

# *Central Bank Operations*



## III. Central Bank Operations

### 1. Overview

In 2013, against the backdrop of uncertainties surrounding the global economic outlook, mild expansion in the domestic economy, and muted inflationary pressures, the CBC kept policy rates unchanged so as to maintain price and financial stability and to ensure steady economic growth. At the end of 2013, the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral were 1.875 percent, 2.25 percent, and 4.125 percent, respectively.

In response to economic and financial conditions, the CBC continued to issue certificates of deposit (CDs) and conduct open market operations to maintain reserve money at appropriate levels and sustain steady growth in monetary aggregates. In addition, in order to diversify banks' portfolios, the CBC resumed monthly auctions of 2-year CDs from August 2013. At the end of the year, the total outstanding amount of CDs issued by the CBC was NT\$6,843 billion. The average annual growth rate of reserve money in 2013 was 7.18 percent, while M2 recorded an annual growth rate of 4.78 percent, within the CBC's target range of 2.5 percent to 6.5 percent.

The CBC continued with credit risk management measures for housing loans in “specific areas,” land collateralized loans, and high-value housing loans. Furthermore, the CBC also urged financial institutions to enhance self-discipline via prudential measures for real-estate lending in “non-specific areas” with considerable housing price surges, and to exercise caution regarding collateral loans on industrial area land.

In terms of foreign exchange management, the CBC steadily promoted the internationalization of capital markets and revised relevant foreign exchange regulations in continual cooperation with the Financial Supervisory Commission. Moreover, to develop Taiwan as an offshore renminbi (RMB) market, the CBC amended the *Regulations Governing Foreign Exchange Business of Banking Enterprises* in January 2013, stipulating that authorized foreign exchange banks (DBUs) may conduct RMB business after opening clearing accounts with the RMB clearing bank in Taiwan. On February 6, 2013, DBUs in Taiwan officially launched RMB business. In September, the CBC allowed DBUs to grant foreign currency (including RMB) loans to Taiwanese firms based on lending contracts with their affiliates or subsidiaries in Kunshan, Mainland China. This policy would help expand the channels for Taiwan's RMB funds to flow back to Mainland China.

To ensure smooth payment system operation, the CBC closely monitored domestic payment

systems and urged settlement institutions to set up backup facilities and adequate contingency plans to provide business continuity. In addition, to further strengthen financial infrastructure and to support the operation of the cross-strait RMB clearing mechanism, the CBC mapped out a foreign currency clearing platform, which adopted the SWIFT standard to facilitate transactions with financial institutions abroad. This platform was officially launched on March 1, 2013, providing the service of domestic US dollar remittance. The service of domestic and cross-border RMB remittance commenced operation through this platform on September 30.

## 2. Monetary Management

In 2013, against the backdrop of uncertainties surrounding the global economic outlook, moderate growth in the domestic economy, and muted inflationary pressures, the CBC maintained its monetary policy stance, leaving policy rates unchanged. In addition, the CBC continued to urge financial institutions to manage their credit risks and ensure financial stability. The CBC also continued to enhance the financing mechanism for small and medium-sized enterprises (SMEs) in order to expand banks' lending to SMEs while at the same time absorbing excess funds from the financial market to an appropriate liquidity level.

### Policy Rate Unchanged to Maintain Price and Financial Stability

In light of global economic uncertainties, mild expansion in the domestic economy, and subdued inflationary pressures, the CBC kept policy rates unchanged so as to maintain price and financial stability and to promote economic growth.

At the end of 2013, the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral were 1.875 percent, 2.25 percent, and 4.125 percent, respectively.

### CBC Policy Rates

Unit: % (percent per annum)

Effective Date	Discount Rate	Accommodation Rate with Collateral	Accommodation Rate Without Collateral
2010 / Jun. 25	1.375	1.750	3.625
Oct. 1	1.500	1.875	3.750
Dec. 31	1.625	2.000	3.875
2011/ Apr. 1	1.750	2.125	4.000
Jul. 1	1.875	2.250	4.125

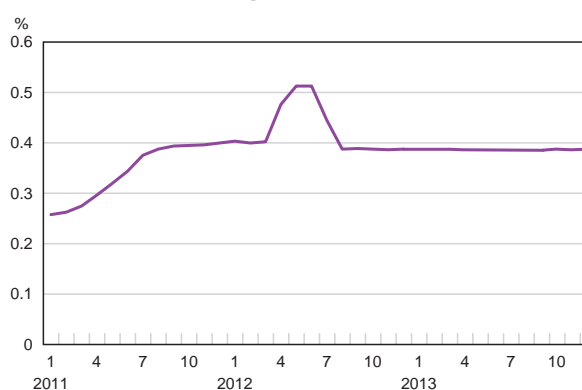
Source: *Financial Statistics Monthly*, CBC.

### Absorbing Excess Liquidity Through Open Market Operations

In 2013, the CBC continued to issue certificates of deposit (CDs) and conduct open market operations to maintain reserve money and overnight call loan rates at appropriate levels. The total value of CDs issued amounted to NT\$63,122 billion in 2013, and the total outstanding amount of CDs issued by the CBC was NT\$6,843 billion at the end of the year. The average annual growth rate of reserve money in 2013 was 7.18 percent, while M2 recorded an annual growth rate of 4.78 percent, within the CBC's target range of 2.5 percent to 6.5 percent.

Keeping in line with policy rates, the CBC also kept its non-competitive bidding rates for new CDs unchanged. Consequently, in 2013, the rates on 30-day, 91-day, and 182-day CDs remained at 0.87 percent, 0.93 percent, and 1.05 percent, respectively. On the other hand, the rates on 365-day CDs exhibited a downward trend from 0.72 percent in January to 0.56 percent in December.

### Overnight Call Loan Rate



Source: Financial Statistics Monthly, CBC.

In 2013, the average overnight call loan rate remained broadly stable in each month, within the range of 0.386 percent to 0.387 percent.

### Open Market Operations

Unit: NT\$ Billion; %

Year/ Month	Amount Absorbed	Amount Offered	Weighted Average Rate on CDs Issued			
	Issues of CDs	Redemptions of CDs	1-30 Days	31-91 Days	92-182 Days	274-365 Days
2011	44,310	44,279	0.82	0.88	0.99	0.95
2012	54,831	54,912	0.87	0.93	1.05	0.85
2013	63,122	63,074	0.87	0.93	1.05	0.66
2013 / 1	4,830	4,858	0.87	0.93	1.05	0.72
2	4,734	4,839	0.87	0.93	1.05	0.72
3	5,164	5,156	0.87	0.93	1.05	0.72
4	5,295	5,289	0.87	0.93	1.05	0.69
5	5,363	5,334	0.87	0.93	1.05	0.66
6	4,883	4,892	0.87	0.93	1.05	0.64
7	5,780	5,751	0.87	0.93	1.05	0.63
8	5,421	5,400	0.87	0.93	1.05	0.63
9	5,173	5,166	0.87	0.93	1.05	0.65
10	5,471	5,450	0.87	0.93	1.05	0.64
11	5,370	5,345	0.87	0.93	1.05	0.62
12	5,637	5,594	0.87	0.93	1.05	0.56

Source: Financial Statistics Monthly, CBC.

### Continuing Risk Management Policy on Real Estate Loans

To urge financial institutions to manage their credit risks and ensure financial stability, the CBC continued to carry out the regulations governing housing loans in “specific areas”, land collateralized loans and high-value housing loans by financial institutions. Besides the above mentioned regulations, the CBC also asked financial institutions to pay attention to risk management when handling the following mortgage-related business. Important measures in 2013 included:

1. For real estate lending in “non-specific areas” with considerable housing price surges, financial institutions were urged to formulate and implement prudential measures for self-discipline. Subsequently, most major banks have formulated internal rules and procedures in this regard, such as expanding areas for credit risk management, lowering loan-to-value ratios, removing grace periods, and raising mortgage rates.
2. Financial institutions were urged to exercise caution regarding loans collateralized against industrial area land, rigorously observe credit regulations in extending such loans, and refrain from relying solely on collateral appraisal or borrowers' status as principals of large companies to grant a large credit line.

Since mortgage payment as a percentage of household income had exceeded 30 percent, the CBC advised borrowers to be mindful of risks stemming from future interest rate changes. The risk management measures for real estate lending implemented by the CBC have achieved the following results:

1. The outstanding amount of housing loans grew at a slower pace through 2013, accounting for 26.92 percent of total loans at the end of the year, down by 0.7 percentage points from June 2010. In addition, the concentration of housing loans in “specific areas” identified in targeted prudential measures reduced significantly.

### Housing Loan Ratios

Unit: %

Date	Housing Loans to Total Loans	New Housing Loans in “Specific Areas” to Total New Housing Loans
2010 / Jun.	27.62	64.37
2013 / Dec.	26.92	47.66

2. The average loan-to-value ratio in “specific areas” declined to 57.2 percent, while the average mortgage rate rose to 2.11 percent at the end of 2013.

### Housing Loans in “Specific Areas”

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
2010 / Jul.	63.91	1.97
2013 / Dec.	57.20	2.11

3. The average loan-to-value ratio of newly-extended land collateralized loans decreased to 61.01 percent, and the average mortgage rate increased to 2.72 percent at the end of 2013.

### Newly-Extended Land Collateralized Loans

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
2010 / Dec.	68.36	2.08
2013 / Dec.	61.01	2.72

4. The efforts of the aforesaid policy measures had successfully brought down the average loan-to-value ratio of high-value housing loans to 56.19 percent, and led the average mortgage rate upwards to 2.07 percent in December 2013.

### High-Value Housing Loans

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
Pre-restriction	80-99 (maximum)	1.84 (minimum)
2013 / Dec.	56.19 (average)	2.07 (average)

### Enhancing the SME Financing Mechanism

To provide easier access to financing for SMEs, the CBC continued to urge commercial banks to increase lending to SMEs. Furthermore, the Financial Supervisory Commission agreed with the CBC's suggestion to increase banks' annual SME lending target. The outstanding loans extended to SMEs by domestic banks increased to NT\$4,761 billion at the end of 2013, which was a 7.05 percent rise from the end of 2012.

### Redeposits of Financial Institutions

Accepting redeposits from Chunghwa Post and commercial banks is another instrument for the CBC to influence banks' reserve positions to promote financial stability. At the end of 2013, outstanding postal savings redeposits amounted to NT\$1,624 billion. At the same time, commercial banks' redeposits totaled NT\$396 billion.

The Agricultural Bank of Taiwan accepted deposits from community financial institutions and made redeposits with the CBC. At the end of 2013, its outstanding redeposits were NT\$165 billion. In addition, the Central Deposit Insurance Corporation's time deposits at the CBC totaled NT\$39 billion, which was a NT\$27 billion increase from 2012.

### 3. Foreign Exchange Management

For the year 2013, the CBC followed the established managed float regime to maintain an orderly foreign exchange (FX) market. Sufficient seed funds were provided by the CBC for the Taipei Foreign Currency Call Loan Market. The CBC's foreign exchange reserves increased by US\$13.6 billion owing to a higher return on investments. The CBC also established a foreign currency clearing platform compatible with international standards. Moreover, the CBC approved the NTD clearing bank in Mainland China and the renminbi (RMB) clearing bank in Taiwan.

#### Foreign Exchange Market Management

Taiwan's exchange rate is in principle guided by the market mechanism; the CBC only steps in when there is excessive exchange rate volatility. At the end of 2013, the NT\$/US\$ exchange rate depreciated by 0.53 percent from the previous year end's 29.614 to 29.77, relatively stable as compared to the euro's 3.33 percent appreciation against the US dollar, the renminbi's 1.85 percent appreciation, the Korean won's 2.81 percent appreciation, the Japanese yen's 22.32 percent depreciation and the Singapore dollar's 0.13 percent depreciation.

In 2013, the CBC continued to implement the Real-Time Reporting System for Large-Amount Foreign Exchange Transactions to keep the market in order. Moreover, examination efforts were reinforced to ensure that forward transactions were based only on actual transactions. The CBC also urged authorized banks to enhance their exchange rate risk management. In addition, the CBC strengthened target examinations related to foreign exchange activities. The CBC also approved 107 new authorized FX banks and 20 new FX derivatives and provided liquidity for the FX call loan and swap markets.

#### Management of the Foreign Currency Call Loan and Swap Business

In order to provide the financial system with sufficient foreign currency liquidity to meet funding needs, including those for corporations to venture into overseas markets, the CBC provided seed funds\* for the Taipei Foreign Currency Call Loan Market.

Furthermore, the CBC continued to conduct foreign currency swap transactions with banks and extended foreign currency call loans to banks so as to facilitate smooth corporate financing. During 2013, the volume of foreign exchange call loan transactions reached US\$1,362.7 billion, 24.6 percent less than that of 2012, while the volume of foreign currency-NT dollar swap transactions reached US\$1,131.9 billion, 0.2 percent more than 2012.

\* The seed funds include US\$20 billion, €1 billion and ¥80 billion.



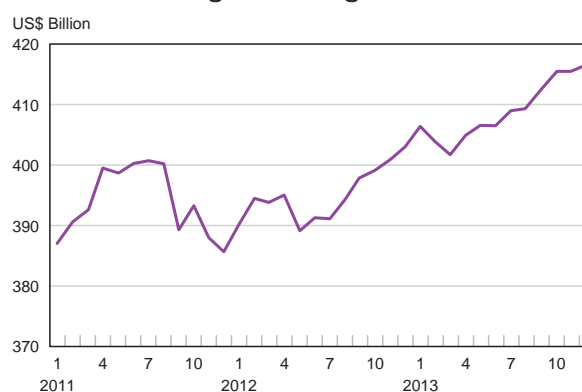
## Foreign Exchange Reserve Management

At the end of 2013, total foreign exchange reserves stood at US\$416.8 billion, a US\$13.6 billion increase from the end of 2012. The increase was mainly attributable to higher returns from foreign exchange reserves investments.

## Capital Flow Management

The CBC's foreign exchange management mainly relies on the market mechanism, and capital can, in principle, flow freely in and out of Taiwan. As of 2013, foreign currency capital not involving NT dollar conversion can flow freely; neither is there any restriction on financial flows involving NT dollar conversion for commodity and service trade, as well as direct and securities investments approved by the competent authorities. However, regulation exists for short-term remittances. Annual remittances for an individual resident within US\$5 million and for a juridical person within US\$50 million can be settled by banks directly, while annual remittances above the aforementioned amounts require the approval of the CBC. Each transaction for a non-resident within US\$0.1 million can be settled by banks directly, whereas any amount of transaction above that threshold requires the approval of the CBC.

Foreign Exchange Reserves



Source: Department of Foreign Exchange, CBC.

## Key Measures with Regard to the Management of Capital Flows in 2013

1. In order to promote the internationalization of Taiwan's capital markets, the CBC approved the following in 2013:
  - (1) The issuance of overseas depositary receipts by five domestic corporations with a total issuance amount of US\$1.7 billion, and the issuance of European Convertible Bonds by six domestic corporations with a total of US\$1 billion raised.
  - (2) Initial public offerings on the TWSE and GTSM by 22 foreign corporations, with a total amount of NT\$15.4 billion raised; the issuance of NT dollar Convertible Bonds by seven foreign corporations, which combined to raise a total amount of NT\$5.7 billion; the offering and issuance of RMB-denominated bonds by four foreign banks, raising RMB\$6.7 billion; the offering and issuance of international bonds by one foreign bank for a total amount close to US\$1 billion.
2. The CBC gave consent to an increase in residents' investments in foreign securities, detailed as follows:
  - (1) Domestic securities investment trust companies were allowed to offer 45 public funds and two

private funds domestically, all of which invest in foreign securities, with a total of NT\$555 billion and NT\$4.5 billion raised, respectively.

- (2) One domestic managed futures enterprise was allowed to offer one futures trust fund on the local market, with a total of NT\$5 billion raised.
- (3) Life insurance companies were approved to invest in foreign securities with the amount totaling US\$1.6 billion through non-discretionary money trusts managed by financial institutions. Their own investments in foreign securities amounted to US\$0.9 billion.
- (4) Five major government pension or insurance funds, including labor pension funds, invested a total amount of US\$8.2 billion in foreign securities.

3. The CBC loosened the following regulations regarding foreign exchange remittances:

- (1) *The Regulations Governing the Declaration of Foreign Exchange Receipts and Disbursements or Transactions* was revised and released on July 30, 2013. Starting from August 1, remittances for individual's payments of non-residents' services are excluded from the declarer's yearly accumulated remittances; unless otherwise regulated by the CBC, the regulations apply to the declaration of Taiwan area renminbi disbursements or transactions.
- (2) *The Directions for Banking Enterprises while Assisting Customers to Declare Foreign Exchange Receipts and Disbursements or Transactions* was amended, effective August 1, 2013. Pursuant to the amendments, for citizens of Mainland China with Taiwan Resident Certificates, the declaration and amount of their remittances shall be handled on the same basis as those for other people with Taiwan Resident Certificates; moreover, in tandem with relevant regulations of the Ministry of Economic Affairs (MOEA), qualified data processing service providers with proof of certification from the MOEA may conduct foreign exchange declarations for cross-border on-line transactions on behalf of service users.

## **Management of the Foreign Exchange Business of Financial Institutions**

### **1. Authorized banks**

At the end of 2013, there were 3,356 authorized foreign exchange banks in total, which included 39 head offices and 3,278 branches of domestic banks, 36 branches of 28 foreign banks, three branches of Mainland Chinese banks, as well as 992 authorized money exchangers, post offices and financial institutions authorized to engage in basic foreign exchange business. In 2013, the CBC approved 15 cases for authorized banks to establish branches in Mainland China, eight cases for domestic banks to set up branches abroad, and one case for a Mainland Chinese bank to establish its branch in Taiwan. In terms of new FX products, 20 derivatives were approved in 2013 after prudent

review aimed at investor rights protection.

## 2. Insurance companies

In 2013, 18 insurance companies were allowed to engage in foreign currency investment-linked insurance business, and 24 were permitted to conduct business in relation to traditional foreign currency insurance products.

## 3. Securities firms

In 2013, the CBC approved four securities firms to be agents for foreign bond trading, 40 to be entrusted as agents for foreign securities trading, 28 for underwriting international bonds, six for proprietary trading of and investments in international bonds, six for proprietary foreign securities trading neither belonging to investment with their own funds nor for hedging needs, eight to issue warrants linked to foreign securities or indexes, one to issue overseas warrants linked to domestic securities, nine to conduct non-discretionary individually managed money trust wealth management business, 21 to deal onshore foreign currency bills, and five as participating dealers of offshore exchange traded funds.

The CBC also permitted 45 securities firms, investment trust and investment consulting firms to be master agents for offshore public funds, 21 institutions to be mandated to place private offshore funds in Taiwan; the CBC also gave permission to 21 investment trust and investment consulting firms to conduct foreign currency discretionary investments in foreign securities, 19 as mandated institutions to publicly offer or privately place foreign currency-denominated funds in Taiwan, and two to be master agents for offshore exchange traded funds.

## 4. Renminbi exchange transactions

- (1) On January 25, 2013, the Taipei Branch of the Bank of China signed *Clearing Agreement Regarding Renminbi Business* with the People's Bank of China. On January 28, the CBC approved the Taipei Branch of the Bank of China as the renminbi clearing bank in Taiwan.
- (2) Taiwan's authorized FX banks (domestic banking units, DBUs) signed clearing agreements with the Taipei Branch of the Bank of China, and began to offer renminbi business on February 6.
- (3) With the establishment of the cross-strait currency clearing mechanism, the management of renminbi business in the Taiwan area is governed by the *Foreign Exchange Control Act*. Therefore, on August 30, 2013, the CBC and the Financial Supervisory Commission abolished the *Regulations Governing the Administration and Settlement of Renminbi in the Taiwan Area*, and restrictions on renminbi banknotes purchase involved in banks' renminbi currency exchange business were lifted.

- (4) By the end of 2013, there were 65 authorized FX banks and 57 offshore banking units (OBUs) engaged in renminbi business. From February 6, 2013, to the end of 2013, renminbi deposit balance amounted to RMB182.6 billion; renminbi remittances totaled RMB499.5 billion; renminbi settlement through the Taipei Branch of the Bank of China totaled RMB1,545.8 billion.
- (5) In 2013, the renminbi investment products were further diversified. As of the end of 2013, renminbi business conducted by financial institutions were as follows: (A) 43 authorized FX banks and four securities firms offered renminbi derivative financial products and structured products; (B) nine banks and companies issued 13 renminbi bonds, totaling RMB10.6 billion; (C) nine companies raised and issued 14 renminbi funds, totaling RMB3.5 billion.

#### 5. Foreign currency clearing platform

- (1) To further reinforce Taiwan's financial infrastructure, and in line with the establishment of the cross-strait renminbi clearing mechanism, the CBC consigned the Financial Information Service Co. to set up a foreign currency clearing platform in conformity with international standards. The platform went on line on March 1, 2013, to handle domestic US dollar remittances. From September 30 onward, domestic and cross-strait renminbi remittances were included.
- (2) By the end of 2013, the foreign currency clearing platform had achieved the following: (A) 76 domestic banks participated in US dollar settlement with a daily average of 3,244 transactions and an amount of US\$8.9 billion; (B) 44 domestic units participated in renminbi settlement, with a daily average of 318 transactions and an amount of RMB0.57 billion; (C) domestic bank remittance fees were lowered from NT\$600-1,400 to NT\$320-1,020 per transaction.

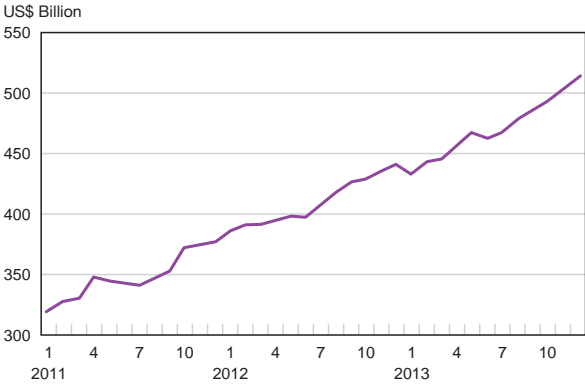
#### 6. Offshore Banking Units

- (1) At the end of 2013, all OBU assets totaled US\$169.6 billion, which was US\$1.33 billion or 0.8 percent less than the previous year end. Domestic banks owned 84 percent of the OBU assets, while foreign banks owned 16 percent.
- (2) OBU cross-strait financial business kept growing.
- A. At the end of 2013, non-financial institutions' deposits reached US\$51.19 billion, a 16.1 percent increase from a year ago.
  - B. Cross-strait remittances increased 16.3 percent in 2013 from a year ago, amounting to US\$31.7 billion at the end of 2013.
- (3) Offshore Securities Units (OSUs)
- A. In order to expand the scope of Taiwan's capital market and to promote securities firms'

international competitiveness, the CBC, along with the Financial Supervisory Commission, revised some provisions of the *Offshore Banking Act*, and began to accept securities firms' applications to establish offshore securities business branches. This amendment was approved by the President on June 19, 2013, and went into effect immediately.

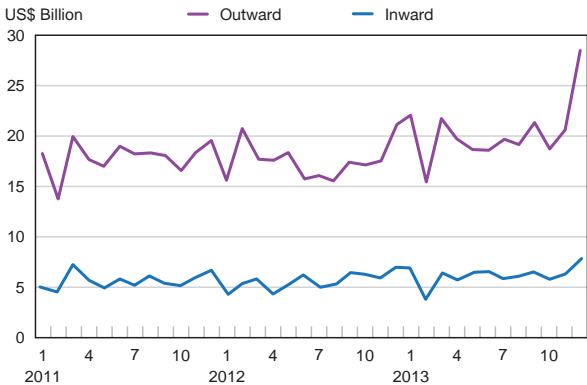
- B. The CBC and the Financial Supervisory Commission together revised the *Enforcement Rules of the Offshore Banking Act* and formulated the *Regulations Governing Offshore Securities Branches*, announced and enacted on December 26, 2013.

OBU’s Non-financial Institution Deposits



Source: Department of Foreign Exchange, CBC.

Cross-Strait Remittances Through OBUs



Source: Department of Foreign Exchange, CBC.

## 4. Financial Inspection

Pursuant to the Central Bank of the Republic of China (Taiwan) Act, the CBC conducts target examinations to ensure effective enforcement of policies related to monetary, credit, and foreign exchange management. To fulfill its mandate of financial stability, the CBC has established an off-site monitoring system and a financial stability assessment framework to systematically monitor and assess potential sources of risks in order to deploy appropriate policies and measures in a timely manner.

### On-Site Target Examinations

Target examinations in 2013 inspected the handling of land collateralized loans and high-value housing loans as well as mortgage lending in legally-stipulated “specific areas,” banks' offered rates, data warehousing of checking accounts, counterfeit money detection and follow-up, foreign exchange transactions, purchases and sales of foreign currency securities entrusted with securities dealers, foreign currency exchanges, the correctness of reporting to the CBC, etc.

### Follow-up on Banks' Compliance with Examination Findings

In 2013, in light of the CBC's target examination findings and the Financial Supervisory Commission's examination findings related to the CBC's operations or regulations, the CBC continued monitoring how the examined financial institutions had improved and urged them to rectify related deficiencies, thus ensuring successful implementation of the CBC's policies.

### Off-Site Monitoring

Based on financial conditions and the amendments to relevant laws and regulations, the CBC reviews and amends as necessary the format and content of periodical statistical data submitted by financial institutions. In 2013, developments related to off-site monitoring for the above purposes included the following:

1. In line with the IFRS, assessment contents in the CBC's off-site monitoring system for domestic banks, local branches of foreign banks, financial holding companies, bills finance companies, securities dealers, and insurance companies were amended accordingly.
2. The items of “Tier I capital ratio,” “common equity ratio” and “net worth less than capital” related to capital adequacy requirements for domestic banks were added. Also, assessment criteria of provision coverage ratios for special mention loans were adjusted.
3. The outstanding and duration of securities held by bills finance companies and liquidity analysis

related to the weighted duration of bond assets were incorporated in the CBC's off-site monitoring system.

4. "Own assets" and "local debt, equity and other items" were added to the country risk statistics.

### **Financial Institution Information Transparency**

The CBC regularly compiles and publishes various financial institution statistics and up-to-date financial regulations. It also discloses related information on its website. As a result, operational transparency of financial institutions has increased, and market self-discipline has been reinforced.

### **Financial Stability Assessment**

The CBC compiles financial soundness indicators so that the relevant authorities, market participants and the public are kept informed of the status and sources of financial system risks in Taiwan. In 2013, the 7<sup>th</sup> *Financial Stability Report* was published. The publication also promotes cross-border communication and information sharing with regard to Taiwan's financial stability and surveillance.

### **International Cooperation in Financial Supervision**

In 2013, the CBC continued to actively engage in international cooperation related to financial supervision, as follows:

1. Hosting a 6-day Course on Credit Risk Analysis, held by the SEACEN Centre and the Federal Reserve System.
2. Participating in the 4<sup>th</sup> SEACEN High-Level Seminar on Financial Stability/4<sup>th</sup> Meeting of Deputy Governors in Charge of Financial Stability and Banking Supervision, the conference "Asia: Challenges of Stability and Growth" held by the Bank of Korea and IMF, the 18<sup>th</sup> consulting group meeting for APEC Financial Regulators Training Initiative, Asia/Pacific Group on Money Laundering (APG) Annual Meeting and Forum on Technical Assistance and Training.
3. Completing questionnaires from the SEACEN Centre and the Asian Development Bank, respectively. The former was to be used for SEACEN learning and research needs analyses and their 3-year strategic plans. The latter was regarding the APEC Financial Regulators Training Initiative.
4. Answering the queries related to financial supervision from foreign central banks and financial supervisory agencies.

## 5. Payment and Settlement Systems

The CBC Interbank Funds-Transfer System (CIFS) is the backbone of Taiwan's payment system, linking two Interbank Remittance Systems (IRS) operated by the Financial Information Service Co. (FISC) and the National Credit Card Center of the R.O.C. (NCCC), the Check Clearing House System (CCHS), the Central Government Securities Settlement System (CGSS), the Bills Clearing and the Settlement System (BCSS), the Securities Book-Entry Clearing System (SBECS) of the Taiwan Stock Exchange Corporation (TWSE), and the Electronic Bond Trading System (EBTS). Together these constitute a comprehensive payment system.

Accordingly, the CBC, with its mandate for financial stability, plays a key role in the smooth functioning of Taiwan's payment systems. In addition to operating the CIFS and the CGSS, the CBC also monitors major payment systems based on international standards to ensure sound operation of these systems and to promote stability of the financial system.

### Operation of Payment and Settlement Systems

#### 1. Funds Transfers via the CIFS

Launched in May 1995, the CIFS is a large-value electronic funds-transfer system. In addition to dealing with interbank funding, reserve requirement adjustments and funds settlements in financial markets, the CIFS also provides interbank final settlement services to several clearing institutions such as the Taiwan Clearing House (TCH), the FISC, the NCCC, the Taiwan Depository and Clearing Corporation (TDCC) and the TWSE.

At the end of 2013, participants of the CIFS included 71 banks, eight bills finance companies, and seven other institutions including Chunghwa Post, the TWSE, the GreTai Securities Market (GTSM), and the NCCC, etc. In the year 2013, the daily average amount of funds transferred via the CIFS was NT\$1,803.4 billion, while the daily average number of transactions reached 2,848.

#### 2. Transactions via the CGSS

The CGSS was established in September 1997. It is a system for issuance, transfer, redemption, and interest payment of book-entry central government securities. Since its inception, central government bonds have been issued in book-entry form. In October 2001, treasury bills were included in this system and have been issued in book-entry form ever since.

The CGSS linked up with the CIFS in April 2008. Since then, fund settlements, principal redemptions and interest payments have been handled through the CIFS using a delivery-versus-payment (DVP)



mode. The DVP mode, promoted by the Bank for International Settlements (BIS), is an arrangement in a securities settlement system to ensure that securities delivery occurs almost at the same time as the funds transfer, effectively mitigating potential risks during the transaction process.

There were 16 clearing banks with 1,693 branches that handled the registration of central government securities transfers at the end of 2013. During 2013, 294 thousand transfers with a total amount of NT\$28.7 trillion were processed by this system.

### Monitoring Payment Systems

The CBC monitors the payment systems on a periodic basis to maintain their safety and efficiency. In 2013, the CBC's monitoring activities in this regard included the following:

1. Requiring payment system operators and payment instrument issuers to provide detailed information on their operations and activities as a basis for monitoring payment systems.
2. Ensuring clearing institutions set up backup systems and contingency plans for business continuity in case of emergency.
3. Inviting the Financial Supervisory Commission and clearing institutions such as the FISC, the TDCC, and the TCH to jointly hold conferences twice in 2013 to promote the sound operation of the payment systems.
4. Urging the TCH to establish a risk management mechanism of check clearing and settlement to complete the day's clearing once a member fails to pay its accrued net difference. As a result, the TCH formulated the “*Directions for Risk Management Mechanism of Clearing and Settlement*,” effective from May 1, 2013.
5. Urging the TCH to, in accordance with Article 27 of the *Personal Information Protection Act* and the CBC's *Regulations Governing the Clearinghouse's Plan of Security Measures for Personal Information Files*, draw up a formal plan and the policy to enhance credit information protection under its possession.

### Planning and Building the Foreign Currency Clearing Platform

The foreign currency clearing platform planned by the CBC and established by the FISC was launched in 2013, aiming to strengthen financial infrastructure and facilitate the development of the financial services sector. This platform adopted the SWIFT standard to facilitate transactions with financial institutions abroad. Settlements of domestic US dollar remittances and domestic and cross-strait renminbi remittances could be processed on this platform, starting from March and September 2013, respectively. Both services have run smoothly with steady growth in the trading volume. Moreover, the PVP (payment-versus-payment) system for cross-currency transactions and

the service of cross-strait US dollar remittances were launched in February 2014.

### **Incorporating Credit Card Transactions into the CIFS**

In November 2013, the CBC agreed that the payment operations of credit cards of the NCCC, which were originally handled by three banks, be included in the CIFS to enhance clearing efficiency of credit card payments. Since the incorporation, the credit card payment clearing operations have been working smoothly.

### **International Research Cooperation**

In 2013, the CBC participated in the project titled “Analytical Framework to Assess Systemic Financial Market Infrastructure” held by the Conference of Governors of South East Asian Central Banks (SEACEN) Research and Training Centre, and submitted a research report on the case of Taiwan.

## 6. Currency Issuance

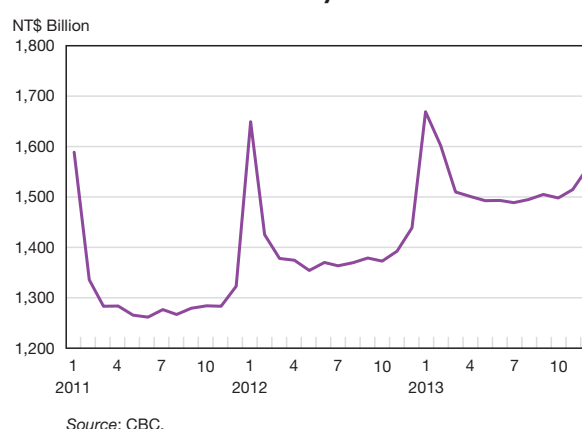
As the issuing authority for the nation's currency, the CBC has the responsibility for maintaining the supply of currency at an appropriate level to meet public demand, which is dependent on the level of economic activity, seasonal factors, and the development of noncash payments instruments, etc.

### Currency Issuance Increased

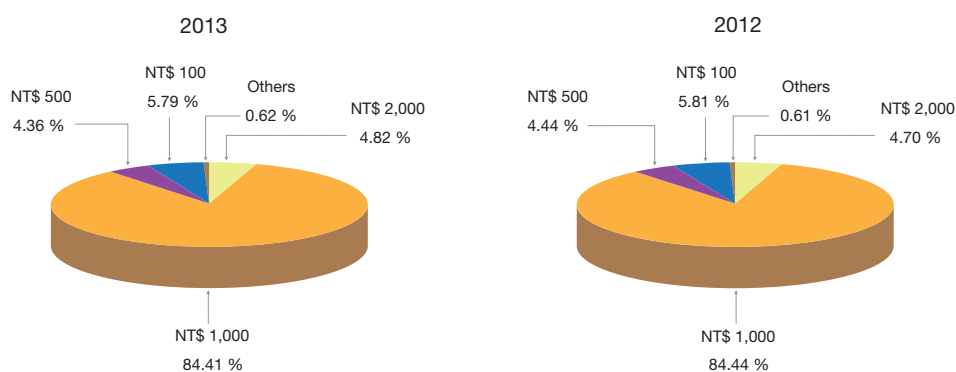
In 2013, the CBC implemented an appropriate currency issuance plan for delivering banknotes and coins. The currency issued peaked at NT\$1,873.0 billion on February 8, the day before the Chinese New Year holidays, reflecting a temporary seasonal surge in cash demand. At the year end, the outstanding amount of the currency issued was NT\$1,556.0 billion, representing an increase of NT\$118.5 billion or 8.24 percent over the previous year end.

At the end of 2013, the denomination structure of NT dollar banknotes in circulation was similar to the end of 2012. The NT\$1,000 note accounted for the lion's share at 84.41 percent, followed by the NT\$100 (5.79 percent) and the NT\$2,000 (4.82 percent) notes.

Currency Issued



Composition of NT Dollar Banknotes Issued  
( Year-End Figures )



Source: CBC.

### Currency in Circulation to GDP Ratio Increased

Owing to the low interest rate environment since September 2008, the public began to increase their currency holdings, and the ratio of currency in circulation to GDP rose significantly. It stood at 8.96 percent in 2013, a 0.51 percentage point gain over the previous year.

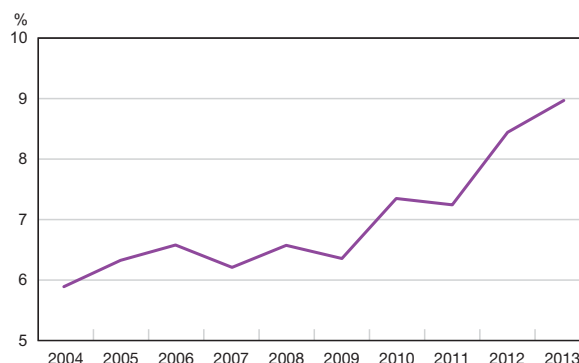
### Two Commemorative Coin Sets Were Issued

In addition to normal currency issuance, the CBC may also issue gold and silver coins and commemorative notes and coins from time to time, such as for important ceremonies, national holidays, major international events or other significant national events. During the year 2013, the CBC issued a casting set of coins for the Chinese Zodiac Year of the Snake, and the second coin set of the National Parks of Taiwan series-Yushan National Park.

### The Virtual Money Museum Launched

The Virtual Money Museum of the CBC was officially launched on June 19, 2013, introducing the historical development, anecdotes, and circulation of banknotes and coins, as well as the security features of the New Taiwan dollar. In addition, the Museum provides various contents to meet different viewing needs, including a regular version, a child-friendly version, and a virtual gallery.

**The Ratio of Currency Held by the Public to GDP**



Sources: 1. CBC.  
2. DGBAS, Executive Yuan.

## 7. Fiscal Agency Functions

The CBC acts as a banker to the central government as well as to other banks. As the fiscal agent of the government, the CBC performs various services for the national treasury. These services include handling the treasury deposit account (TDA), managing central government agency deposit accounts, and undertaking the issuance, registration, redemption, and interest payment of central government bonds and treasury bills.

### Managing the Treasury Deposit Account

The CBC manages the TDA on behalf of the Ministry of Finance (MOF), processing receipts and disbursements of the central government. For the convenience of government agencies and the general public, the CBC delegates the handling of treasury transactions to 13 financial institutions and their 360 branches, including three overseas branches located in New York, Los Angeles, and Paris. In addition, there are another 4,784 tax collection agencies set in financial institutions. In 2013, the CBC received a total of NT\$3,087.4 billion in treasury deposits, a decrease of NT\$140.9 billion or 4.36 percent from 2012. Payments made on behalf of the national treasury were NT\$3,090 billion, decreasing by NT\$121.1 billion or 3.77 percent over the previous year. At the end of 2013, the TDA balance was NT\$23.3 billion, a decrease of NT\$2.4 billion or 9.34 percent from the end of 2012.

### Handling Central Government Agency Deposits

Central government agencies are required to make their deposits with the CBC or other delegated banks. However, the delegated banks are required by law to redeposit 60 percent of the deposits with the CBC, except those in interest-bearing accounts. At the end of 2013, the balance of central government agencies' deposits with the CBC amounted to NT\$124.5 billion, a decrease of NT\$17.2 billion or 12.14 percent over 2012. Deposits with other delegated banks were NT\$424.8 billion at the end of 2013, decreasing by NT\$21.2 billion or 4.75 percent. Among them, redeposits with the CBC registered NT\$14.4 billion, increasing by NT\$3.9 billion or 37.14 percent from the previous year end.

### Managing Central Government Bonds

As a fiscal agent, the CBC provides services related to the issuance, registration, transfer, redemption, and interest payment of central government bonds. The CBC also conducts the auctions of central government bonds. There are 63 domestic dealers qualified to directly participate in the auctions, including 27 banks, 22 securities companies, eight bills finance companies, five insurance companies, and Chunghwa Post.

In 2013, the CBC handled 19 issues of central government bonds in book-entry form worth NT\$641.9 billion and paid NT\$350 billion in principal and NT\$115.2 billion in interest for central government bonds. At the end of 2013, the outstanding amount of central government bonds was NT\$5,068.2 billion, an increase of NT\$291.9 billion or 6.11 percent from the previous year end.

### **Managing Treasury Bills**

The CBC also conducts the auctions of treasury bills, which are issued at a discount. Currently, direct bidders include banks, insurance companies, securities companies, bills finance companies, and Chunghwa Post.

In 2013, the CBC handled 13 issues of book-entry treasury bills with a total amount of NT\$324.6 billion. At the end of 2013, the outstanding amount of treasury bills was NT\$214.6 billion, an increase of NT\$19.6 billion or 10.03 percent from the previous year end.

### **Improving Operational Efficiency**

In response to the needs of issuing multiple central government bonds or treasury bills with different maturities for the MOF on the same day, the CBC expanded the functions of the Central Government Securities Settlement System, and the updated system went online from December 9, 2013.

## 8. Participation in International Activities

The CBC actively took part in international activities during 2013. As a member of various international organizations, the CBC hosts conferences, provides training courses, and attends numerous forums, including the annual meetings organized by the Asian Development Bank (ADB), the Central American Bank for Economic Integration (CABEI), and the South East Asian Central Banks (SEACEN) group. In addition, the CBC also maintains close relationships with the Inter-American Development Bank (IDB), the European Bank for Reconstruction and Development (EBRD) and the Bank for International Settlements (BIS). In 2013, the CBC strengthened its ties with other central banks to exchange views on key issues of the current global economic and financial situation.

The CBC is a founding member of ADB and, through this platform, has played an active role in promoting financial cooperation and stability in Asia. In May 2013, the CBC participated in the 46th annual meeting of ADB held in New Delhi, India, and shared views on unconventional monetary policy being used as a tool to stimulate economic growth. The CBC judged that a number of advanced economies have become over-reliant on monetary stimulus during the recent economic downturn. Although macroeconomic stimulus may be effective in the short run, it is no substitute for structural reforms. Therefore, policy makers in these large and advanced nations should give some consideration to the possible spillover effects that their policies may inadvertently cause.

The CBC is also a member of SEACEN. In November 2013, the CBC attended the 49th annual conference of governors held in Kathmandu, Nepal. At this conference, the CBC joined other member central banks to exchange views on financial sector development strategies for inclusive growth, and discussed the key downside risks in the global economy and their potential adverse effects on regional economies. Furthermore, the CBC hosted the SEACEN-Federal Reserve System Course on Credit Risk Analysis during November 10 to 15.

In addition, the CBC participated in the meetings held by other international organizations, such as the IDB's annual meeting of the Board of Governors held in Panama City, Panama, during March 14 to 17, the CABEI's ordinary meeting of the Board of Governors which took place in San Salvador, El Salvador, on April 25 and 26, the EBRD's annual meeting of the Board of Governors held in Istanbul, Turkey, on May 10 and 11, and the BIS annual general meeting in Basel, Switzerland, on June 22 and 23.

