Central Bank Operations

III. Central Bank Operations

1. Overview

In 2012, in light of global economic uncertainties, mild recovery of domestic economy, and sustained attention to inflation, the Bank kept policy rates unchanged so as to maintain price and financial stability and to ensure sound economic growth. At the end of the year, 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 Bank issued certificates of deposits (CDs) and conducted open market operations to maintain reserve money at appropriate levels and steady growth in monetary aggregates.

To curb speculative property investments, the Bank not only continued with existing measures to control risks associated with mortgages in several areas in metropolitan Taipei and land collateralized loans, but also introduced new restrictions on mortgages on high-value housing in June. As a result, the concentration of real-estate related lending declined further.

With regard to foreign exchange management, the Bank steadily promoted the internationalization of capital markets and revised relevant foreign regulations in continual cooperation with the FSC. In addition, to support the government's efforts to implement the "Program to Develop Financial Services with Cross-Strait Characteristics" and to increase cross-strait commercial activity and financial cooperation, in August 2012, the Bank and the People's Bank of China jointly signed a memorandum on cross-strait currency clearing cooperation. The Bank later announced the Shanghai branch of the Bank of Taiwan as the NTD clearing bank in the mainland area in September 2012.

To ensure smooth operation of the payment systems, the Bank closely monitored domestic payment systems and urged settlement institutions to set up backup facilities and adequate contingency plans to provide business continuity. Furthermore, to meet the need for domestic US dollar remittances, and to facilitate RMB receipt and payment and cross-strait currency settlement, the Bank has begun to set up a foreign currency settlement system.

2. Monetary Management

In 2012, in view of uncertainties in the international economic outlook and mild recovery of the domestic economy, the Bank maintained its monetary policy stance, leaving policy rates unchanged. In addition, the Bank continued to monitor financial institutions to manage their credit risks and ensure financial stability. The Bank also continued to enhance the financing mechanism for small and medium-sized enterprises (SMEs) in order to expand banks' lending to SMEs while absorbing excess funds from the financial market to an appropriate liquidity level.

Policy Rate Unchanged to Maintain Price and Financial Stability

Owing to global economic uncertainties, moderate domestic economic recovery and sustained attention to inflation, the Bank kept policy rates unchanged so as to maintain price and financial stability and to promote sound economic growth.

At the end of 2012, 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.

Continuing Risk Management Policy on Real Estate Loans

To urge financial institutions to manage their credit risks and ensure financial stability, the Bank continued to carry out the regulations governing land mortgage loans and housing loans by financial institutions and also amended them in June to include restrictions on high-value housing loans. Important measures related to the above mentioned regulations in 2012 include:

(1) On February 15, for existing land mortgage loans for personal finance, the Bank announced that the rollover of such loans shall be adjusted to an appropriate loan-to-value ratio within the prescribed period therein.

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.

(2) Beginning June 22, the Bank adopted targeted prudential measures with respect to high-value housing loans. Housing loans for properties located in Taipei City or New Taipei City with an appraisal or sale value of NT\$80 million or above, or those located elsewhere in Taiwan with an appraisal or sale value of NT\$50 million or above shall be subject to a loan-to-value ratio capped at 60% with no grace period.

Absorbing Excess Liquidity through Open Market Operations

In 2012, the Bank continued to issue certificates of deposit (CDs) and conduct open market operations to maintain reserve money and overnight call loan interest rates at appropriate levels. At the end of the year, the total value of CDs issued amounted to NT\$54,831 billion and the total outstanding amount of CDs issued by the Bank was NT\$6,643 billion. The average annual growth rate of reserve money in 2012 was 4.91 percent, while M2 recorded an annual growth rate of 4.17 percent, within the Bank's target range of 2.5 percent to 6.5 percent.

Keeping in line with policy rates, the Bank also kept its non-competitive bidding rates for new CDs unchanged. Consequently, in 2012, 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 0.90 percent in January to 0.73 percent in December.

In the first half of the year, as a result of inflationary pressures caused by fuel and electricity price hikes, the average overnight interest rate of interbank call loans gradually increased to 0.513 percent in June from 0.403 percent in January. In the second half of the year, owing to modest

Open Market Operations

Unit: NT\$ Billion; %

Year/	Amount Absorbed	Amount Offered	Weighted Average Rate on CDs Issued				
Month	Issues of CDs	Redemptions of CDs	1-30 Days	31-91 Days	92-182 Days	274-365 Days	
2010	45,105	44,401	0.62	0.66	0.73	0.70	
2011	44,310	44,279	0.82	0.88	0.99	0.95	
2012	54,831	44,279	0.87	0.93	1.05	0.85	
2012 / 1	3,513	3,676	0.87	0.93	1.05	0.90	
2	4,285	3,817	0.87	0.93	1.05	0.89	
3	4,493	4,546	0.87	0.93	1.05	0.88	
4	6,056	6,129	0.87	0.93	1.05	0.89	
5	4,450	4,514	0.87	0.93	1.05	0.89	
6	4,136	4,256	0.87	0.93	1.05	0.88	
7	4,323	4,261	0.87	0.93	1.05	0.87	
8	5,033	5,036	0.87	0.93	1.05	0.85	
9	4,236	4,313	0.87	0.93	1.05	0.83	
10	5,139	5,152	0.87	0.93	1.05	0.81	
11	4,756	4,809	0.87	0.93	1.05	0.76	
12	4,412	4,405	0.87	0.93	1.05	0.73	

Source: Financial Statistics Monthly, CBC.

economic recovery, the average overnight interest rate decreased to 0.388 percent in August. Afterwards, the overnight call loan rate remained relatively stable.

Enhancing the SME Financing Mechanism

To provide easier access to financing for SMEs, the Bank continued to urge commercial banks to increase lending to SMEs. Furthermore, the Financial Supervisory Commission agreed with the Bank's suggestion to set banks' regional SME lending targets. The outstanding loans extended to SMEs by domestic banks increased to NT\$4,448 billion in 2012, which was a 9.13 percent rise from 2011.

Overnight Call Loan Rate % 0.6 0.5 0.4 0.3 0.2 0.1 0 1 4 7 10 1 4 7 10 1 4 7 10 2010 2011 2012 Source: Financial Statistics Monthly, CBC.

Redeposits of Financial Institutions

Accepting redeposits from Chunghwa Post Co. and commercial banks is another instrument for the Bank to influence banks' reserve positions to promote financial stability. At the end of 2012, outstanding postal savings redeposits amounted to NT\$1,624 billion. At the same time, commercial banks' redeposits totaled NT\$398 billion.

In addition, Agricultural Bank of Taiwan accepted deposits from community financial institutions and made redeposits with the Bank. At the end of 2012, its outstanding redeposits were NT\$165 billion.

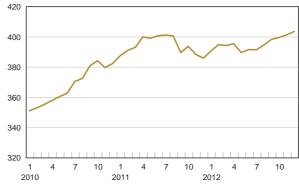
3. Foreign Exchange Management

For the year 2012, the Bank followed the established managed float regime to maintain an orderly foreign exchange (FX) market. Sufficient seed funds were provided by the Bank for foreign currency swaps and call loans. The Bank's foreign exchange reserves increased by US\$17.6 billion owing to a higher return on investments and the portfolio appreciation of the euro and other currencies against the US dollar. The Bank also loosened regulations regarding foreign exchange remittances. Moreover, the Bank and the People's Bank of China jointly signed the Memorandum on Cross-Strait Currency Clearing Cooperation, an important step in establishing a bilateral currency clearing mechanism.

Foreign Exchange Market Management

Taiwan's exchange rate is in principle guided by the market mechanism; the Bank only steps in when there is excessive exchange rate volatility. At the end of 2012, the NT\$/U\$\$ exchange rate appreciated by 3.96 percent from the previous year end's 30.290 to 29.136, relatively stable as compared to the euro's 2.4 percent appreciation against the US dollar, the renminbi's 0.97 percent, the won's 7.58 percent, the yen's 10.14 percent and the Singapore dollar's 6.17 percent.

Foreign Exchange Reserves US\$ Billion



Source: Department of Foreign Exchange, CBC

In 2012, the Bank 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 Bank also urged authorized banks to enhance their exchange rate risk management. In addition, the Bank strengthened target examinations related to foreign exchange activities. The Bank also broadened the foreign exchange market by approving 905 new FX authorized banks and eight new FX derivatives, and providing liquidity for FX call loan and swap markets.

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

In order to provide the financial system with sufficient foreign currency liquidity to meet funding needs, including corporate needs to venture into overseas markets, the Bank provided seed funds* for the Taipei Foreign

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

Currency Call Loan Market

Furthermore, the Bank 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 2012, the volume of foreign exchange call-loan transactions reached US\$1,806.5 billion, while that of foreign currency-NT dollar swap transactions reached US\$1,130 billion.

Foreign Exchange Reserve Management

In 2012, the Bank's foreign exchange revenues amounted to US\$1,053.6 billion, while foreign exchange expenditures were US\$1,036 billion. At the end of 2012, total foreign exchange reserves stood at US\$403.2 billion, a US\$17.6 billion increase from the end of 2011. The increase was mainly attributable to a higher return from foreign exchange reserves management and the appreciation of euro- and other currencies-denominated assets in the portfolio.

Capital Flow Management

The Bank's foreign exchange management mainly relies on the market mechanism, and capital can , in principle, flow freely in and out of Taiwan. As of 2012, 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 Bank. Each transaction for a non-resident within US\$0.1 million can be settled by banks directly, whereas any amount of transactions above that threshold require the approval of the Bank.

Key measures with regard to the management of capital flows in 2012 included:

- (1) In order to promote the internationalization of Taiwan's capital markets, the Bank approved the following in 2012:
 - A. The issuance of overseas depositary receipts by seven domestic corporations with a total issuance amount of US\$1.4 billion, and the issuance of European Convertible Bonds by nine domestic corporations with a total of US\$1.5 billion raised;
 - B. Seventeen foreign corporations to launch initial public offerings on the TWSE or GTSM, with a total amount of NT\$13.2 billion raised; the issuance of NT Dollar Convertible Bonds by five foreign corporations, which combined to raise a total amount of NT\$2.1 billion; the offering and issuance of NT dollar-denominated bonds by the Central American Bank for Economic

- Integration (CABEI), raising NT\$5 billion; the offering and issuance of foreign currency international bonds by BNP Paribas Bank for a total of no more than US\$1 billion.
- (2) The Bank gave consent to an increase in residents' investments in foreign securities, detailed as follows:
 - A. Twenty-nine domestic securities investment trust companies were allowed to offer 42 securities investment trust funds domestically that invest in foreign securities, with a total of NT\$537.5 billion raised:
 - B. Two domestic securities investment trust companies were allowed to offer domestically two futures trust funds that invest in foreign futures trust funds and securities funds, with a total of NT\$2 billion raised;
 - C. Life insurance companies were approved to invest in foreign securities with the amount totaling US\$1.5 billion through non-discretionary money trusts managed by financial institutions. Their own investments in foreign securities amounted to US\$2.6 billion, while their interest earned on foreign securities investments were hedged by forward foreign exchange contracts totaling US\$1.78 billion;
 - D. Four major government pension funds, including labor pension fund, invested a total amount of US\$4.1 billion in foreign securities.
- (3) The Bank loosened the following regulations regarding foreign exchange remittances:
 - A. Starting from August 23, securities investment trust companies may hedge the exchange rate risk for their foreign securities investments via FX swap or cross-currency swap transactions based on the funds' hedging strategies;
 - B. In step with the amendments by the Financial Supervisory Commission (FSC) to the "Guidelines Governing Applications by Securities Investment Trust Enterprises for Offering and Issuing Trust Funds Denominated in Foreign Currencies," starting from October 26, the Bank approved that banks may process the exchange declaration of the NT dollar payments of foreign currency (except renminbi) denominated funds offered by securities investment trust enterprises. The Bank also issued an official letter to inform banks of the items for attention and verification for such settlements.

Management of the Foreign Exchange Business of Financial Institutions

(1) Authorized Banks

At the end of 2012, there were 3,249 authorized foreign exchange banks in total, which included

38 head offices and 3,160 branches of domestic banks, 49 branches of 28 foreign banks, two branches of Mainland Chinese banks, as well as 1,605 authorized money exchangers, post offices and financial institutions authorized to engage in basic foreign exchange business. In 2012, the Bank approved six cases for authorized banks to establish branches in Mainland China, 15 cases for domestic banks to set up branches abroad, and two cases for Mainland Chinese banks to establish branches in Taiwan.

(2) Insurance Companies

Up until the end of 2012, 19 insurance companies had been allowed to engage in foreign currency investment-linked insurance business, and 22 had been permitted to conduct business in relation to traditional foreign currency insurance products.

(3) Securities Firms

In 2012, the Bank approved three securities firms to be agents for foreign bond trading, 39 to be entrusted as agents for foreign securities trading, 17 for underwriting international bonds, three 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, eight to conduct non-discretionary individually managed money trust wealth management business, 22 to deal onshore foreign currency bills, and five as participating dealers of offshore exchange traded funds. The Bank also permitted 43 securities firms and investment trust or investment consulting firms to be master agents for offshore public funds, 21 institutions to be mandated to place private offshore funds in Taiwan; the Bank also gave permission to 20 investment trust or investment consulting firms to conduct foreign currency discretionary investments in foreign securities, 13 as mandated institutions to publicly offer or place foreign currency-denominated funds in Taiwan, and two to be master agents for offshore exchange traded funds.

(4) Promoting Renminbi Exchange Transactions

In response to the needs for consumption purchases by Mainland Chinese and Taiwanese tourists traveling to the other side of the Taiwan Strait, renminbi (RMB) notes have been allowed to be exchanged in Taiwan since June 30, 2008.

Along with the steady increase in cross-strait activities, and the permission of Mainland Chinese free and independent travel in June 2011, banks' RMB cash exchange businesses grew markedly. Between June 30, 2008, and the end of 2012, the government approved 227 financial institutions (3,908 branches) and 238 authorized money exchangers to conduct RMB cash exchange

business. The amount of RMB purchased totaled around RMB25.02 billion, while the sale was almost identical at about RMB25.02 billion.

(5) Establishing a Cross-Strait Currency Clearing Mechanism

- A. In order to promote cross-strait commercial activity and financial cooperation, on August 31, 2012, the Bank and the People's Bank of China jointly signed the *Memorandum on Cross-Strait Currency Clearing Cooperation*. On September 7, 2012, the Bank promulgated the "Regulations Governing the Selection of Designated NTD Clearing Bank in the Mainland Area." After the process of evaluation and selection, on September 17, the Bank announced the Shanghai branch of the Bank of Taiwan as the NTD clearing bank in the mainland area; then on December 11, the People's Bank of China designated the Taipei branch of the Bank of China as the RMB clearing bank in the Taiwan area.
- B. As a result, domestic banking units (DBUs) may conduct RMB business once the clearing banks sign the clearing and settlement agreement, finish preparation work, and the relevant regulations are amended and promulgated by the Bank. This will help increase the flexibility of Taiwanese firms' funding arrangements and support the government's efforts to implement the "Program to Develop Financial Services with Cross-Strait Characteristics."
- C. The Bank has begun talks with the People's Bank of China to establish a cross-strait currency swap mechanism, which will form a part of future discussions on cooperation.

(6) Offshore Banking Units

- A. On September 11, 2012, the Bank and the FSC jointly repealed the *Regulations Governing* the Conduct of RMB Business for the OBUs and Overseas Branches of Taiwan's Domestic Banks, which would then allow Offshore Banking Units (OBUs) to conduct RMB business in compliance with the Offshore Banking Act, without the need for the FSC's prior approval.
- B. The OBU business continued to grow in 2012, and by the end of the year, there were 62 OBUs in operation, with total assets worth US\$170.9 billion, which was a 17.8 percent increase from the previous year end. Non-financial institutions' deposits reached US\$44.1 billion, a 17.1 percent increase from a year ago. However, 2012 cross-strait remittances decreased by 1.9 percent from those in 2011 and registered a total of US\$277.4 billion.

 By the end of 2012, 50 out of 62 OBUs had launched RMB business, with their total assets amounting to RMB57.5 billion, an increase of 616.8 percent from the previous year end. The RMB deposit balance reached RMB24 billion, growing by 326.9 percent from the end of 2011. These developments demonstrated OBU's increasing importance as funding centers for overseas Taiwanese firms.

Non-financial Institution Deposits and Cross-Strait Remittances Through OBUs **OBU** Assets US\$ Billion US\$ Billion 200 50 160 Non-financial Institution Deposits 40 120 30 80 20 40 Cross-Strait Remittances 10 0 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 1 2010 Source: Department of Foreign Exchange, CBC. Source: Department of Foreign Exchange, CBC. 85

4. Financial Inspection

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

Implementing On-Site Target Examinations

Target examinations in 2012 inspected the handling of land collateralized loans and high-value housing loans as well as mortgage lending in legally-stipulated "specific areas," mortgage information disclosure, required reserves, banks' offered rates, data warehousing of checking accounts, counterfeit money detection and follow-up, quality control of ATM banknotes, forex forwards, NT dollar options, the operation of foreign currency exchanges by authorized banks, banks' foreign currency bond positions, the classification and statistics of foreign exchange remittances, correctness of reporting to the Bank, etc.

Follow-Up on Banks' Compliance with Examination Findings

In light of the Bank's target examination findings and the FSC's examination findings related to the Bank's operations or regulations, the Bank continued to monitor how the examined financial institutions had improved and to urge the financial institutions to rectify related deficiencies, thus ensuring the successful implementation of the Bank's policies.

Off-Site Monitoring

Based on financial conditions and amendments to relevant laws and regulations, the Bank reviews and amends as necessary the format and content of periodical statistical data submitted by financial institutions. In 2012, developments relating to off-site monitoring for the above purpose included the following:

- (1) In line with the new required liquidity ratio raised by the Bank, criteria for assessing liquidity and compliance of domestic banks, local branches of foreign banks, credit cooperative associations, and credit departments of farmers' and fishermen's associations were amended accordingly.
- (2) The assessment criteria for domestic banks' asset quality were adjusted to also include analysis of other special mention loans and changes to loan loss provision standards and weights.

- (3) The benchmark of financial holding companies' double leverage ratios was changed in an adjustment of capital adequacy assessment.
- (4) In view of the establishment of their first Taiwan branches by two Mainland Chinese banks (Bank of China and Bank of Communications), the related statistical reports were amended and incorporated in the Bank's off-site monitoring system.

Financial Institution Information Transparency

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

Financial Stability Assessment

The Bank 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 2012, the sixth *Financial Stability Report* was published. This also promotes cross-border communication and information sharing with regard to Taiwan's financial stability and surveillance.

International Cooperation in Financial Supervision

In 2012, the Bank continued to actively engage in international cooperation relating to financial supervision, including completing SEACEN Centre questionnaires regarding their learning and research needs analyses, writing to the Asian Development Bank to convey our support for the APEC Financial Regulators Training Initiative, participating in the 3rd SEACEN High-level Seminar on Financial Stability/3rd Meeting of Deputy Governors in charge of Financial Stability and Banking Supervision, and hosting the SEACEN Course on Assessing Market Risk of a Bank.

Other Important Measures

The Bank collaborated with academia in the research project "Basel III Impacts on Financial Stability and Monetary Policy" in order to explore a feasible countercyclical capital buffer mechanism for Taiwan as well as comprehensively understanding Basel III's impacts on bank credit supply and monetary policy in Taiwan.

5. Payment and Settlement Systems

The CBC Interbank Funds-Transfer System (CIFS) is the backbone of Taiwan's payment system, linking the Check Clearing House System (CCHS), the Interbank Remittance System (IRS), the Central Government Securities Settlement System (CGSS), the Bills Clearing and Settlement System (BCSS), the Securities Book-Entry Clearing System (SBECS), and the Electronic Bond Trading System (EBTS) together to constitute a comprehensive payment system.

Accordingly, the Bank, 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 Bank 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 Financial Information Service Co. (FISC), the Taiwan Depository and Clearing Corporation (TDCC) and the Taiwan Stock Exchange Corporation (TWSE).

At the end of 2012, participants of the CIFS included 68 banks, eight bills finance companies, and four other institutions including Chunghwa Post Co., the TWSE, and the GreTai Securities Market (GTSM). For the year as a whole, the daily average amount of funds transferred via the CIFS was NT\$1,538.6 billion, while the daily average number of transactions reached 2,846.

(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 since then.

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 connecting securities delivery with funds settlement 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 1,690 branches that handled the registration of central government securities transfers at the end of 2012. During 2012, 402 thousand transfers with a total amount of NT\$38.9 trillion were processed by this system.

Monitoring Payment Systems

The Bank monitors the payment systems on a periodic basis to maintain their safety and efficiency. Monitoring activities include the following:

- (1) Required payment system operators and payment instrument issuers to provide detailed information on their operations and activities as a basis for monitoring payment systems.
- (2) Ensured clearing institutions set up backup systems and contingency plans for business continuity in case of emergency.
- (3) Invited clearing institutions, the FISC, the TDCC, and the TCH, to jointly hold conferences twice in 2012 to promote the sound operation of the payment systems.
- (4) Amended Article 23 in the Regulations Governing the Business of Negotiable Instruments Exchange and Clearance of Accounts among Banks in response to the implementation of the Personal Information Protection Act, and stipulated the "Regulations Governing the Clearinghouse's Plan of Security Measures for Personal Information" to require clearinghouses to comply with relevant obligations defined in the Personal Information Protection Act, and to strengthen the management of credit information.
- (5) Urged the TCH to establish a risk management mechanism of check clearing and settlement to control counterparty risk, and completed the amendments of corresponding regulations. In addition, all updated information operating systems were launched at the end of January 2013.

Building the Foreign Currency Payment System

In October 2012, the bank assigned a task force to the effort to establishing a foreign currency settlement system, aiming to meet a growing need for domestic US dollar remittances, to assist in processing interbank US dollar spot, swap, call loans and other transactions, and to facilitate the burgeoning business of RMB receipt and payment and cross-strait currency settlement. The system is expected to be fully constructed in the first half of 2013.

International Research Cooperation

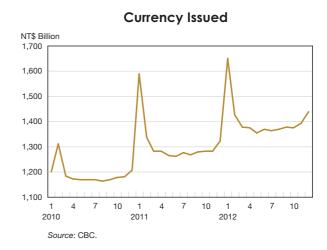
In 2012, the Bank participated in the project titled "The Role of Payment Systems in Monetary Policy and Financial Stability" held by the South East Asian Central Banks (SEACEN) Research and Training Centre, and submitted a research report on the case of Taiwan.

6. Currency Issuance

Currency Issuance Increased

During the year of 2012, the Bank conducted currency issuance with a focus on 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.

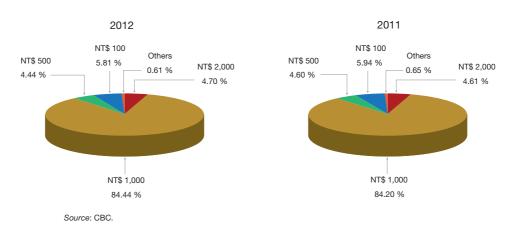
In 2012, the Bank implemented an appropriate currency issuance plan for delivering banknotes and coins. The currency issued peaked at NT\$1,743.8 billion on January 20, the day before the Chinese Lunar New Year holidays, reflecting a temporary seasonal surge in cash demand. At the year end, the outstanding amount of the currency issued was NT\$1,437.5 billion, representing an increase of NT\$116.9 billion or 8.85 percent over the previous year end.



At the end of 2012, the denomination structure of NT dollar banknotes in circulation

was similar to the end of 2011. The NT\$1,000 note accounted for a lion's share at 84.44 percent, followed by the NT\$100 (5.81 percent) and the NT\$2,000 (4.70 percent) notes.

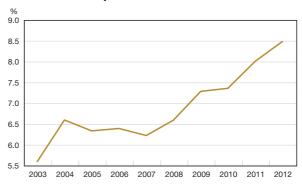
Composition of NT Dollar Banknotes Issued (Year-End Figures)



Currency in Circulation to GDP Ratio Increased

Between 2005 and 2007, currency demand for transaction purposes contracted on account of weak private consumption caused by credit card defaults. Therefore, the ratio of currency in circulation to nominal GDP trended downwards. However, 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 8.47 percent in 2012, a 0.47 of a percentage point gain over the previous year.

The Ratio of Currency Held by the Public to GDP



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

Several Commemorative Coin Sets Were Issued

With the authority of currency issuance, the Bank 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 2012, the Bank issued a casting set of coins for the Chinese Zodiac Year of the Dragon, the commemorative gold and silver coins for the inauguration of the 13th president and vice president of the Republic of China (Taiwan), and the first coin set of the National Parks of Taiwan series - Kenting National Parks.

Additionally, the Bank commissioned the Bank of Taiwan to conduct a public auction online for special number uncut commemorative NT\$100 notes in celebration of the 100th anniversary of the founding of the Republic of China.

7. Fiscal Agency Functions

The Bank acts as a banker to the central government as well as to other banks. As the fiscal agent of the government, the Bank provides various services for the Treasury, such as handling the treasury deposit account (TDA), managing central governmental 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 Bank 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 Bank delegates the handling of treasury transactions to 13 financial institutions and their 358 branches, including three overseas branches located in New York, Los Angeles, and Paris. In addition, there are another 4,766 tax collection agencies set in financial institutions. In 2012, the Bank received a total of NT\$3,228.3 billion in treasury deposits, an increase of NT\$199.4 billion or 6.58 percent over the previous year. Payments made on behalf of the Treasury were NT\$3,211.1 billion, increasing by NT\$163.9 billion or 5.38 percent from 2011. At the end of 2012, the TDA balance was NT\$25.7 billion, significantly increasing by NT\$17.3 billion or 205.95 percent from the end of 2011, mainly owing to the funding operation considerations of the MOF.

Handling Central Government Agency Deposits

Central government agencies are required to make their deposits with the Bank or other delegated banks. However, the delegated banks are required by law to redeposit 60 percent of the deposits with the Bank, except those in interest-bearing accounts. At the end of 2012, the balance of central government agencies' deposits with the Bank amounted to NT\$141.7 billion, a decrease of NT\$31.6 billion or 18.23 percent over the previous year. Deposits with other delegated banks were NT\$446 billion at the end of 2012, a decrease of NT\$14.4 billion or 3.13 percent. Among them, redeposits with the Bank registered NT\$10.5 billion, merely decreasing by NT\$0.2 billion or 1.87 percent from the previous year end.

Managing Central Government Bonds

As a fiscal agent, the Bank provides services related to the issuance, registration, transfer, redemption, and interest payment of central government bonds. The Bank also conducts the auctions of central government bonds. There are 63 domestic dealers qualified to directly participate in the auctions, including 26 banks, 23 securities companies, eight bills finance companies, five

insurance companies, and Chunghwa Post Co.

In 2012, the Bank handled 19 issues of central government bonds in book-entry form worth NT \$665 billion and paid NT\$398.2 billion in principal and NT\$119.3 billion in interest for central government bonds. At the end of 2012, the outstanding amount of central government bonds was NT\$4,776.3 billion, an increase of NT\$266.7 billion or 5.91 percent from the previous year end.

Managing Treasury Bills

The Bank 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 Co.

In 2012, the Bank handled 10 issues of book-entry treasury bills with a total amount of NT\$265 billion. At the end of 2012, the outstanding amount of treasury bills was NT\$195 billion, an increase of NT\$14.7 billion or 8.15 percent from the previous year end.

Improving Operational Efficiency

To streamline treasury disbursements, the MOF and the Bank launched a mechanism of electronic transfer of treasury funds, which was effective from December 10, 2012. Thereafter, payments from the Treasury to the central government account and central government agencies' accounts were made online. Therefore, physical treasury check writing and deliveries have since become completely electronic, which has improved the operational efficiency of managing the TDA.

8. Participation in International Activities

In 2012, the Bank contributed to a wide-ranging agenda of participation in international activities. As a member of various international organizations, the Bank hosts conferences, provides training courses, and attends various 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 Bank 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 2012, the Bank strengthened its relationship and interaction with other central banks to exchange views on key issues of current global economic and financial situations.

The Bank 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 2012, the Bank participated in the 45th annual meeting of ADB held in Manila, the Philippines, and shared views on the possibility of a formal regional exchange rate coordination mechanism in response to volatile short-term international capital flows. In addition, the issue of combining the functions of the Chiang Mai Initiative Multilateralization (CMIM) and the ASEAN+3 Macroeconomic Research Office (AMRO) by setting up the Asian Monetary Fund (AMF) was also addressed on the occasion.

The Bank is also a member of SEACEN. In February 2012, the Bank attended the 47th annual conference of governors held in Seoul, South Korea. Moreover, as SEACEN decided to move from a financial year (April to March) to a calendar year for better alignment with the operating periods of its stakeholders, the 48th annual conference of governors was held in Ulaanbaatar, Mongolia in November 2012. At these two conferences, the Bank joined other member central banks to exchange views on emerging economic and financial issues and to be updated on the world economic outlook. Furthermore, the Bank hosted the SEACEN Course on Assessing Market Risk of a Bank during November 4 to 9.

In addition, the Bank participated in the meetings held by other international organizations, such as the IDB's annual meeting of the Board of Governors held in Montevideo, Uruguay during March 16 to 19, the CABEI's ordinary meeting of the Board of Governors which took place in Roatan, Honduras on April 26 and 27, the EBRD's annual meeting of the Board of Governors held in London, UK on May 18 and 19, and the BIS annual general meeting in Basel, Switzerland on June 23 and 24.

