



## Development of Market Infrastructure

*One of the main functions of the Monetary Authority is to promote the efficiency, integrity and development of the financial system, particularly payment and settlement arrangements. In 1994, the Monetary Authority pursued a number of important initiatives to reform the interbank payment and settlement system and to promote the further development of the HK dollar debt market.*

### Interbank payment and settlement system

The Monetary Authority has been working closely with the banking industry to ensure that Hong Kong has an efficient and robust payment system, an essential market infrastructure for Hong Kong as an international financial centre. Good progress was made in 1994. In January, the Monetary Authority's Working Party on Payment and Settlement System recommended that Hong Kong should move to RTGS as soon as possible. Having accepted the Working Party's recommendation, the HKAB commissioned in June a Project Coordinator to undertake the RTGS Feasibility Study. On 31 May, a Committee on Payment System, chaired by the Monetary Authority with representatives from leading banks in Hong Kong, was set up to provide policy input on the implementation of RTGS in Hong Kong.

The main findings and recommendations of the Feasibility Study, which took full account of the advice and views of the Committee on Payment System, were approved

by the EFAC and the HKAB Committee in December. The Study's main conclusion is that it would be feasible to implement the RTGS project in phases beginning in February 1996 for completion by end-1996. It is also recommended that Hong Kong should adopt a new RTGS system with the following core features :

- (a) compliance with international standards;
- (b) final settlement across the books of the Monetary Authority;
- (c) single tier system in which all licensed banks would open clearing accounts with the Monetary Authority;
- (d) seamless interface with the CMU operated by the Monetary Authority to enable the banks to obtain intraday liquidity through same-day Repurchase Agreement to fund their clearing account payments; and
- (e) allowance for domestic and international linkages to facilitate real time delivery versus payment (DvP) and real time payment versus payment (PvP).

The report also recommends the establishment of a new clearing and settlement company to be jointly owned by the Monetary Authority and HKAB. Financial liabilities of this new company would be guaranteed by the Monetary Authority and the three continuing members of HKAB. The ownership and management structure for the new payment system in RTGS environment would need to be put in place quickly and effectively, having regard to the need to establish real time PVP links with the US Fedwire when it lengthens its operating hours from 12 to 18 hours in 1997 and with China's National Automated Payment System when it implements RTGS in 1996.

The new clearing and settlement company is expected to be set up in the first half of 1995. A project team comprising the staff of Monetary Authority, HKAB, the Project Coordinator and software development experts from HSBC and other consultants began work in January 1995.

### Development of debt market

The Monetary Authority plays an important role in promoting the

development of Hong Kong's debt market. Firstly, the Monetary Authority supplies top quality, highly liquid paper to the market through the Exchange Fund Bills and Notes Programme, which was first introduced in 1990 to provide a money market instrument to facilitate monetary management. The programme has established a benchmark yield curve for HK dollar debt paper, greatly facilitating pricing by other issuers. Secondly, the Monetary Authority has improved the market infrastructure through setting up an efficient and robust central clearing and custodian system for HK dollar debt securities.

### Benchmark yield curve extended

There were two important developments in 1994. In July, the fourth issue of the three-year Exchange Fund Notes, the first to mature after 1 July 1997, was tendered. The Notes were 4.5 times oversubscribed and the average accepted yield was 14 bp above the third issue, which had exactly the same spread above the second issue. This provided a firm indication that the market did not demand any additional premium even though the money borrowed is for repayment after the transfer of sovereignty on 1 July 1997. In September, the Monetary Authority launched the first issue of 5-year Exchange Fund Notes. Notwithstanding a rising interest rate environment, the issue was 2.1 times oversubscribed. The average accepted yield, at 7.68%, was only

37 bp above 5-year US Treasury notes and was some 90 bp below the HK dollar papers issued by some AAA-rated multilateral agencies. This provided stronger evidence that the market had largely discounted the risk, if any, associated with the transfer of sovereignty in 1997 as the repayment falls due two years thereafter. There is now a smooth benchmark yield curve running up to the five-year area, with a narrow spread above the US Treasury notes (Chart 1).

The outstanding amount of Exchange Fund Bills and Notes increased by HK\$23.7 bn in 1994 to HK\$52.3 bn at the end of the year. This rise was due to an increase in the issue size of Exchange Fund Bills and the issue of

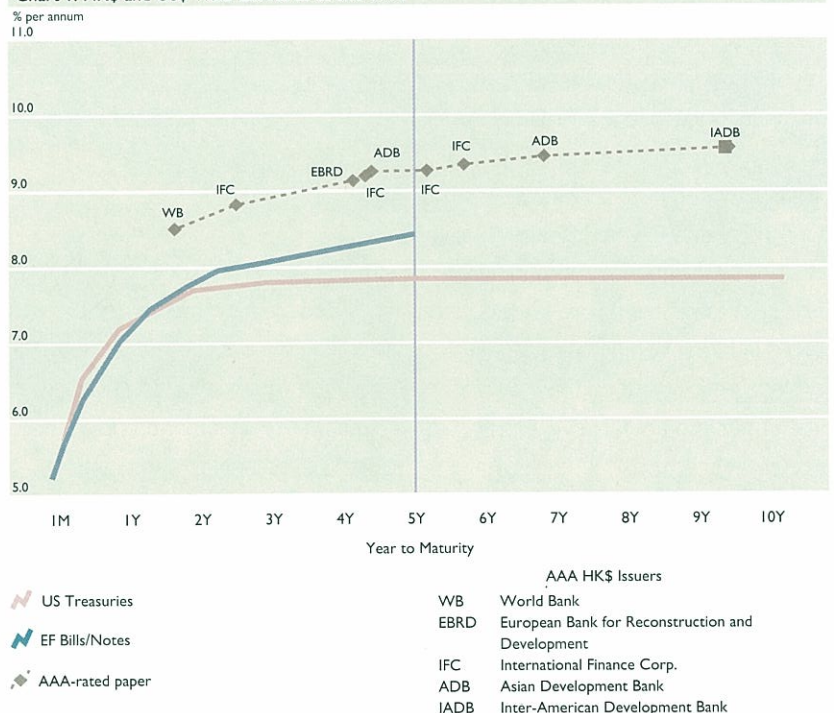
additional Exchange Fund Notes (Chart 2).

### Debt securities by other issuers

Apart from the rapid development in the Exchange Fund Bills and Notes Programme, there was a record level of debt issuance in Hong Kong in 1994. For the year as a whole, about HK\$60.1 bn of HK dollar paper (excluding Exchange Fund Bills and Notes) were issued. This was 2.6 times the amount in 1993. Under a rising interest rate environment, an estimated 70% of the issues launched in 1994 were arranged on floating rate terms.

Contributing to a surge in issue activities was a significant pick-up in the issue of NCDs by authorised

Chart 1: HK\$ and US\$ Yield Curves as at end-1994

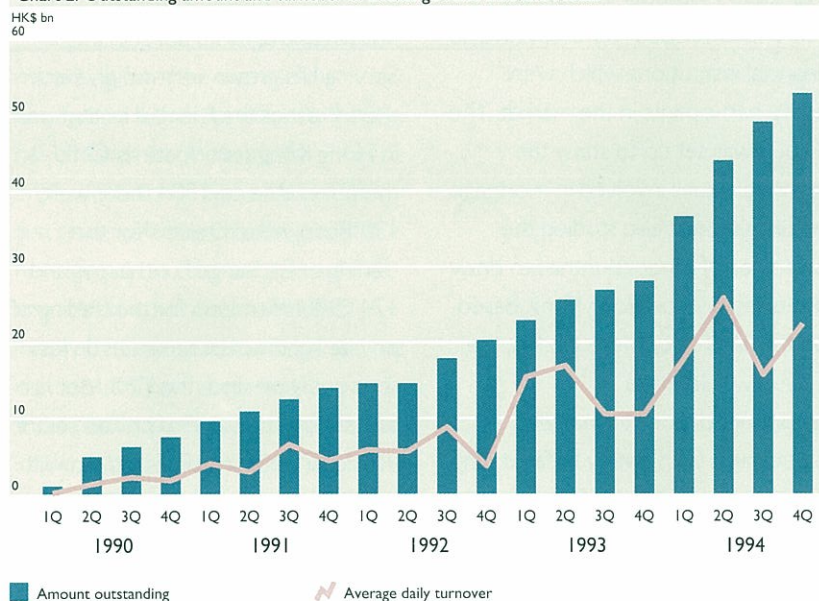


institutions. Outstanding HK dollar NCDs rose by 92% during 1994 to HK\$64.2 bn at the end of the year. Even some local banks with a strong deposit base tapped HK dollar funds through the debt market, probably to meet the expected funding needs of some major borrowing programmes. Besides, some authorised institutions secured longer-term funds to reduce the maturity mismatch in their liabilities and assets. A significant proportion of the floating rate CDs was reportedly held by foreign bank branches wishing to build up their HK dollar assets. Thus to some extent the NCD market represents an extension of the HK dollar interbank market at the longer end. Of the total outstanding HK dollar denominated NCDs at end-1994, 56% were held by authorised institutions, with the balance being held outside the local banking sector.

Another notable development in the HK dollar debt market was an increase in issue activity by corporate borrowers. There were no fewer than five major corporate issues amounting to HK\$5.0 bn in 1994, with individual issue size ranging from HK\$500 mn to HK\$2.3 bn. This indicates that the local debt market is developing into a major funding avenue for both financial institutions and corporates.

Multilateral agencies continued to participate actively in the HK dollar debt market. Eight issues were launched by these AAA-rated borrowers in 1994 (including three

Chart 2: Outstanding amount and turnover of Exchange Fund Bills and Notes



issues by IFC, two issues each by EBRD and Nordic Investment Bank and one issue by IADB). The combined issue size amounted to around HK\$8 bn. This brought the total outstanding HK dollar issued by multilateral agencies to HK\$11 bn at the year end.

In addition to HK dollar debt securities, there were more than 40 foreign currency denominated issues launched in Hong Kong in 1994, involving a total amount of HK\$42.2 bn, compared to HK\$62.2 bn in 1993. While the US dollar remained the predominant currency in these issues, a considerable proportion of the paper was denominated in regional currencies such as the Thai Baht (Table 1).

About HK\$278 bn of foreign currency denominated paper, mainly

for global issue, were newly listed on the Stock Exchange of Hong Kong in 1994.

### Mortgage securitisation

A recent development in the Hong Kong debt market is the issue of MBS. With a substantial pool of residential mortgage loans (of HK\$257.5 bn as at end-1994), there are fertile grounds for mortgage securitisation in Hong Kong.

Four issues of MBS were launched in 1994. Of these, three involved mortgage loans originated by banks and the other involved loans originated by an affiliated company of a property developer. The total issue size was HK\$2.95 bn. The senior tranches of two of these issues were rated.

An Informal Group on the Secondary Mortgage Market was formed by the

Monetary Authority in February 1994. It comprised representatives of financial institutions which were active participants in the market. The Group was set up to study the technical issues involved in mortgage securitisation. It also studied the examples of other countries to draw useful lessons for Hong Kong. Based on the findings of these studies, the Group would make recommendations to market participants with a view to facilitating healthy development of the market.

The Informal Group has set up two sub-groups: one to study secondary market liquidity in MBS and the other to study legal issues. The Group also conducted a survey to gauge the characteristics and performance of residential mortgages in Hong Kong. The survey findings revealed that residential mortgage loans have performed well, with very low default or delinquent rates. The average ratio of outstanding loans to valuation (at origination or refinancing), at 53.3%, was at a prudent level relative to international standards.

### CMU Service

The CMU operated by the Monetary Authority is the central clearing and settlement system for HK dollar debt securities. It was set up more than four years ago to clear the Exchange Fund Bills. Encouraged by the highly successful Exchange Fund Bills and Notes programme, the CMU extended its clearing facility and service to private sector debt

securities at the beginning of 1994. Known as the CMU Service, the Service has grown very rapidly since then. Most of the financial institutions in Hong Kong participate as CMU members. At end-1994 there were 133 Recognised Dealers for the trading of Exchange Fund paper and 174 CMU Members for the trading of private sector debt securities. In less than one year since the CMU Service was set up, the value of private sector HK dollar debt securities lodged with the CMU Service reached HK\$31 bn. The total outstanding, including Exchange Fund Bills and Notes, was HK\$83.2 bn.

Since its establishment, the CMU Service has introduced a number of enhancement measures designed to make the Service more comprehensive and user friendly. Starting from 1 October, the CMU offers a paying agent function as an optional service available to members. In December, the CMU established linkages with both Euroclear and Cedel, the two largest international clearing systems in the

world. These links, the first of their kind in East Asia, enable overseas investors and traders easy access to the HK dollar debt market.

### Recent initiatives to promote debt market development

With a view to improving monetary management and enhancing the further development of the local debt paper, the Monetary Authority has broadened the scope of eligible Repo securities for discounting under the Liquidity Adjustment Facility since March 1994. In addition to Exchange Fund Bills and Notes, certain high quality, marketable HK dollar denominated paper which are lodged with and cleared through the CMU Service are in principle accepted.

As eligible Repo securities are useful instruments for banks to manage their liquidity positions, the demand from banks for these papers will increase. This will in turn lead to more HK dollar debt issues to fill the market appetite. Up to end-1994, three issues were accepted by the Monetary Authority as eligible Repo

**Table I: Funds Raised in the HK Debt Market in 1994 (a)**

| HK\$mn                              | Foreign |          | Total   |
|-------------------------------------|---------|----------|---------|
|                                     | HK\$    | Currency |         |
| Negotiable Certificates of Deposits | 46,799  | 19,358   | 66,157  |
| Bonds and Notes (b)                 | 13,272  | 22,842   | 36,114  |
| Total (c)                           | 60,071  | 42,200   | 102,271 |

(a) The table is compiled largely based on debt securities reported to the Securities and Futures Commission and the Hong Kong Stock Exchange Ltd.

(b) This category includes debt securities listed on the Hong Kong Stock Exchange (excluding foreign currency denominated global issues), bonds issued by multilateral agencies and other corporations.

(c) These figures do not include Exchange Fund Bills and Notes.

securities. They included HSBC's FRCD of HK\$3.2 bn, Wharf Treasury's FRN of HK\$2.3 bn and Standard Chartered Bank's FRCD of HK\$2.5 bn.

In another move, the Monetary Authority finalised the arrangement for an extension of the market making system for the Exchange Fund paper to the HK dollar debt instruments issued by the MTRC. The arrangement took the form of a dedicated MTRC Note Issuance Programme, with the Monetary Authority acting as the issuing, paying, custodian and clearing agent. With the market-making system in place and with the paper eligible for discounting under the Liquidity Adjustment Facility, trading of the MTRC paper in the secondary market is expected to be liquid. This would in turn enable the MTRC to borrow HK dollar funds at a lower cost. The fact that the MTRC is interested in issuing paper with maturities as long as ten years also helps to further extend the benchmark yield curve of HK dollar debt.

In anticipation of the inclusion of the MTRC paper in the market making

system, and with a view to strengthening the management of the risk arising from the short-selling arrangement, the Monetary Authority has devised new measures for implementation in two phases. The first phase, which entails the use of a new formula to calculate the cushion required to cover the market risk incurred by the system arising from the maturity mismatch between long and short positions of a market maker, was implemented in September. The second phase, which requires a market maker to enter into a Sale and Repurchase Agreement with the Monetary Authority to purchase the relevant securities to cover its short position, will be implemented as and when the MTRC paper are brought into the market-making system.

Besides the risk management device for short-selling, the clearing and settlement for Exchange Fund paper has adopted a more robust means of relaying transfer instructions by using SWIFT since May. By end-1994, about 75% of the market makers and 80% of the transfer instructions for Exchange Fund paper used the SWIFT system for sending transfer instructions to the CMU.



Cupro-nickel \$1 coin, 1960. The coin, which was the first Hong Kong one dollar coin since the silver dollar of 1866-68, had a new design depicting a crowned lion, the territory's heraldic crest.

This brass 10 cent coin was part of the first phase of coins of Queen Elizabeth II, 1955.

Hustle and bustle in the Central district in the 1960s.