Market Infrastructure

Hong Kong's competitiveness as an international financial centre depends on a robust and efficient market infrastructure: the HKMA is mandated to develop and improve this infrastructure. Nineteen-ninety-eight saw continued improvements in the payment and settlement system, further development of Hong Kong's debt market, and important advances in the secondary mortgage market.

Objectives

The HKMA is committed to promoting the efficiency, integrity and development of Hong Kong's financial system, particularly the payment and settlement arrangements. In pursuit of this objective, we have made continued efforts to enhance the efficiency and robustness of the payment and settlement system and to promote the development of the debt market and the secondary mortgage market.

Achievements

Interbank payment system

The HKMA successfully introduced a new interbank payment system based on Real Time Gross Settlement (RTGS) principles in December 1996. Over the past two years, the system has provided smooth and efficient settlements for interbank payments. With a view to further improving the reliability of the system, the HKMA has been working closely with Hong Kong Interbank Clearing Limited (HKICL) to

upgrade the back-up facilities. A "hot" off-site back-up computer centre for HKICL's operating system started operation in August 1998.

In 1998 the RTGS system processed an average daily throughput of 12,528 CHATS transactions (involving \$299 bn), 129 Central Moneymarkets Unit (CMU) secondary market transactions (involving \$9 bn) and 566 intraday repo transactions (involving \$28 bn). The processing of the four daily bulk clearing runs for the net settlement for stock market transactions, lowvalue bulk electronic payment items, paper cheques and JETCO has also been smooth. The average processing time for each transaction is nine minutes for the clearing of cheques, three minutes for stock market transactions, three minutes for low-value bulk electronic payment items, and two minutes for JETCO. The Liquidity Adjustment Window, which was designed as a fall-back intraday facility for bulk clearing, was triggered only 14 times. This shows that banks were generally managing their intraday liquidity reasonably well.

Delivery versus Payment facility for shares transactions

Building upon the capability of the RTGS system, the HKMA has extended the Delivery versus Payment (DvP) facility for debt securities transactions to shares transactions. A link between HKICL and the Central Clearing and Settlement System (CCASS), a clearing system for shares operated by Hong Kong Securities and Clearing Corporation, was set up in May 1998 to provide DvP facility for shares in order to reduce settlement risks and improve settlement efficiency.



Joint clearing facility for Hong Kong dollar cheques presented in Shenzhen

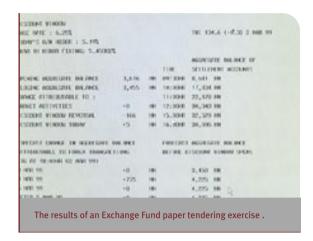
To speed up the processing of Hong Kong dollar cheques drawn on banks in Hong Kong and presented in Shenzhen for clearing, the HKMA and the Shenzhen Branch of the People's Bank of China entered into a Memorandum of Understanding on a Joint Clearing Facility. Since commencing operation on 5 January 1998, the Facility has significantly reduced the processing time, from 14 to two days, thereby minimizing the settlement risk. Reflecting the

growing demand for the Facility, the average daily number of cheques processed increased from 232 in the first half of the year to 323 in the second half.

Debt market development in Hong Kong

The local debt market expanded further in 1998, with the outstanding amount of Hong Kong debt securities (including Exchange Fund Bills and Notes) rising from \$345.5 bn at the end of 1997 to \$390.1 bn at the end of 1998: this represents an increase of 12.9%. There was a significant pick-up in the debt issues by multilateral agencies, mainly at the shorter end. At the end of 1998, debt issues by multilateral agencies accounted for 17.4% of the total outstanding amount. Another 57.6% was taken up by private sector debt securities. Exchange Fund Bills and Notes accounted for the remaining 25% (or \$97.5 bn).

As one of the measures to strengthen the currency board arrangements, the HKMA has decided to increase the outstanding issuance of Exchange Fund Bills and Notes only when there is an inflow of funds to provide directly corresponding foreign currency backing. Existing issues are rolled over as they mature, although the replacement issue may not necessarily be of the same term to maturity. The HKMA has also decided that new debt issues, other than Exchange Fund paper, will no longer be accepted as discountable securities at the Discount Window. Although in the short term these measures may slightly restrain the development of the debt market, the HKMA is committed to working closely with market practitioners to promote longer-term development through improvements in market infrastructure and other initiatives.



Expansion of bilateral linkages with other Central Securities Depositories (CSDs) in the region

Following the establishment of a linkage with the CSD in Australia in December 1997, the CMU set up a securities link with Austraclear New Zealand System, a clearing system operated by the Reserve Bank of New Zealand (RBNZ), in April 1998. The bilateral linkage was established on a reciprocal basis. Both the HKMA and the RBNZ have become members of each other's clearing system. This has facilitated cross-border DvP settlement of debt securities between Hong Kong and New Zealand. The reduction in settlement risks and the improvement in settlement efficiency should help enlarge the investor base of the debt markets in the respective economies.

The traffic of bilateral linkages with Australia and New Zealand increased steadily during the second half of 1998. The total holdings of New Zealand Government Notes in the CMU rose from NZ\$247 mn at the end of July to NZ\$359 mn at the end of December. The holdings of Australian Government

Notes increased from A\$190 mn to A\$259 mn over the same period.

Note Issuance Programme for the Hong Kong Mortgage Corporation Limited

Following the Note Issuance Programmes set up for the MTRC in 1995 and the Airport Authority in 1997, the HKMA arranged a similar programme for the Hong Kong Mortgage Corporation Ltd (HKMC) in January 1998. Under this Programme, the HKMA acts as the arranger, custodian, agent and operator for the debt issues. The securities are covered by the existing market making arrangements for Exchange Fund Bills and Notes, which should help to improve their secondary market liquidity. The first issue under the HKMC Note Issuance Programme was successfully launched in May 1998.

The Hong Kong Mortgage Corporation Limited

Nineteen-ninety-eight was the first full year of operation of the HKMC, which was established in 1997 to promote the development of the secondary mortgage market. The Corporation has built a solid foundation for its core business. An extensive network of 31 Approved Seller/Servicers with a combined market share of over 80% of the primary residential mortgage market has been established. Aided by the innovative Forward Commitment Facility and the Scheme for Promoting Fixed Rate Mortgages, the Corporation achieved its target of building a mortgage portfolio of over \$11 bn by the end of 1998. Given its prudent purchasing criteria

and intensive due diligence procedures, the HKMC's mortgage portfolio has proved to be of good quality: as at 31 December 1998 there were no loans overdue for more than 90 days.

On the funding side, despite a volatile interest rate environment, the HKMC successfully set up two Hong Kong dollar bond issuance programmes in 1998. The bonds have attracted strong interest from both financial institutions and institutional investors. By the end of December, the HKMC had launched six issues under the Note Issuance Programme and nine issues under the Debt Issuance Programme, raising a total of \$5.2 bn. This made it the third most active corporate issuer in the Hong Kong dollar debt market for the year.

Profit after tax for the year 1998 amounted to \$106 mn. This produced an annualised return on average shareholder's equity of 7.9% and an annualised return on average assets of 2.1%. With effective cost control, the cost-to-income ratio was kept at a relatively low level of 33.9%, compared with the average ratio of 48.2% (at June 1998) for the banking industry.

Challenges

Further improvements in the payment system

The HKMA is undertaking a number of initiatives to further enhance the efficiency and robustness of the payment system. We are currently developing a crosscurrency payment matching processor, which is a form of software designed to facilitate the development of the Payment versus Payment (PvP) facility. This facility will effectively reduce settlement risk, known as Herstatt risk, arising from foreign exchange transactions.

To reduce the pressure on the payment system caused by heavy IPO subscriptions and to streamline the process of IPO applications, the HKMA has been investigating the possible use of electronic means for IPO applications, using a Payment by Phone Service. Detailed discussions are under way with the Securities and Futures Commission, the HKAB and the Stock Exchange of Hong Kong.

With the successful introduction of the Joint Cheque Clearing Facility with Shenzhen, the HKMA is studying the possibility of extending the Facility to other cities in Mainland China where there may be a significant need to clear Hong Kong dollar cheques.

Development of the debt market

The Asian financial turmoil has underscored the need for a mature debt market to diversify funding sources and to reduce maturity mismatch by channelling long-term savings to long-term investments. The current real interest rate environment is also conducive to an expansion of the investor base, especially among retail investors. In meeting the challenges of debt market development, the HKMA continues to pursue a number of initiatives to further improve the market infrastructure and expand the investor base.

Listing of Exchange Fund paper on the Stock Exchange

With a view to facilitating the access of retail investors to the Exchange Fund Notes market, the HKMA is planning to list the Notes on the Stock Exchange of Hong Kong. Trading on the Stock Exchange is expected to commence in the second half of 1999.

Development of cross-margining facilities among clearing houses of shares, futures and options

In order to assist liquidity management by participants in the stock options and futures exchange, the Stock Exchange Options Clearing House, the Hong Kong Futures Exchange Clearing Corporation Ltd and the CMU are planning for Exchange Fund paper to be usable as common margin collateral for trading in stock options and futures. Both clearing houses will become Recognised Dealers of Exchange Fund paper. This will allow them to hold and settle Exchange Fund paper on behalf of their members. Accordingly, their members will be able to use Exchange Fund paper as collateral in addition to cash.

Expansion of bilateral linkages between the CMU and other CSDs in the region

Following the successful link-up with the CSDs in Australia and New Zealand, the HKMA is discussing with Mainland authorities the possible establishment of a bilateral linkage with the Government Securities Book-entry System, a clearing system of debt securities operated by the China Government Securities Depository Trust & Clearing Co. Ltd. The CMU is also exploring the feasibility of setting up a securities link with the Korea Securities Depository.

The HKMC's Mortgage Insurance Programme

On 3 December 1998, the Board of Directors of the HKMC gave its approval in principle for the Corporation, in conjunction with mortgage reinsurers, to launch a Mortgage Insurance Programme that will enable home buyers to secure mortgage loans of up to 85% of the loan-to-value ratio. The Programme should be beneficial to home buyers, banks, the HKMC and the insurance industry. Under the Programme, the HKMC will provide insurance at a fee to the lending bank (which has to be an Approved Seller of the HKMC) for an amount of up to 15% of the value of the property. To hedge the risk, the HKMC will reinsure the exposure with Approved Reinsurers on a back-to-back basis.