

Monetary Stability

The linked exchange rate system, which maintains the external value of the Hong Kong dollar at the rate of HK\$7.8 to the US dollar, is one of the linchpins of Hong Kong's externally oriented economy. During a year of continuing regional turbulence, the Hong Kong dollar remained stable in the face of speculative attacks. A number of important technical refinements to the currency board system improved the working of Hong Kong's machinery for maintaining currency stability.

Objectives

The central monetary policy objective in Hong Kong is currency stability. This is defined in terms of a stable external value of the Hong Kong dollar against the US dollar under the linked exchange rate system. Since its introduction in 1983, the link has been an important monetary anchor for Hong Kong, and has buttressed confidence in the Hong Kong dollar and Hong Kong dollar assets against a turbulent external environment.

Hong Kong's linked exchange rate system is, in technical terms, a currency board system. A core principle of this system is that any change in the monetary base has to be matched by a corresponding change in foreign currency reserves. This backing requirement builds in an automatic interest rate adjustment mechanism to ensure exchange rate stability. When there is a net outflow of funds, the HKMA passively buys Hong Kong dollars. This leads to a contraction in the monetary base and hence a rise in interest rates, creating the conditions that help counteract the original outflow. Conversely, when

there is a net inflow of funds, the HKMA passively sells Hong Kong dollars for US dollars. The monetary base expands and interest rates fall, which helps to stem the original inflow.

While adhering to the core principle of the currency board system, the HKMA has introduced measures over the past years to modernise the arrangements in the light of changing market circumstances and new technology. We shall continue our efforts to review and refine our monetary arrangements with a view to further improving their robustness and resilience.

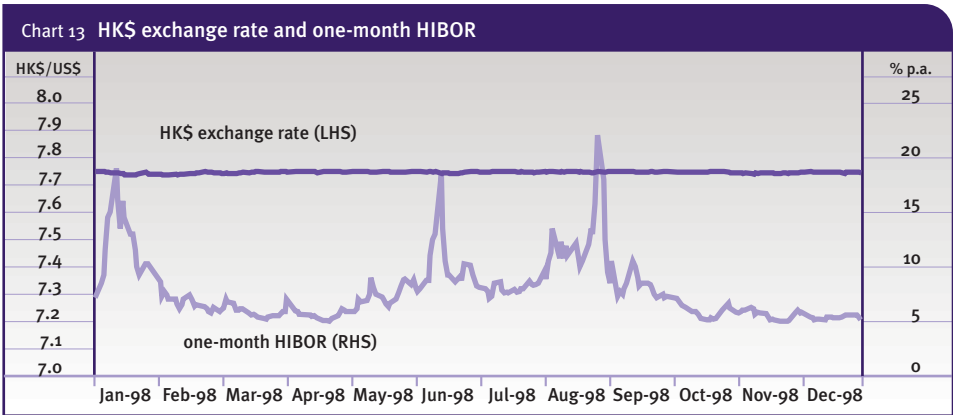
Achievements

The Hong Kong dollar experienced a turbulent period in 1998. The financial turmoil that erupted in Thailand in mid-1997 precipitated turbulence in markets in all of East Asia, Russia, Latin America and to some extent the US and Europe. Amid external shocks and adjustments in the domestic economy, the Hong Kong dollar came under intense speculative pressure on three occasions - in January, June and August. Facilitated by the open and predictable

nature of our monetary arrangements, speculative activity escalated, from typical forward sales of the Hong Kong dollar in the earlier episodes, to a full-blown attack across the currency, money, stock and futures markets (the "double market play") in August. Against the background of evidence that speculation had turned into a form of manipulation that was distorting the proper functioning of the markets, the government mounted operations in the stock and futures markets to restore market order in the second half of August. The HKMA followed through in September with technical measures to strengthen the currency board arrangements and fortify the system against market manipulation. These measures, together with a more benign external environment, led to improved market sentiment in the latter part of 1998, as evidenced by a significant narrowing of the differential between Hong Kong dollar and US dollar interest rates toward the end of the year. The Hong Kong dollar exchange rate remained very stable against the US dollar throughout 1998, moving within a narrow range of 7.736 to 7.750 (Chart 13).

The January and June episodes

Following revelations about financial problems in Korea and Japan towards the end of 1997 and the sharp depreciation of the Indonesian rupiah in early January 1998, selling pressure intensified in the major regional currency and stock markets in Asia, including Hong Kong, during the first two weeks of January. The HKMA passively bought Hong Kong dollars, as a result of which interbank liquidity shrank and interbank interest rates rose. Overnight and one-month HIBORs firmed up to 13% and 19% respectively on 12 January. The interest rate differential between the one-month HIBOR and its US dollar counterpart widened to over 1300 bp on the same day. The shortage of interbank liquidity and the increase in interest rates stemmed the outflow of funds. On 12 January, reflecting the surge in interbank rates, the savings deposit rate governed by the Interest Rate Rules (IRR) of the Hong Kong Association of Banks (HKAB) and the best lending rate quoted by major banks were adjusted upwards by 75 bp. As the selling pressure gradually subsided from mid-January, interbank interest rates



started to ease. The differential between one-month HIBOR and the corresponding US dollar interest rate narrowed to below 190 bp in early February.

Speculative pressures re-emerged in mid-June, when a weakening of the Japanese yen to an eight-year low of 146 yen per US dollar weighed on regional financial markets. The outflow of funds was again halted by a reduction in interbank liquidity and a firming up of Hong Kong dollar interest rates. The one-month HIBOR increased to 18.5% on 15 June, but quickly eased on the back of a recovery in the Japanese yen. Compared with the October 1997 episode, the magnitude and duration of the interest rate hikes in January and June 1998 were much reduced. The clarification of the definition of "repeated borrowing" in access to the Liquidity Adjustment Facility in November 1997 helped to prevent an overshooting of markets to a sudden shrinkage in interbank liquidity. Furthermore, starting from early June 1998, the forecast changes in the Aggregate Balance (which is the sum of the balances in the clearing accounts maintained by licensed banks with the HKMA for settling interbank payments and payments between banks and the HKMA) attributable to the foreign exchange transactions of the HKMA were published almost on a real-time basis. This enabled market participants to anticipate changes in liquidity conditions in the interbank market and to respond accordingly, facilitating a more efficient and orderly adjustment in interest rates.

The August episode

Already in the first half of the year, some speculative funds had begun to position themselves for a "double market play" to take advantage of the predictable nature of the interest rate response under the currency board arrangements. Specifically, at times when Hong Kong dollar interest rates were relatively stable, they borrowed Hong Kong dollars. One vehicle for such borrowing was through currency swaps associated with the issuance of Hong Kong dollar debt securities by multilateral agencies: the combined issuance of such paper was around \$30 billion in the first seven months of 1998. At the same time, speculative funds built up substantial short positions in the stock and futures markets in anticipation of a fall in stock prices when interest rates rose in response to selling pressures on the Hong Kong dollar.

A large-scale attack was launched across Hong Kong's financial markets in early August, when external conditions were deteriorating as a result of growing instability in Russia and Latin America. There were also widespread rumours of an imminent RMB devaluation and the abandonment of the linked exchange rate system in Hong Kong. The selling pressure on the Hong Kong dollar was far greater than in earlier episodes. Trading in stock index futures grew sharply and disproportionately. Gross Open Interest in spot Hang Seng Index futures rose from 70,000 contracts in June to some 92,000 contracts in early August.

The sale of Hong Kong dollars in early August did not, however, lead to a contraction in the monetary base. The months of June to October are the usual "deficit" season for the Treasury, during which there are sizable net drawdowns from the Exchange Fund by the Treasury to cover government expenses. To fund the actual and anticipated drawdowns by the Treasury in 1998, the HKMA switched some of its foreign currency reserves into Hong Kong dollars. This helped to counteract the selling pressure on the Hong Kong dollar, leaving interbank liquidity unchanged. Interbank interest rates only firmed slightly in early August, with overnight and one-month interbank interest rates moving around 6-7 % and 10-11 % respectively.

Shortly before the long weekend in mid-August, selling pressure on the Hong Kong dollar intensified. To frustrate the double market play, which posed significant risks to systemic stability, the Government decided to mount operations in the stock and futures markets in the latter half of August, purchasing the constituent stocks of the Hang Seng Index and acquiring Hang Seng Index futures contracts to counteract market manipulation.

Measures to strengthen currency board operations

The HKMA followed through on these operations with a package of technical measures to strengthen the currency board arrangements and fortify the system against market manipulation. The package had two major provisions: a Convertibility Undertaking to demonstrate our strong commitment to the link, and a bigger cushion of liquidity through

the Discount Window to address the problem of excessive interest rate volatility attributable to a small Aggregate Balance.



Chief Executive Joseph Yam briefs the press on the seven technical measures introduced in September to strengthen the currency board arrangements.

Under the Convertibility Undertaking, the HKMA provides a clear undertaking to all licensed banks in Hong Kong to convert Hong Kong dollars in their clearing accounts maintained with the HKMA into US dollars at a fixed exchange rate - initially HK\$7.75 to US\$1. Through the Discount Window (which replaces the previous Liquidity Adjustment Facility), banks are allowed unrestricted access to discount window borrowing in respect of repo transactions involving Exchange Fund Bills and Notes, which are fully backed by US dollars. A two-tier Discount Rate enables the interest rate adjustment mechanism to kick in appropriately when there is a significant outflow of capital.

The new measures were put to the test during brief periods of fund outflows in mid-September and late October. In the former incident, market anxiety over a reportedly imminent move of the exchange rate under the Convertibility Undertaking in respect of the Aggregate Balance from 7.75 to 7.80 triggered a significant outflow of Hong Kong dollars on

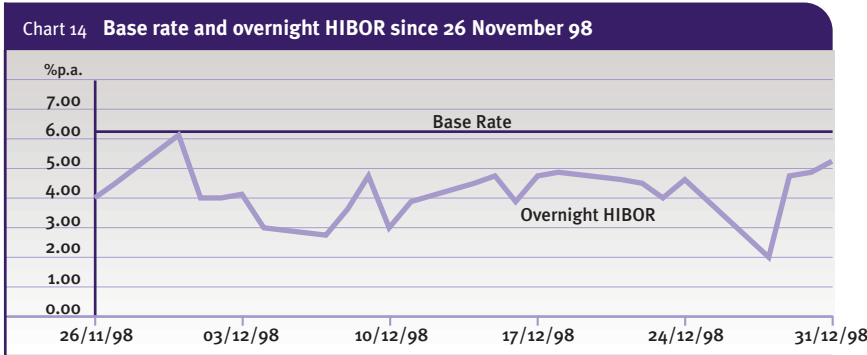
14 September. The other test occurred in late October, when market participants switched out of the Hong Kong dollar, as short-term interest rates fell below corresponding US dollar interest rates. In both incidents the Aggregate Balance shrank substantially. Helped, however, by a greater assurance of day-end liquidity through the Discount Window, the money market reacted in a more orderly manner. Interbank interest rates firmed up only moderately and eased quickly. The more moderate interest rate adjustment did not compromise the functioning of the currency board arrangements, since the outflow of funds was promptly stemmed when the interest rate adjustment started to take effect.

To allay market concerns about any sudden move of the exchange rate under the Convertibility Undertaking from 7.75 to 7.80, which is the rate applicable for the issue and redemption of Certificates of Indebtedness, the HKMA announced in late November a schedule for moving the exchange rate under the Convertibility Undertaking by one pip every calendar day, starting on 1 April 1999. It will take 500 calendar days for the rate to reach 7.80, where it will remain thereafter. The HKMA has also

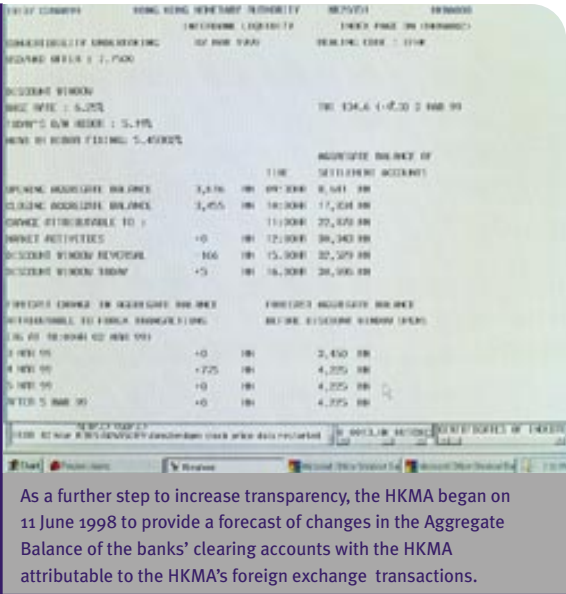
announced the methodology of determining the Base Rate, which is the foundation upon which the Discount Rate is computed. The Base Rate will be set with reference to the five-day average of the overnight and one-month HIBORs, with a floor set at the US Fed Funds Target Rate plus an adjustment factor. Since November, the adjustment factor has been set at 150 bp (Chart 14).

Greater transparency in currency board operations

As an important part of its measures to strengthen the currency board system, the HKMA made significant efforts in 1998 to increase the transparency of currency board operations. In addition to the disclosure, since June 1998, of the forecast level of the Aggregate Balance, the size and components of the monetary base have, since November 1998, been published on a daily basis. Starting from its November meeting, records of the meetings of the EFAC Sub-Committee on Currency Board Operations have been published within six weeks of each meeting. The Sub-Committee was formed in the summer of 1998, and has been entrusted with the responsibility of overseeing the operations of the



currency board arrangements and reviewing and proposing measures to further enhance the robustness of these arrangements.



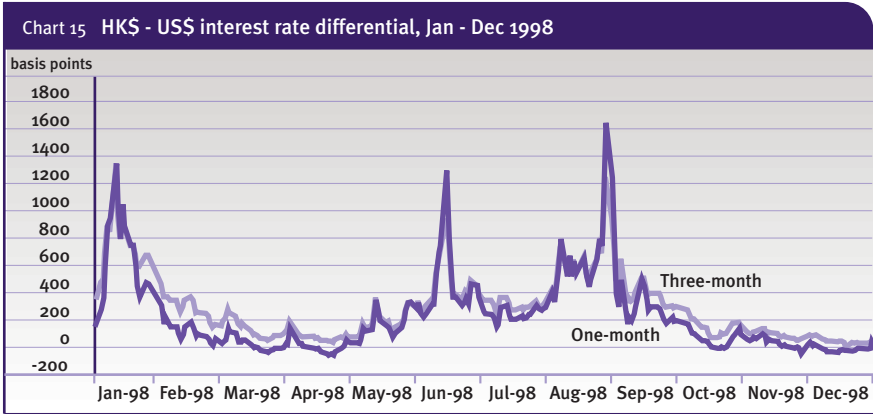
Effectiveness of the new measures

Market sentiment improved substantially after the successful defence of the Hong Kong dollar in August. The new measures introduced in early September, the deleveraging of some speculative funds, the strengthening of the Japanese yen towards the end of the year, and global monetary easing all helped. Reflecting improved sentiment as well as a decline in US interest rates, Hong Kong dollar interest rates generally moved downwards during the last four

months of the year. One-month and three-month HIBORs fell gradually from 18% and 15% respectively at the end of August to 5.13% and 5.25% at the end of 1998, around two percentage points and four percentage points lower than their respective levels at the beginning of the year. The interest rate premia over corresponding US dollar counterparts, in terms of one-month and three-month HIBORs, narrowed substantially to seven bp and 19 bp respectively at the end of 1998, compared with 147 bp and 346 bp at the beginning of the year (Chart 15). In line with the easing in interbank interest rates, both the HKAB savings deposit rate and best lending rates quoted by major banks were cut on four occasions by a total of 100 bp from October to December, to stand at 4.25% and 9% respectively at the end of the year.

Challenges

As a small economy with completely open exchange and capital markets, Hong Kong enjoys significant benefits from free capital flows. At the same time, it is exposed to the risk of excessive volatility in capital movements, which have been exacerbated by highly leveraged activities. In managing the risks of free



capital flows, the HKMA will continue its efforts to ensure the soundness of the currency board arrangements and to improve the financial infrastructure. The EFAC Sub-Committee on Currency Board Operations provides an institutional framework for reviewing, on a continuing basis, the currency board arrangements in Hong Kong and for introducing measures, when appropriate, to ensure that such arrangements can effectively cope with the challenges of a modern-day financial environment.

Hong Kong is still affected by the repercussions of the global financial turmoil, and external conditions remain uncertain. We shall continue to monitor the currency and money markets closely. Following the setting up of the New York representative office in 1996, the HKMA will upgrade its presence in London by establishing a representative office there. This will facilitate round-the-clock market monitoring. In addition, the HKMA has been working closely with the Securities and Futures Commission and the Financial Services Bureau to step up cross-market surveillance with a view to detecting early signals of market manipulation.