### **III. Central Bank Operations**

### 1. Overview

For the year 2015, the global economy performed weaker than expected, domestic economic growth decelerated, the negative output gap widened, and inflation expectations were mild. Against such a backdrop, the CBC lowered policy rates twice in September and December, respectively, by a total of 25 basis points to foster economic growth.

In response to economic and financial conditions, the CBC continued to conduct open market operations by issuing certificates of deposit (CDs) to manage market liquidity and sustain steady growth in monetary aggregates. Furthermore, the CBC raised the bidding amounts of 364-day CDs and 2-year CDs to meet financial institutions' portfolio diversification needs. The outstanding balance of CDs issued by the CBC was NT\$7,545 billion at the end of the year, expanding by NT\$438 billion or 6.17% from the end of the previous year. In regard to money supply, M2 recorded an anuual growth rate of 6.34%, within the CBC's target range of 2.5% to 6.5%, which was sufficient to support economic activity.

In 2015, the CBC continued with targeted macro-prudential measures on the real estate sector. During the year, banks' concentration on mortgage loans improved, the government's measures to sustain housing market soundness gradually came into effect, and real estate speculation was more contained. Based on these assessments, the CBC revised the scope of the designated Specific Areas by removing six districts, and raised the 50% cap on the loan-to-value (LTV) ratio to 60%, effective from August 14, 2015.

In terms of foreign exchange management, the CBC steadily promoted the internationalization and liberalization of capital markets and revised relevant foreign exchange regulations in continual cooperation with the FSC. In 2015, adjustments to foreign exchange business made by the CBC included easing regulations governing foreign exchange business performed by insurance companies, approving authorized banks to issue foreign currency-denominated negotiable certificates of deposit, and expanding the scope of foreign exchange derivatives business conducted by authorized banks as well as simplifying relevant application procedures.

To enhance the safety and efficiency of payment system operation, the CBC continued to improve financial infrastructure. During 2015, the CBC further expanded the functions of the foreign

currency clearing platform, such as launching domestic and cross-border yen and euro remittances, and establishing the delivery-versus-payment (DVP) mechanism for transactions of foreign currency bonds and bills. The new functions significantly reduced both the charges for remittances and the processing time.

### 2. Monetary Management

In 2015, uncertainties continued to surround the global economy, while the domestic economy experienced a slower recovery, the negative output gap widened and the inflation outlook was anticipated to be mild. Against this backdrop, the CBC announced policy rate cuts to help construct a stable financial environment and foster economic growth. In addition, the CBC continued to monitor financial institutions' management of real estate-associated credit risks and the enforcement results of targeted macro-prudential measures to 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 absorbing excess funds from the financial market to maintain liquidity at an appropriate level.

#### Lowering Policy Rates to Promote Economic Growth

The CBC cut policy rates in September and December, respectively, by a total of 0.25 percentage points to promote economic growth. At the end of 2015, the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral were 1.625%, 2.000%, and 3.875%, respectively.

#### **CBC Policy Rates**

Unit: % (percent per annum)

Effective Date	Discount Rate	Accommodation Rate with Collateral	Accommodation Rate Without Collateral
2011 / Apr. 1	1.750	2.125	4.000
Jul. 1	1.875	2.250	4.125
2015 / Sep. 25	1.750	2.125	4.000
Dec. 18	1.625	2.000	3.875

Source: Financial Statistics Monthly, CBC.

#### Continuing to Conduct Open Market Operations to Absorb Excess Liquidity

In 2015, the CBC continued to conduct open market operations by issuing certificates of deposit (CDs) to maintain reserve money and overnight call loan rates at accommodative levels. The average annual growth rate of reserve money in 2015 was 5.79%, while M2 recorded an annual growth rate of 6.34%, within the CBC's target range of 2.5% to 6.5%.

In response to the demands for asset allocation of financial institutions, the monthly amount of

#### **Open Market Operations**

Unit: NT\$ Billion: %

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Year/	Amount Absorbed	Amount Offered		Weighted A	verage Rate on	CDs Issued	
Month	Issues of CDs	Redemptions of CDs	1-30 Days	31-91 Days	92-182 Days	274-364 Days	2 Years
2013	63,122	63,074	0.870	0.930	1.050	0.660	0.769
2014	67,187	66,955	0.870	0.930	1.050	0.575	0.786
2015	68,418	67,877	0.842	0.911	1.031	0.502	0.617
2015/ 1	5,446	5,406	0.836	0.930	1.050	0.596	0.793
2	5,068	5,089	0.870	0.930	1.050	0.591	-
3	6,585	6,553	0.845	0.930	1.050	0.585	0.778
4	6,262	6,222	0.870	0.930	1.050	0.571	0.755
5	5157	5,113	0.870	0.930	1.050	0.557	0.728
6	5,794	5,748	0.870	0.930	1.050	0.540	0.698
7	5,642	5,571	0.867	0.930	1.050	0.519	0.669
8	5,467	5,402	0.866	0.930	1.050	0.494	0.619
9	5,605	5,540	0.858	0.922	1.040	0.447	0.553
10	5,456	5,396	0.796	0.860	0.980	0.417	0.505
11	5,577	5,510	0.796	0.860	0.980	0.389	0.465
12	6,359	6,329	0.772	0.836	0.952	0.384	0.464

Source: Financial Statistics Monthly, CBC.

364-day CDs issued increased from NT\$120 billion to NT\$130 billion from March onwards, and then increased to NT\$150 billion from June. Subsequently, the monthly amount of 2-year CDs issued rose from NT\$20 billion to NT\$30 billion beginning August 2015. The total value of CDs issued amounted to NT\$68,418 billion in 2015, and the total outstanding amount of CDs issued by the CBC was NT\$7,545 billion at the end of the year.

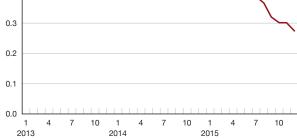
Keeping in line with policy rates, the non-competitive bidding rates on CDs also changed. Consequently, in 2015, the rates on 30-day CDs fluctuated for the first eight months within the range of 0.836% to 0.870%, and then showed a downward trend from 0.858% in September to 0.772% in

0.4

December. Meanwhile, the rates on 91-day, and 182-day CDs remained unchanged for the first eight months, and dropped to 0.836% and 0.952% at the end of the year, respectively. Furthermore, the rates on 364-day and 2-year CDs exhibited a downtrend from 0.596% and 0.793% in January to 0.3840% and 0.464% at the end of the year, respectively.

The average overnight call loan rates for the first seven months of the year remained

Overnight Call Loan Rate



Source: Financial Statistics Monthly, CBC.

stable within 0.387% to 0.388%. Afterwards, the average overnight call loan rates gradually declined, dropping to 0.275% at the end of the year.

#### Making Changes to Targeted Macro-prudential Measures Governing Real Estate Loans

- (1) Since June 2010, the CBC has introduced several rounds of targeted macro-prudential measures governing housing loans and strengthened financial institutions' management of real estateassociated credit risks. Furthermore, the CBC has urged banks to exercise self-discipline to implement risk management of real estate loans.
- (2) Banks' management of real estate-associated credit risks has already improved, and the government's measures to sustain housing market soundness have gradually come into effect. Real estate speculation has been more contained. Based on these assessments, the Board made several amendments to the Regulations Governing Home Mortgage Loans and Land Loans Extended by Financial Institutions on August 13, effective from August 14, 2015. Important amendments related to the above mentioned regulations included:
  - A. Revising the scope of the designated Specific Areas by removing two districts in New Taipei City, namely Bali and Yingge, and four districts in Taoyuan City, namely Taoyuan, Luzhu, Zhongli and Guishan.
  - B. Raising the loan-to-value (LTV) ratio ceiling on housing loans taken out by corporate legal entities and those taken out for high-value housing or third (or more) home purchases by natural persons to 60%, up from 50%.
- (3) Since the CBC introduced targeted macro-prudential measures on the real estate sector in June 2010, banks' concentration on mortgage loans has improved. Moreover, banks were also found to have granted loans for housing in the designated Specific Areas and high-valued housing across the country at lower LTV ratios and higher mortgage rates. This is conducive to sound banking operation and to the attainment of financial stability.

The risk management measures for real estate lending implemented by the CBC have achieved the following results:

A. The outstanding amount of housing loans accounted for 27.13% of total loans at the end of the year, down by 0.49 percentage points from June 2010. In addition, the concentration of housing loans in the stipulated Specific Areas improved markedly.

#### **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	64.99
2015 / Dec.	27.13	39.62

B. The average LTV ratio of housing loans in Specific Areas fell to 56.52%, and the average mortgage rate rose to 2.10% at the end of 2015.

#### Housing Loans in "Specific Areas"

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
2010 / Jul.	63.91	1.97
2015 / Dec.	56.52	2.10

C. The average LTV ratio of newly-extended land collateralized loans declined by 5.91 percentage points to 62.45%, and the average mortgage rate climbed to 2.81% at the end of 2015.

#### **Newly-Extended Land Collateralized Loans**

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
2010 / Dec.	68.36	2.08
2015 / Dec.	62.45	2.81

D. The average LTV ratio of housing loans taken out by corporate legal entities decreased to 56.77%, and the average mortgage rate increased to 2.18% at the end of 2015.

#### **Housing Loans by Corporate Legal Entities**

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
2011 / Jan.	67.37	1.99
2015 / Dec.	56.77	2.18

E. The efforts of the aforesaid policy measures had effectively pushed the average LTV ratio of high-valued housing loans down to 57.53%, and brought the average mortgage rate upwards to 2.04% in December 2015.

#### **High-Valued Housing Loans**

Unit: %

Date	Loan-to-Value Ratio	Mortgage Rate
Pre-restriction	80-99 (maximum)	1.84 (minimum)
2015 / Dec.	57.53 (average)	2.04 (average)

F. The average LTV ratio on loans for third home purchases edged down to 57.96%, while the average mortgage rate trended up to 2.15% at the end of 2015.

#### **Loans for Third Home Purchase**

Unit: %

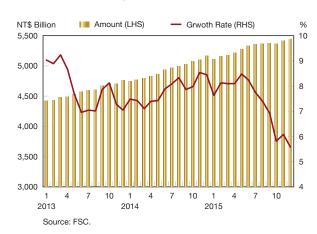
Date	Loan-to-Value Ratio	Mortgage Rate
2014 / Jun.	58~72	1.97
2015 / Dec.	57.96	2.15

#### **Enhancing the SME Financing Mechanism**

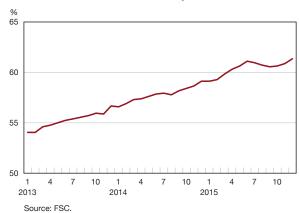
To provide easier access to financing for SMEs, the CBC supported the Financial Supervisory Commission (FSC) to continue the program of encouraging lending to SMEs by domestic banks. Furthermore, the CBC also continued to urge commercial banks to increase lending to SMEs.

At the end of 2015, the outstanding loans extended to SMEs by domestic banks amounted to NT\$5,452 billion, increasing by NT\$289 billion from the end of the previous year. The ratio of the outstanding loans extended to SMEs to those extended to private enterprises rose from 59.11% at the end of 2014 to 61.32%.

#### **Outstanding Loans Extended to SMEs**



#### Ratio of Outstanding Loans Extended to SMEs to Those Extended to Private Entreprises



#### **Redeposits of Financial Institutions**

Accepting redeposits from Chunghwa Post, the Agricultural Bank of Taiwan and commercial banks is another instrument for the CBC to influence banks' reserve positions to promote financial stability. At the end of 2015, the outstanding redeposits of Chunghwa Post and the Agricultural Bank of Taiwan stayed unchanged at NT\$1,624 billion and NT\$165 billion, respectively. However, commercial banks' redeposits slightly decreased to NT\$384 billion.

In addition, the Central Deposit Insurance Corporation's time deposits at the CBC totaled NT\$60 billion, which was a NT\$6.5 billion increase from 2014.

### 3. Foreign Exchange Management

For the year 2015, 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\$7.1 billion owing to returns mainly on investments. A delivery-versus-payment (DVP) mechanism for foreign currency bonds and bills transactions was added to the foreign currency clearing platform. Moreover, from February 6, 2013, when domestic banking units (DBUs) were allowed to conduct renminbi (RMB) business, up to the end of 2015, the total amount of DBUs' cross-strait RMB remittances was RMB5,016.6 billion, and DBUs recorded a balance of RMB319.4 billion on RMB deposits.

#### Foreign Exchange Market Management

Taiwan's exchange rate is in principle guided by the market mechanism; the CBC conducts "leaning against the wind" operations when there is excessive exchange rate volatility. Indeed, according to behavioral macroeconomic analysis, "leaning against the wind" policies can effectively eliminate excessive exchange rate fluctuations and enhance FX market efficiency. In recent years, frequent and massive capital movement has replaced trade or economic fundamentals to become the major factor affecting short-term exchange rate variation. This development increases the need for the CBC to maintain foreign exchange market order. Therefore, Taiwan adopts a managed float regime, which allows exchange rate flexibility and FX intervention and helps diminish or prevent speculative attacks.

At the end of 2015, the NT dollar depreciated by 4.08% against the US dollar compared with the end of the previous year, showing that the NTD exchange rate was relatively stable as compared to the euro's 13.37% depreciation, the RMB's 5.36% depreciation, the Korean won's 6.31% depreciation and the Japanese yen's 2.19% depreciation.

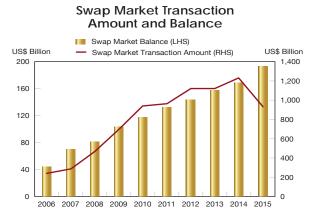
In 2015, the CBC continued to implement the Real-Time Reporting System for Large-Amount Foreign Exchange Transactions to keep the market orderly. Moreover, reinforced examination efforts were made to ensure that forward transactions were based only on actual transactions. The CBC also urged authorized banks to enhance their exchange rate risk management.

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

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, including US\$20 billion, €1 billion and ¥80 billion.

Furthermore, the CBC continued to conduct foreign currency swap transactions with banks and offered foreign currency call loans to banks so as to facilitate smooth corporate financing. During 2015, the volume of foreign exchange call loan transactions reached US\$1,407.1 billion, 4.6% less than that of 2014, while the balance at the end of 2015 was US\$26.8 billion. The volume of foreign currency-NTD swap transactions reached US\$942.8 billion, 24% less than 2014, while the balance was US\$195.2 billion at the end of 2015.

#### Call Loan Market Transaction **Amount and Balance** Call Loan Balance (LHS) US\$ Billion Call Loan Transaction Amount (RHS) US\$ Billion 30 2,100 25 1.750 1.400 20 15 1,050 700 10 5 350 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015



Source: Department of Foreign Exchange, CBC.

#### Foreign Exchange Reserve Management

Source: Department of Foreign Exchange, CBC.

At the end of 2015, total foreign exchange reserves stood at US\$426.0 billion, a US\$7.1 billion increase (1.7%) from the end of 2014, mainly attributable to higher returns from foreign exchange reserve 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.

#### **Foreign Exchange Reserves**



Source: Department of Foreign Exchange, CBC.

As of 2015, foreign currency capital not involving NT dollar conversion can flow freely; neither is there any restriction on financial flows involving NT dollar conversion for goods 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

transaction amount above that threshold requires the approval of the CBC.

Key measures with regard to the management of capital flows in 2015 included:

(1) Promoting the internationalization of Taiwan's capital market

#### **CBC-Approved Fund-Raising by Domestic and Foreign Institutions**

Institution	Method	Number	Amount
	IPO on TWSE & TPEx and registration on the Emerging Stock Board	21	NTD 12.12 billion
Foreign companies	NTD convertible bonds	9	NTD 5.55 billion
			USD 27.04 billion
	International bonds	53	RMB27.66 billion
			USD 2.11 billion
Domestic companies	Overseas convertible bonds	8	USD 2.41 billion
Domestic Companies	Overseas depositary receipts	1	USD 0.09 billion
Mainland Chinese banks	RMB-denominated bonds	1	RMB 3.0 billion

Note: TWSE (Taiwan Stock Exchange) ; TPEx (Taipei Exchange) . Source: Department of Foreign Exchange, CBC.

(2) Approving residents' investments in foreign securities

#### Residents' investments in Foreign Securities Approved by the CBC

Institution	Method/Instrument	Amount
	100 domestic SITE funds (including 37 NTD-foreign multiple currency SITE funds)	NTD 1,602.5 billion (multiple currency funds: NTD 766 billion)
Securities investment trust enterprises (SITEs)	1 SITE private fund	NTD 3.0 billion
6.me.p.nees (6.125)	1 domestic futures trust fund	NTD 2.0 billion
	1 domestic futures trust fund for qualified person	NTD 5.0 billion
	Non-discretionary money trusts managed by financial institutions	USD 0.11 billion
Life insurance companies	Investment for their own accounts	USD 0.75 billion
	Lowering overseas investment hedge positions	USD 1.6 billion
Five major government funds	Investment for their own accounts	USD 4.93 billion
Chunghwa Post	Hedge own investment interest Presell forward FX	USD 0.1 billion

Source: Department of Foreign Exchange, CBC.

#### (3) Recommending FSC announce adjustments to foreigners' investment limit measures

To stimulate the stock market, and taking into the consideration the fact that corporate bonds, financial debentures and government bonds are all fixed income securities, the CBC recommended the Financial Supervisory Commission (FSC) to include foreign investors' holdings of corporate bonds and financial debentures, along with government bonds and money market instruments, into the category of which the total amount can not exceed 30% of the inflow funds, in order to maintain the consistency of foreigners' investment limit management. The above adjustment went into effect starting from April 22, 2015.

#### (4) Loosening the regulations regarding foreign exchange remittances

- A. To facilitate declarations of FX settlements for electronic payments, the CBC revised the Directions for Banking Enterprises while Assisting Customers to Declare Foreign Exchange Receipts and Disbursements or Transactions. Starting from May 3, 2015, electronic payment institutions which receive the FSC's approval of cross-border business items, and companies approved by the FSC to cooperate with or assist foreign institutions to engage in related businesses, may act as agents for FX settlement declaration.
- B. To promote the development of Taiwan as a key offshore renminbi market and to aid the internationalization and product diversification of the futures market, starting from July 20, 2015, banks are allowed to conduct FX settlement declarations for the Taiwan Futures Exchange (TFE) or futures firms to conduct renminbi/USD exchange rate futures listed on TFE.
- C. To assist investment trust and investment consulting firms to explore more business opportunities in foreign currency related services, starting from October 20, 2015, these investment firms' declarations of FX settlements of foreign currency-denominated (excluding renminbi) mutual funds collected and paid with NTDs on behalf of fund purchasers do not count as part of the accumulated yearly FX settlement amount.

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

#### (1) Authorized FX banks

Pursuant to the Central Bank of the Republic of China (Taiwan) Act and the Foreign Exchange Regulation Act, the CBC reviews and authorizes banks to conduct FX business and be supervised accordingly. In 2015, the CBC continued to approve bank branches as authorized FX banks and loosened restrictions on FX derivative product business in order to promote authorized FX banks' competitiveness and quality of services.

A. At the end of 2015, there were 3,415 authorized FX banks in total, which included 39 head offices and 3,375 branches of domestic banks, 37 branches of 27 foreign banks, three branches

- of Mainland Chinese banks, as well as 1,268 authorized money exchangers, post offices, and financial institutions authorized to engage in basic foreign exchange business
- B. The CBC also approved 10 cases for authorized FX banks to establish branches in Mainland China, and 10 cases for domestic banks to set up branches abroad.
- C. In terms of new FX products, 35 derivatives were approved in 2015 after prudent review.
- D. The CBC actively assisted banks to take advantage of business opportunities in the digital age, and promoted related businesses:
  - (a) On March 4, the CBC simplified procedures for authorized FX banks to apply for electronic FX business.
  - (b) On September 14, the CBC announced that customers of authorized FX banksmay conduct FX related business through their own deposit accounts via internet banking, in addition to traditional branch services.
  - (c) On September 16, the CBC announced that authorized FX banks may accept instructions by fax to conduct FX settlement in the amount of NT\$0.5 million and above.
- E. The CBC simplified procedures for banks to apply for FX business through two amendments to the *Directions Governing Banking Enterprises for Operating Foreign Exchange Business:* 
  - (a) On January 8, the CBC announced in Foreign Exchange Circulars the following measures regarding FX related business conducted by authorized FX banks: allowing FX certificates of deposits to be pledged for foreign currency funds; streamlining procedures for the sale/purchase of foreign currencies at the country's international airports and ad hoc money exchanges; revising rules to allow Mainland Chinese citizens, to enter into non-discretionary money trust contracts investing in foreign currency securities, the same as foreigners.
  - (b) On July 31, the CBC relaxed the qualification criteria for trustors for foreign currency non-discretionary money trusts; and if the trustor is also the beneficiary, the trustors may use their beneficiary right as collateral to pledge for foreign currency loans.
- F. On May 22, the CBC revised the *Regulations Governing Foreign Exchange Business of Banking Enterprises*, the main points of the amendments included:
  - (a) The Agricultural Bank of Taiwan is allowed to apply for approval to be designated as an authorized FX bank.
  - (b) Authorized FX banks may issue foreign currency certificates of deposit.
  - (c) Authorized FX banks with trust business are allowed to establish currency-denominated collective investment trust accounts.
  - (d) The scope of FX derivatives was expanded, and procedures for authorized FX banks to apply for FX business was streamlined.

- G. On July 31, the CBC promulgated the *Directions for Issuance of Foreign-Currency Denominated Negotiable Certificates of Deposit by Banks*. Accordingly, authorized FX banks would be allowed to issue foreign currency negotiable certificates of deposit, and to offer foreign currency pledged credit or foreign currency loans collateralized with foreign currency negotiable certificates of deposit.
- H. On November 27, authorized FX banks with trust business and money trust business may, in consideration of their role as trustee banks for the business of electronic payment institutions, conduct foreign currency individually managed non-discretionary money trust business without prior approval by the CBC.

#### (2) Insurance companies

- A. Up to the end of 2015, 21 insurance companies were allowed to engage in foreign currency investment-linked insurance business, and 23 were permitted to conduct business in relation to traditional foreign currency insurance products.
- B. Effective April 8, the restriction on insurance firms that a foreign currency loan pledged against a foreign currency-denominated policy should not exceed 20% of the amount of policy value reserve was removed.
- C. On April 29, the *Regulations Governing Foreign Exchange Business of Insurance Enterprises* was revised, and, accordingly, insurance firms would be allowed to conduct foreign currency-denominated property insurance and reinsurance business and to extend foreign currency loans pledged against foreign currency-denominated policy.
- D. Effective August 24, insurance firms may participate in foreign currency syndicated lending.
- (3) Securities firms, securities investment trust and consulting firms, and bills finance firms
  - A. On August 17, in order to help domestic investment trust firms to grow their foreign mutual funds business, the CBC extended the scope of foreign currency discretionary investment business conducted by securities investment trust enterprises (SITEs) and securities investment consulting enterprises (SICEs), allowing these enterprises to invest, within 30% of the net asset value of the funds, in foreign currency classes of NTD-included multi-currency funds.
  - B. The approved cases granted by the CBC for securities firms, investment trust and investment consulting firms to manage FX business as of the end of 2015, are shown in the following table.

## CBC-Approved FX Business Managed by Securities Firms and Investment Trust and Investment Consulting Firms

(As of End-2015)

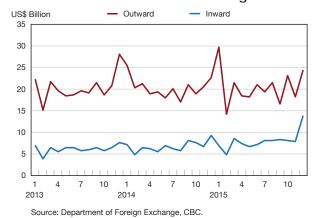
Institution	FX business	Number
	Agents for foreign bond trading	14
	Brokering trades in foreign securities	40
	Underwriting international bonds	38
	Proprietary foreign securities trading neither belonging to investment with their own funds nor for hedging needs	15
Securities firms	Issuance of warrants linked to foreign securities or indexes7	7
	Issuance of warrants linked to domestic securities	1
	Non-discretionary individually managed money trust wealth management	11
	FX spot transactions among foreign currencies	2
	Participating dealers of offshore exchange traded funds	4
Securities firms; investment trust and investment	Master agents for offshore public funds	49
consulting firms	Mandated institution of private offshore funds	25
	Foreign currency discretionary investments in foreign securities	29
investment trust and investment consulting firms	Conducting public offer or private placement of foreign currency-denominated funds	18
	Master agents for offshore exchange traded funds	2
Dille fin an ac fives	Foreign currency bond dealing and investment	8
Bills finance firms	Foreign currency bills certification, underwriting, brokerage and dealing	26

Source: Department of Foreign Exchange, CBC.

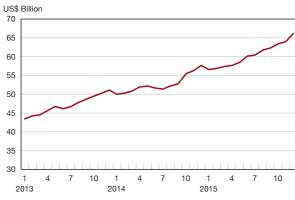
#### (4) Offshore Banking Units (OBUs)

- A. At the end of 2015, all OBU assets totaled US\$181.9 billion, which was US\$2.1 billion or 1.1% less than the previous year end. Domestic banks owned 86.4% of the OBU assets, while foreign banks owned 13.6%.
- B. In 2015, the total FX trading amount was US\$1,067.3 billion, a large 77.3% increase from 2014.
- C. OBU cross-strait financial business kept growing.

#### **Cross-Strait Remittances Through OBUs**



#### **OBU's Non-financial Institution Deposits**



Source: Department of Foreign Exchange, CBC.

- (a) Cross-strait remittances increased by 5.6% from a monthly average of US\$27.02 billion in 2014 to US\$28.53 billion in 2015.
- (b) At the end of 2015, non-financial institutions' deposits reached US\$66.14 billion, a 14.4% increase from a year ago.
- (5) Offshore Securities Units (OSUs)

At the end of 2015, 17 OSUs were approved and established, total OSU assets reached US\$1.77 billion; total OSU net losses in 2015 were US\$0.6million.

(6) Offshore Insurance Units (OIUs)

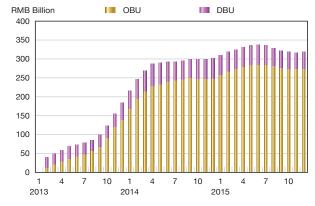
On February 4, 2015, the CBC announced the amendments to the *Offshore Banking Act*, whereby insurance firms would be allowed to establish OIUs. Up to the end of 2015, 18 insurance firms were approved to establish OIUs, and seven of the approved cases were set up.

#### RMB Exchange Business Kept Growing

### Since February 6, 2013, when authorized FX banks or DBUs began to conduct RMB business, domestic RMB business has been flourishing.

(2) By the end of 2015, there were 69 DBUs and 59 OBUs engaging in RMB business. The balance of RMB deposits amounted to RMB319.4 billion, 5.7% higher than the end of 2014; RMB remittances totaled RMB3,045.8 billion in 2015, 107% higher than 2014; and RMB settlement

#### RMB Deposit Balances of All Banks



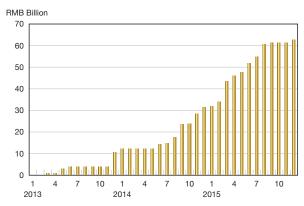
Note: Bank renminbi deposits started from February 2013. Source: Department of Foreign Exchange, CBC.

- through the Taipei Branch of the Bank of China totaled RMB5, 135.7 billion, 29.8% higher than 2014.
- (3) Along with the development of RMB business, RMB investment instruments were further diversified. As of the end of 2015, RMB investment business conducted by financial institutions is included in the following table.

#### **Expanding Foreign Currency Clearing Platform**

 The CBC began efforts to establish a domestic USD clearing mechanism in September 2008 and officially launched the system on December
2010. Afterwards, the CBC consigned the

### Accumulated Amount of RMB-denominated Bonds Issued



Note: Bank renminbi deposits started from February 2013. Source: Department of Foreign Exchange, CBC.

Financial Information Service Co. to set up a foreign currency clearing platform, which started operating in March 2013. The platform also began services for domestic and cross-border US dollar and RMB remittances, and adopted a payment-versus-payment (PVP) mechanism among banks and a liquidity-saving mechanism for foreign currency remittances. In 2015, the CBC made available on the platform domestic and cross-border yen and euro remittances, as well as a delivery-versus-payment (DVP) mechanism for foreign currency bonds and bills.

#### **RMB Business Conducted by Financial Institutions**

Unit: RMB Billion

Institution and business	Amount
Deposit balance (include NCDs, end of 2015)	319.4 (DBU: 272.4; OBU: 47)
Total remittances (February 2013 till December 2015)	5,016.6
Total settlement through the Taipei Branch of the Bank of China (February 2013 to December 2015)	10,638.1
Total value of 97 RMB-denominated bonds issued (up to the end of 2015)	62.6
Issuance of 118 RMB-denominated funds or RMB share classes (up to the end of 2015)	8.3
Accumulated premium receipts from RMB-denominated investment-linked insurance business (up to the end of 2015)	1.2
Accumulated premium receipts from RMB-denominated traditional insurance business (up to the end of 2015)	0.8

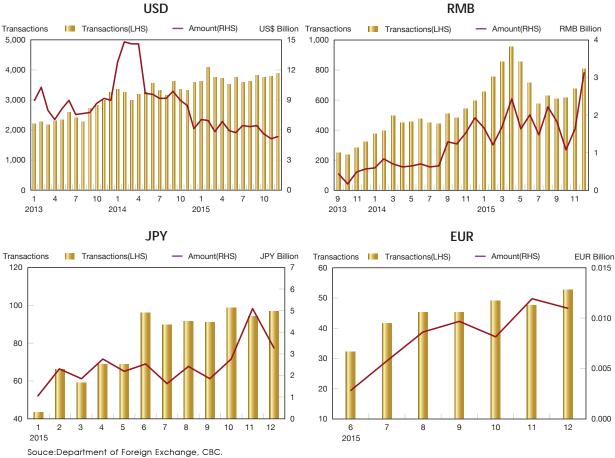
Source: Department of Foreign Exchange, CBC.

- (2) By the end of 2015, the scope of services provided by the platform was complete and comprehensive. It helps to promote the efficiency of foreign currency remittances, significantly reduces the remittance fees, improves the safety and efficiency of payment systems, and boosts financial service development.
  - A. Domestic foreign currency settlement business grew quickly.

Currency	Domestic participating units	Settlements in 2015	
		Transactions	Amount
US dollar	69	917,543	USD 1,496.6 billion
Renminbi	60	178,477	CNY 457.4 billion
Yen	40	19,383	JPY 697.4 billion
EUR	38	6,057	EUR 1.2 billion

Source: Department of Foreign Exchange, CBC.

### Daily Average Transactions and Amount of Domestic Foreign Currency Settlements



B. The fees for domestic foreign currency remittances were decreased. Some domestic banks' fees lowered from NT\$600-1,400 per transaction to NT\$320-1,020 per transaction.

### 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 risks and risk sources in order to deploy appropriate policies and measures in a timely manner.

#### **On-Site Target Examinations**

Target examinations in 2015 inspected the handling of 921 earthquake reconstruction loans, collateralized loans for industrial area land, housing loans, mortgage information disclosure, required reserves, banks' offered rates, counterfeit money detection, foreign exchange transactions, foreign exchange derivatives, foreign exchange remittances, and the correctness of reporting to the CBC, etc.

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

In 2015, in light of the CBC's target examination findings and the Financial Supervisory Commissio'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

Taking into consideration financial conditions, the amendments to relevant laws and regulations as well as the monitoring of financial institutions' operations, the CBC reviews and amends as necessary the format and content of periodical statistical data submitted by financial institutions. In 2015, developments related to off-site monitoring for the above purposes included the following:

- (1) In line with the new regime of IFRS, the reporting system and format for domestic banks, bills finance companies and credit cooperative associations were amended accordingly.
- (2) A compliance and liquidity indicator, "Liquidity Coverage Ratio (LCR) for domestic banks," was added. Assessment criteria for the coverage ratio of unsound credit assets were adjusted as well.
- (3) "Accumulated loss," "profit growth rate," and "net profit ratio" were incorporated in internal management commentaries for local branches of foreign and Mainland Chinese banks. Meanwhile, the weights and classifications of relevant assessment criteria were adjusted.

(4) The assessment criteria for the compliance indicators "credit granting ratios for members and non-members of credit departments of farmers' and fishermen's associations" were adapted to the amendment to the relevant laws and regulations.

#### Financial Institution Information Transparency

The CBC regularly compiles and publishes financial institution statistics, such as *Condition and Performance of Domestic Banks (Quarterly)* and *Major Business Statistics of Financial Institutions,* as well as the latest financial regulations. It also discloses related information on its website. As a result, operational transparency of financial institutions has strengthened, and market self-discipline has been reinforced.

#### **Financial Stability Assessment**

The CBC compiles financial soundness indicators and develops a macro model based on Basel III framework for evaluating banks' market risks, 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 2015, the ninth *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 2015, the CBC continued to actively engage in international cooperation related to financial supervision, as follows:

- (1) Participating in international meetings/conferences
  - A. The sixth SEACEN Financial Stability Forum and sixth Meeting of Deputy Governors in Charge of Financial Stability and Banking Supervision.
  - B. APEC FRTI Regional Seminar on Capital Planning and Stress Testing.
- (2) Hosting the SEACEN Seminar on Liquidity Risk Management and Supervision.
- (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. The latter was regarding the APEC Financial Regulators Training Initiative.

### 5. Payment and Settlement Systems

The CBC Interbank Funds-Transfer System (CIFS) is the backbone of Taiwan's payment system, linking payment and remittance systems operated by the Financial Information Service Co., Ltd. (FISC), the National Credit Card Center of R.O.C. (NCCC), the Taiwan Clearing House (TCH), the Taiwan Depository and Clearing Corporation (TDCC), the Taipei Exchange (TPEx), and the Taiwan Stock Exchange Corporation (TWSE), as well as the Central Government Securities Settlement System (CGSS), together to construct a comprehensive system.

In addition, the CBC monitors major payment systems based on the *Principles for Financial Market Infrastructure* released by the Bank for International Settlements (BIS) 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

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 each clearing institution.

At the end of 2015, participants of the CIFS included 69 banks, eight bills finance companies, and seven other institutions including Chunghwa Post, the TWSE, the TPEx, and the NCCC. In the year 2015, the number of transactions via the CIFS was 729,222, and the amount of funds transferred totaled NT\$524 trillion. Meanwhile, the daily average number of transactions via the CIFS reached 2,964, and the daily average amount of funds transferred was NT\$2,128.8 billion, growing by 8.02% over the previous year.

#### (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 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 1,691 branches that handled the registration of central government securities transfers at the end of 2015. During 2015, 265,000 transfers with a total amount of NT\$29.9 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 2015, 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) Supervising clearing institutions to perform regular drills on operating backup systems and implementing contingency plans in case of emergency to ensure business continuity.
- (3) Inviting the Financial Supervisory Commission and clearing institutions such as the FISC, the TDCC, and the TCH to jointly hold conferences on "Promoting Sound Operation of the Payment Systems" with themes of "Business Review and Improvement" and "Results of Self-Assessment against Principles for Financial Market Infrastructure" in April and December 2015, respectively, in order to urge clearing institutions to strengthen system governance and backup mechanisms and implement suggestions for improvement from self-assessment results.

#### **Expanding the Foreign Currency Clearing Platform**

The foreign currency clearing platform planned by the CBC and established by the FISC was launched in March 2013, aiming to strengthen financial infrastructure and facilitate the development of the financial services sector. In 2014, domestic and cross-border (including cross-strait) remittances of the US dollar and the renminbi, the payment-versus-payment (PVP) mechanism for transactions between different currencies, and the liquidity saving mechanism for foreign currency remittances were all incorporated into the platform. In 2015, functions of this platform were gradually expanded as follows:

- (1) Domestic and cross-border remittances of the Japanese yen were launched in January and May, respectively.
- (2) Domestic and cross-border remittances of the euro were both available from June.
- (3) Transactions of foreign currency bonds and bills via the DVP mode were incorporated into this platform in July.

#### Assessing Payment and Settlement Systems in Line with BIS Principles

To ensure that major payment systems meet the requirements of international standards, the CBC assessed the CIFS, the CGSS, the FISC Interbank Payment System, the foreign currency clearing platform, and the clearinghouse system in accordance with the *Principles for Financial Market Infrastructure*. The results showed that the af oresaid systems generally complied with the BIS standards.

### 6. Currency Issuance

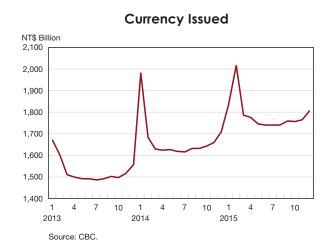
For the year 2015, the CBC conducted currency issuance with a focus on maintaining an adequate supply of currency to meet public demand, which is dependent on the level of economic activity, seasonal factors, and the development of noncash payment instruments, etc.

#### Rise in Currency Issuance in Response to Currency Demand

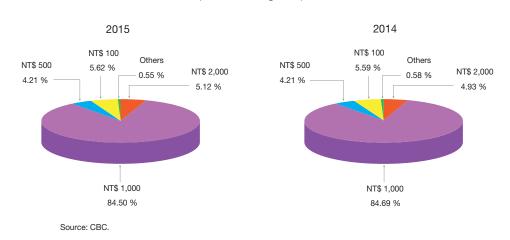
In 2015, the CBC implemented an appropriate currency issuance plan for delivering banknotes and coins in response to currency demand. The currency issued peaked at NT\$2,126.8 billion on

February 17, the day before the Lunar New Year holidays, reflecting a temporary seasonal surge in cash demand. At the year end, the outstanding amount of currency issued was NT\$1,804.6 billion, representing an increase of NT\$97.9 billion or 5.74% over the previous year end.

At the end of 2015, the composition of NT dollar banknotes in circulation by denomination was similar to the end of 2014. The NT\$1,000 note accounted for the lion's share at 84.50%, followed by the NT\$100 (5.62%) and the NT\$2,000 (5.12%) notes.



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



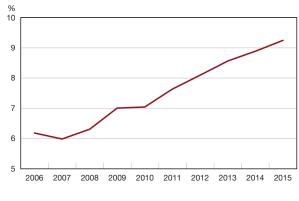
#### Currency in Circulation to GDP Ratio Increased

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 continued to rise. It stood at 9.25% in 2015, a 0.36 percentage point gain over the previous year.

#### Three 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

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



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

holidays, major international events or other significant national events. During 2015, the CBC issued a casting set of coins for the Chinese Zodiac Year of the Goat, a coin set for commemorating the 70th Anniversary of Victory in the War of Resistance Against Japan and the Retrocession of Taiwan, and the fourth coin set of the National Parks of Taiwan series - Taroko National Park.

Moreover, the CBC issued the commemorative silver coin for the 150th Anniversary of the Birth of Dr. Sun Yat-sen, Founding Father of the Republic of China.

### 7. Fiscal Agency Functions

The CBC fulfills its responsibilities as a banker to the central government as well as to other banks. As the fiscal agent of the government, the CBC offers services for the national treasury, such as 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. In order to provide convenient services for government agencies and taxpayers, the CBC delegates the handling of treasury business to 14 financial institutions and their 357 branches, including three overseas branches located in New York, Los Angeles, and Paris. In addition, there are another 4,796 tax collection agencies set in financial institutions. In 2015, the CBC received a total of NT\$3,264.3 billion in treasury deposits, an increase of NT\$107.6 billion or 3.41% over the previous year. Payments made on behalf of the national treasury were NT\$3,252.7 billion, increasing by NT\$82.7 billion or 2.61% from 2014. At the end of 2015, the TDA balance was NT\$21.7 billion, an increase of NT\$11.7 billion or 117% from a year earlier, 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 CBC or other delegated banks. However, the delegated banks are required by law to redeposit 60% of the deposits with the CBC, except those in interest-bearing accounts. At the end of 2015, the balance of central government agencies' deposits with the CBC amounted to NT\$169.5 billion, an increase of NT\$53.4 billion or 45.99% over the previous year. Deposits with other delegated banks were NT\$457.7 billion at the end of 2015, slightly increasing by NT\$2.1 billion or 0.46%. Among them, redeposits with the CBC registered NT\$11.4 billion, increasing by NT\$1.3 billion or 12.87% from the end of 2014.

#### 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 60 domestic dealers qualified to directly participate in the auctions, including 26 banks, 20 securities companies, eight bills finance companies, five insurance

companies, and Chunghwa Post.

In 2015, the CBC handled 19 issues of central government bonds in book-entry form worth NT\$605.3 billion and paid NT\$465.0 billion in principal and NT\$115.6 billion in interest for central government bonds. At the end of 2015, the outstanding amount of central government bonds was NT\$5,478.8 billion, an increase of NT\$140.3 billion or 2.63% 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 2015, the CBC handled eight issues of book-entry treasury bills with a total amount of NT\$233.7 billion. At the end of 2015, the outstanding amount of treasury bills was NT\$90 billion, a decrease of NT\$40 billion or 30.77% from the previous year end, mainly attributable to the lower borrowing needs of the government resulting from increased tax revenue.

#### Improving Operational Efficiency

To enhance operational efficiency and the effectiveness of the treasury securities auction, the CBC upgraded the functions of the Electronic Bidding System for Central Government Bonds and Treasury Bills, and the updated system went online from August 3, 2015.

### 8. Participation in International Activities

In 2015, the CBC contributed to a wide-ranging agenda of participation in international activities. As a member of various international organizations, the CBC hosts conferences, provides training courses, and actively 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). Meanwhile, the CBC strengthens its cooperation with other central banks and related institutions through meetings on macroeconomic and financial issues. By using these opportunities, the CBC establishes a collaborative network with world-renowned experts while sharing policy experience and discussing current issues with them.

The CBC is a member of SEACEN. In November 2015, the CBC attended the 51st annual conference of governors held in Manila, the Philippines, exchanging views on issues such as the challenges to regional economic growth and financial stability in the volatile international environment, the necessity of international monetary system reform, and the importance of international financial institutions in addressing regional as well as global issues and challenges. Moreover, the CBC hosted the SEACEN Seminar on Liquidity Risk Management and Supervision during November 2 to 6.

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 Busan, the Republic of Korea, during March 26 to 29, the CABEI's ordinary meeting of the Board of Governors which took place in Medellin, Colombia, on April 23 and 24, the ADB's annual meeting in Baku, Azerbaijan, during May 2 to 5, the EBRD's annual meeting of the Board of Governors held in Tbilisi, Georgia, on May 14 and 15, and the BIS annual general meeting in Basel, Switzerland, on June 27 and 28.



# Annex