offshore RMB market needs the joint efforts of all parties in the financial industry. The CBC will continue to monitor capital account liberalization after the launch of the Shanghai Free Trade Zone, as well as the process of RMB internationalization and the development of the China International Payment System (CIPS). In addition, the CBC hopes the two sides of the Strait will sign a currency swap agreement as soon as possible in order to build a safety net in Taiwan for RMB liquidity.