

Market Infrastructure

In 2000 Hong Kong's financial infrastructure was reinforced with the implementation of a US dollar clearing system. Using this system, Hong Kong set a record in world financial history with the first synchronised settlement of a foreign exchange transaction on a Payment versus Payment (PvP) basis on 25 September 2000. Hong Kong is now able to offer real-time settlement of US dollar / Hong Kong dollar transactions without Herstatt risk. During the year, the HKMA also initiated cross-border joint cheque clearing with cities in Guangdong, introduced a set of benchmark performance criteria for market makers in Exchange Fund Bills and Notes, and began a review of retail payment systems in Hong Kong.

| Objectives |

The HKMA is committed to promoting the efficiency, integrity and resilience of Hong Kong's financial system and maintaining its competitive position in the international financial market. In pursuit of this objective, the HKMA focused attention during 2000 on the development of Hong Kong's payment and settlement systems and the local debt market.

| Achievements |

Interbank payment systems

Hong Kong's Real Time Gross Settlement (RTGS) system, implemented in 1996, continued to provide efficient and reliable settlement for Hong Kong dollar interbank payments. In 2000 the RTGS system had an average daily throughput of 11,525 CHATS¹ transactions (totalling \$307 billion in value), 210 Central MoneyMarkets Unit² (CMU) secondary market transactions (value \$24.1 billion) and 548 intraday repo transactions (value \$37.9 billion). The operation of the four daily bulk clearings for the net settlement of stock market transactions, low-value bulk electronic payment items, paper cheques and JETCO items continued to run smoothly.

US dollar clearing system

Hong Kong's US dollar clearing system was introduced in 2000 to facilitate the efficient settlement of US dollar transactions in Hong Kong during Asian hours. In March 2000, the HKMA appointed The Hongkong and Shanghai

1 The Clearing House Automated Transfer System (CHATS) is a computer-based system designed for large-value interbank payment under the RTGS system.

2 The Central MoneyMarkets Unit (CMU) is a clearing and custodial system operated by the HKMA for Exchange Fund Bills and Notes and for private sector debt papers.

Banking Corporation Limited (HSBC) to be the settlement institution for the US dollar clearing system for a franchise period of five years starting from 1 August 2000. Hong Kong Interbank Clearing Limited (HKICL) is the clearing operator for both the Hong Kong dollar and US dollar interbank payment systems.



Signing ceremony for the appointment of HSBC as the settlement institution for the US dollar clearing system in March 2000.

Phased implementation

The project was implemented in three phases.

The first phase, launched on 21 August 2000, implemented a US dollar RTGS system, the most critical component of the US dollar clearing system, which allows local financial institutions to settle US dollar transactions real time during Hong Kong business hours (0900 to 1730) instead of more than 12 hours later in New York. It also provided an interface to enable delivery versus payment (DvP) settlement of US dollar denominated products traded on Hong Kong's stock and futures markets.

The second phase, launched on 25 September 2000, provided for the settlement of US dollar/Hong Kong dollar foreign exchange transactions on a payment versus payment (PvP) basis. Hong Kong is the pioneer in implementing real-time PvP and set a ground-breaking record on 25 September 2000 by carrying out the first electronic foreign exchange PvP transaction in world financial history. The PvP device ensures that the two legs of a foreign exchange transaction are settled simultaneously, thereby eliminating Herstatt risk (the settlement risk which arises from the two legs of a foreign exchange transaction being settled in different time zones).

The final phase, launched on 18 December 2000, saw the implementation of two components. The first was the interface between the US dollar RTGS system and the CMU. This allows real-time and end-of-day DvP settlement of US dollar denominated debt securities deposited in the CMU, thereby enhancing settlement efficiency and eliminating settlement risk. It also provides for the automatic triggering of an intraday repo facility to supply US dollar liquidity against eligible securities held by a participant in the CMU. With this interface in place, the settlement risk associated with the trading of US dollar denominated debt securities cleared and deposited in the CMU has been eliminated. The services of the CMU should therefore be more attractive to both local and overseas investors and issuers.

The second component is a US dollar cheque clearing mechanism. Customers can open US dollar current accounts with banks in Hong Kong. The cheques drawn on these accounts will be settled on the day following their presentation in Hong Kong. This two-day settlement cycle compares favourably with the settlement period of approximately two weeks for US dollar cheques drawn upon banks in the US and deposited in Hong Kong. It also provides greater convenience to both retail and corporate customers in making US dollar payments. At the end of 2000, 66 banks in Hong Kong were ready to offer US dollar chequing accounts to their customers.

Usage of the system

The US dollar clearing system has operated smoothly since implementation, and has received a good response from the local and overseas banks. At the end of 2000, there were 62 direct participants and 61 indirect participants. Among the indirect participants, 24 are from overseas. Turnover has been growing gradually. By the end of 2000, the daily RTGS turnover was typically over US\$3 billion, representing over 2,000 transactions, of which between 20 and 30 formed the US dollar leg of PvP transactions accounting for around US\$0.8 to US\$1.8 billion of the total turnover value.

In addition, PvP settlement can eliminate credit risk between counterparties because it ensures that the currency sold is exchanged simultaneously with the currency bought. Thus, the application of bilateral counterparty trading limits may become significantly less important with PvP; and interbank liquidity may also be improved with the traded currencies being put to immediate use in the respective clearing system. In particular, small and medium size banks may now participate more actively in the foreign exchange market.

CMU system enhancements

As part of the preparations for the US dollar RTGS system, the CMU was upgraded in 2000 in order to facilitate clearing and settlement in different currencies on a DvP basis. As a major user of SWIFT, the CMU also upgraded its SWIFT platform to "Alliance" which is now commonly used in the financial market. This provides an alternate means of communication with the CMU to the on-line CMU terminals. The CMU also adopted a new SWIFT message format, which has become a common industry standard for settlement instructions.

Debt market development in Hong Kong

The local debt market continued to grow in 2000, backed by sustained economic recovery and strong demand for Hong Kong dollar debt from banks with ample liquidity. The value of Hong Kong dollar debt instruments outstanding at the end of 2000 was \$473 billion, compared with \$444 billion at the end of 1999. New debt issuance in 2000 registered an increase of 9% over 1999, reaching \$456 billion. Issuance of private sector debt was buttressed by increased activities by multilateral development banks (MDBs), non-MDB overseas entities, and authorized institutions, which grew by 22%, 66%, and 13%

respectively. Local corporate issues, however, declined by about 33%, reflecting a shift to bank financing.

Exchange Fund Bills and Notes Programme

The HKMA conducted a review of the local debt market, in particular the Exchange Fund Bills and Notes (EFBN) Programme. After consulting relevant market groups and market makers, the HKMA decided that there should be a more systematic assessment of the performance of market makers in the primary and secondary markets for EFBN. In September the HKMA issued a letter to all the market makers to promulgate an agreed set of objective guidelines in measuring their performance over each quarter. The three benchmark criteria would require a market maker to have at least 1.5% successful allocation in the EFBN primary market, 1.5% of the secondary market turnover, and \$500 million quarterly turnover in Exchange Fund Notes.

With a view to fostering further development of the long end of the market, and in order to sustain the EFBN yield curve, the HKMA altered slightly the maturity distribution of EFBN issuance. A portion of the short-term Exchange Fund Bills are to be gradually replaced by longer-term Exchange Fund paper with tenor of one year and beyond. And an advance issuance schedule listing prospective tenders in the following quarter is now published every three months.

Joint clearing facility for Hong Kong dollar cheques presented in Guangdong

On 25 September 2000, the HKMA announced that agreement had been reached with the Guangzhou Branch of the People's Bank of China (PBoC) on a new joint clearing facility to speed up the processing of Hong Kong dollar cheques issued by banks in Hong Kong and presented in Guangdong. This was the second agreement of its kind: a similar cheque clearing facility, established between Hong Kong and Shenzhen in January 1998, has been functioning well, processing a total of 86,426 cheques involving \$8.4 billion in 2000. The new joint clearing facility was implemented by HKICL and the Guangzhou Electronic Banking Settlement Centre with effect from 1 October 2000, and has reduced the time required for clearing Hong Kong dollar cheques presented in Guangdong from four to two working days.

Retail payment systems review

In view of the rapid evolution of retail payment systems, the HKMA announced in August 2000 the launch of a comprehensive review of retail payment systems in Hong Kong. The review examines the accessibility, costs, pricing, efficiency, competition and risks associated with various means of retail payment. In particular, the review aims to provide a better understanding of likely future trends in the development and utilisation of different retail payment channels, such as electronic money.

| Plans for 2001 |

Work in 2001 on clearing and payment systems will concentrate on two areas:

First, with regard to payment arrangements for foreign currencies, we shall continue to promote appropriate usage of the US dollar clearing system and the development of associated US dollar denominated products. A number of minor technical enhancements to the US dollar clearing procedures are already in train in response to market feedback. We shall also be watchful for any indications of interest in possible replication of these facilities for other currencies.

Secondly, we shall continue to develop the CMU to provide more sophisticated clearing and custodial facilities for the region, including linkages with regional and international central securities depositories.

In addition to these tasks, the HKMA will continue to work closely with relevant entities in the government and with market participants to facilitate development of the local debt market. In this regard, the Hong Kong Institute for Monetary Research (HKIMR) has sponsored a fundamental study of the taxation of financial intermediation in Hong Kong. The study will review, among other issues, the taxation of Hong Kong dollar debt instruments.

For the EFBN Programme, a regular review of the performance of individual market makers has now been established. The HKMA will continue to assess their performance with a view to ensuring that individual market makers are sufficiently active. On the basis of experience with this review procedure, the HKMA may also consider the introduction of a set of objective criteria for the future guidance of market participants wishing to apply to become market makers.

We intend to complete the review of retail payment systems by mid-2001 and to consider the policy issues that may arise.