

## 5. Payment and Settlement Systems

Taiwan's payment systems mainly include the Check Clearing House System (CCHS), the Interbank Remittance System (IRS), the CBC Interbank Funds-Transfer System (CIFS), and the Central Government Securities Settlement System (CGSS). Among them, the CCHS and the IRS are retail payment systems, while the CIFS and the CGSS are the two main subsystems operated by the Bank. The Bank plays a key role in Taiwan's payment systems. All these payment systems make use of banks' A reserve accounts with the Bank for final settlement. In addition to operating the CIFS and CGSS, the Bank also monitors major payment systems based on international standards to ensure sound operation of these systems.

### Funds Transfers via the CIFS

The CIFS launched in May 1995 is an on-line, large-value fund transfer system. Since September 2002, the System has been operated based on the real-time gross settlement (RTGS), under which payments are settled on a real-time basis and the banks involved are required to hold sufficient account balances with the Bank. Those who maintain transaction accounts with the Bank may directly use the CIFS to transfer funds. Payment instructions are sent over the CIFS for settling obligations on check clearing, adjusting reserve account balances, or making payments associated with interbank loans, bill transactions, and bond transactions.

At the end of 2008, participants of the CIFS included 70 banks, 10 bills finance companies, and 5 other institutions, including Chunghwa Post Co., the Taiwan Stock Exchange (TSE), and the GreTai Securities Market (GTSM), etc. For the year as a whole, the daily average value of funds transferred via the CIFS was NT\$1,120.6 billion, while the daily average number of transactions reached 3,376.

### Transactions via the CGSS

Established in September 1997, the CGSS is an RTGS system for the 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 the system and have been issued in book-entry form since then.

The registration of central government securities transfers is handled by 16 clearing banks and their 1,642 branches. In 2008, more than 797 thousand transfers with a total value of NT \$56,231 billion were processed by the system. Also, the outstanding balance of the book-entry central government bonds amounted to NT\$3,605 billion, or 99.9 percent of the total outstanding

balance of the bond market. The total transaction value of the book-entry central government bonds reached NT\$119 trillion, or 88.0 percent of the total transaction value of the entire bond market.

### **Improving and Monitoring Payment Systems**

The Bank and other government agencies have worked out a plan to improve payment and clearing processes of the securities market. Under this plan, the TSE and the GTSM are able to process net payment clearing of stocks and bonds through the CIFS. Another plan was also implemented to link the CIFS and CGSS to allow clearing banks to handle settlements on a delivery-versus-payment (DVP) basis. This system has been operating since April 14, 2008.

Based on the Core Principles for Systemically Important Payment Systems and Recommendations for Securities Settlement Systems issued by the Bank for International Settlements (BIS), the Bank monitors the payment system to maintain its safety and efficiency as one of its foremost goals. Large-value payment systems monitored by the Bank include the CIFS, the CGSS, the CCHS, and the Depository and Clearing System (DCS). The Bank also monitors interbank settlement and clearing activities involving retail payment and electronic money.

The Bank's monitoring activities include the following:

1. To require each payment system operator and payment instrument issuer to provide detailed data and information on a periodic basis regarding their operations and activities.
2. To supervise clearing institutions to make contingency plans and business continuity plans in case of emergency.
3. To invite the Financial Information Services Co., the Taiwan Depository and Clearing Corporation, and the Taiwan Clearing House to participate in the panel discussions held regularly on promoting sound operation of the payment system.
4. To manage clearing institutions based on the Clearing Institutions section in the Directions for the Central Bank of the Republic of China (Taiwan) to Govern Electronic Interbank Funds Transfer and Settlement.
5. To follow the Core Principles for Systemically Important Payment Systems of the BIS as guidance to govern and review payment systems.