

# STRENGTHENING OF CURRENCY BOARD ARRANGEMENTS IN HONG KONG

*The HKMA introduced on 5 September 1998 a package of technical measures to further strengthen the currency board arrangements and make them less susceptible to manipulation. The two main themes underscoring the technical measures are to demonstrate clearly the Government's commitments to the linked exchange rate system and to dampen excessive and potentially destabilizing interest rate volatility.*

## Introduction

The Hong Kong Special Administrative Region Government is firmly committed to the maintenance of the linked exchange rate system and the adherence to the discipline of the Currency Board arrangements under that system. This policy has served Hong Kong extremely well over the past fifteen years. The linked exchange rate system has also proven to be the linchpin of financial stability in Hong Kong, and beyond, against the worst financial turmoil in the history of Asia. It has the wide support of the community of Hong Kong and the international financial community, particularly in official circles.

Recent developments in the global financial system, encouraged by financial liberalization and the advancement of information and telecommunications technology, have been characterized by very high volatility in international capital flows. This can be very destabilizing and presents tremendous risks for the world economy, in particular for the small open economies, as is clearly demonstrated by events in the past year or so. These risks have to be properly managed and financial stability ensured so that the benefits in the freedom of capital flows can be fully realized.

Hong Kong does not believe in exchange controls. Indeed, the Basic Law specifies clearly that no foreign exchange control policies shall be applied in the Hong Kong Special Administrative Region. Hong Kong is further determined and is very well prepared to bear the pain of adjustments, including interest rate adjustments, under the linked exchange rate system. But in managing the risks of free capital flows, including the possibility of financial markets being subject to manipulation that exacerbates financial volatility and hence the severity of economic adjustment, there is a need now to

strengthen further the Currency Board arrangements in Hong Kong's linked exchange rate system.

## Seven Technical Measures

Against this background, the Hong Kong Monetary Authority (HKMA) announced on 5 September a package of seven technical measures to strengthen the Currency Board arrangements in Hong Kong. After consulting with the Exchange Fund Advisory Committee (EFAC), the Financial Secretary gave his approval for the implementation of the package.

The first technical measure is in the form of a clear undertaking from the HKMA to licensed banks to convert Hong Kong dollars in their clearing accounts into US dollars at the fixed exchange rate of HK\$7.75 to US\$1 (the Convertibility Undertaking). This explicit Convertibility Undertaking is a clear demonstration of the Government's commitment to the linked exchange rate system. The rate of 7.75 has been chosen because it is the current intervention rate of the HKMA. However, it is the clear intention of the HKMA, when market circumstances permit, to move the rate of the Convertibility Undertaking to 7.80, which is the fixed exchange rate of our linked exchange rate system applicable to the issue and redemption of Certificates of Indebtedness backing the bank notes. After consultation with various industry associations such as the Hong Kong Association of Banks (HKAB), the DTC Association (DTCA), the Hong Kong Financial Markets Association and the academics, the HKMA announced on 26 November 1998 that the exchange rate under the Convertibility Undertaking would move from the present level of 7.75 to 7.80 by 1 pip (i.e. HK\$0.0001) per calendar day. It will then take 500 calendar days to complete the move of the rate to 7.80, where it will stay thereafter.

The gradual move of the exchange rate over a 500-day period enables a convergence of the convertibility rate with the exchange rate applicable to the issue and redemption of Certificates of Indebtedness while minimizing disruptions to the foreign exchange and money markets.

With effect from the opening of the market in Hong Kong on Monday 7 September 1998, all licensed banks are able to take advantage of the Convertibility Undertaking, on their own or on behalf of their customers should they find themselves in a position to do so. They must, however, ensure that they have the necessary Hong Kong dollars in their clearing accounts on settlement day to effect settlement. In order to monitor how transactions under the Convertibility Undertaking are being conducted and ensure that the arrangement is not being abused, there will be a need to seek relevant information from licensed banks. This will be a subject to be addressed separately, possibly with licensed banks on an individual basis.

The second technical measure involves the removal of the bid rate of the Liquidity Adjustment Facility (LAF). The LAF was introduced in 1992 when the former Accounting Arrangements were in place to facilitate, amongst other things, orderly interbank market activities. The Accounting Arrangements have, since the end of 1996, been replaced by the requirement whereby all licensed banks maintain a clearing account with the HKMA, on the occasion of the introduction of RTGS in Hong Kong. The improved efficiency of the interbank payment system has facilitated liquidity management of licensed banks. The need for the HKMA bidding money at the end of the day through LAF has fallen away as a result.

The third technical measure deals with the determination of the LAF offer rate which is to be renamed the Base Rate. LAF will also be renamed as the Discount Window. The Base Rate will form the foundation on which different discount rates are computed and for use in the overnight repurchase agreements (repos) through the Discount Window in respect of different percentage thresholds of Exchange Fund paper held by licensed banks. In determining the Base Rate, it is obviously essential, on the one hand, to ensure that interest

rates are adequately responsive to capital flows and, on the other hand, to allow excessive and destabilizing interest rate volatility to be dampened. After consultation with the relevant parties such as the HKAB and academic, the methodology on determination of the Base Rate was finalized starting from 26 November 1998, the HKMA will adopt the following framework in setting the Base Rate under the Discount Window.

- (a) floor – the floor to the Base Rate would be set by reference to the US Fed Funds Target Rate, adjusted by a factor which is to be a premium of 150 basis points. The EFAC Sub-committee on Currency Board Operations would review the adjustment factor from time to time, and where appropriate, recommend any change to the EFAC for approval;
- (b) reference rate – subject to the floor stipulated in (a), the Base Rate would be derived by taking the simple average of the 5-day moving averages of overnight and 1-month Hong Kong Interbank Interest Rates (HIBORs);
- (c) exceptions – the HKMA would reserve the right, in exceptional cases, to apply a different Base Rate to individual banks, for example, banks believed to be facilitating market manipulation. The HKMA would report exceptions to the EFAC Subcommittee on Currency Board Operations and the EFAC; and
- (d) review – this methodology for determining the Base Rate would be reviewed by the EFAC Subcommittee on Currency Board Operations from time to time or as and when circumstances dictate.

The fourth technical measure concerns the manner in which Exchange Fund paper can be used by licensed banks to obtain overnight Hong Kong dollar liquidity from the HKMA at the close of the money market in Hong Kong through the Discount Window. Given that the Exchange Fund paper is in effect fully backed by Foreign Reserves, the HKMA is prepared to allow for greater access by licensed banks to day end liquidity through repos at the Discount Window using the paper. Subject to

Percentage of Exchange Fund paper held by a licensed bank	Applicable Discount Rate
First 50 percent	Base Rate
Next 50 percent	Base Rate plus 5 percent or overnight HIBOR for the day, whichever is higher

the provisions in the sixth measure, the restriction in which the HKMA imposes penal interest rates on repeated borrowers through the repo of Exchange Fund paper will be removed as from Monday 7 September 1998.

The fifth technical measure is in the form of a clear commitment from the HKMA that new Exchange Fund paper will only be issued when there is an inflow of funds enabling the additional paper to be fully backed by Foreign Reserves. This is to ensure that the repo of Exchange Fund paper through the Discount Window does not involve any departure from the discipline of the Currency Board system. Existing issues of Exchange Fund paper outstanding, which are already backed by Foreign Reserves, will be rolled over as and when they mature.

The sixth technical measure spells out, for the purpose of accessing the Discount Window, a schedule of discount rates applicable for different percentage thresholds of holdings of Exchange Fund paper by licensed banks, as follows:

The seventh technical measure deals with the position of the existing eligible paper for LAF other than Exchange Fund paper. Overnight repos using such paper will still be allowed. For triple-A rated paper and Specified Instruments<sup>1</sup>, the schedule of discount rates applicable to Exchange Fund paper will apply. For other eligible paper, the schedule of discount rates will be at a premium of 0.25% over those applicable to the discount of Exchange Fund paper. Repeated borrowings, in accordance with the existing definition, using eligible paper other than Exchange Fund paper will continue to be discouraged through the charging of a penal rate by HKMA. To prevent significant liquidity to be

provided to licensed banks against paper not backed by Foreign Reserves, no new issues of paper other than Exchange Fund paper will be eligible for acceptance at the Discount Window.

### Greater Transparency and Disclosure

Apart from the package of seven technical measures, the HKMA also announced a voluntary move towards even greater transparency and disclosure on its Currency Board operations. Information on the Aggregate Balance in the clearing accounts of licensed banks maintained with the HKMA is already available almost on real time and this is unparalleled in any other jurisdiction. Starting from 25 November 1998, the HKMA has started to publish the size of the Monetary Base and its components on a daily basis.

The new HKMA page on the Reuters (page name: HKMA) shows the aggregate size of the Monetary Base as well as a breakdown into individual components, including Certificates of Indebtedness (backing the bank notes issued in Hong Kong), coins in circulation, Aggregate Balance of the banking system, and outstanding Exchange Fund Bills and Notes. The position before Discount Window activities is also shown. The information is updated on a daily basis after the close of the money market.

### Points to Note

The package of seven technical measures introduced by the HKMA and the voluntary move towards greater disclosure and transparency are clearly aimed at the strengthening Hong Kong's Currency Board arrangements. These measures will

<sup>1</sup> Notes issued by Hong Kong Mortgage Corporation, Airport Authority and Mass Transit Railway Corporation under their respective Notes Issuance Programmes arranged by the Hong Kong Monetary Authority.

enhance the robustness of the linked exchange rate system with a fixed exchange rate for the Hong Kong dollar against the US dollar at 7.80. They will also dampen excessive and destabilizing volatility in interest rates. In the operation of the Currency Board arrangement with these technical measures introduced, there are three points that the HKMA would wish the banking community to note specifically.

First, the Discount Window, like LAF, is not to be used by licensed banks to facilitate manipulation that may destabilize the currency or money markets. A licensed bank will be restricted access to the Discount Window if there is reason to believe that it has been engaging in such activity.

Second, the state of the public finances of the Government would from time to time require the HKMA, as the agency managing the fiscal reserves and providing assistance in the cash flow of the Treasury, to undertake certain activities in the foreign exchange and money markets. In all such activities, for example in the funding of the rare budget deficits through the use of foreign reserves, the HKMA would ensure that there is no departure from the discipline of the Currency Board arrangements.

Third, the HKMA clearly has a responsibility to ensure that the money market functions in an orderly manner. There have been occasions when large scale Hong Kong dollar transactions (such as in the case of large Initial Public Offerings) have created extreme conditions in the interbank market. In a statement made on 3 March 1998, Mr Joseph Yam, Chief Executive of the HKMA, has made it clear that, in these circumstances, the HKMA may lend to or borrow from the interbank market to dampen extreme conditions. This policy remains unchanged.

### **Currency Board Operations Sub-Committee**

The package of technical measures to strengthen the Currency Board arrangements of Hong Kong has earlier been examined closely by a Sub-Committee on Currency Board Operations of

the EFAC established recently with the approval of the Financial Secretary. The Sub-Committee is chaired by the Chief Executive of the HKMA Mr Joseph Yam. The other members of the Sub-Committee are:

Mr Marvin Cheung  
Mr Mervyn Davies as Chairman of the Hong Kong Association of Banks  
Mr John Greenwood  
Professor Y.C. Jao  
The Hon David K.P. Li  
Professor Shu-ki Tsang  
Mr David Carse, Deputy Chief Executive, HKMA  
Mr Norman Chan, Deputy Chief Executive, HKMA

The terms of reference of the EFAC Sub-Committee on Currency Board Operations are:

- (a) to ensure that the operation of the Currency Board arrangements in Hong Kong is in accordance with the policies determined by the Financial Secretary in consultation with the Exchange Fund Advisory Committee;
- (b) to report to the Financial Secretary through the Exchange Fund Advisory Committee on the operation of the Currency Board arrangements in Hong Kong;
- (c) to recommend, where appropriate, to the Financial Secretary through the Exchange Fund Advisory Committee, measures to enhance the robustness and effectiveness of the Currency Board arrangements in Hong Kong;
- (d) to ensure a high degree of transparency in the operation of the Currency Board arrangements in Hong Kong through the publication of relevant information on the operation of such arrangements; and
- (e) to promote a better understanding of the Currency Board arrangements in Hong Kong.

## Effectiveness of the Seven Technical Measures

Since the introduction of the new measures in early September, market sentiment has improved significantly. Reflecting also a decline in US interest rates, Hong Kong dollar interest rates in general have moved on a downward trend. 1-month and 3-month HIBOR fell gradually from 18% and 15% respectively at end August to 5.75% and 6.25% in early November. As a result, the interest rate differential between the HK dollar and the US dollar narrowed significantly. The spread between 3-month HIBOR and its US counterpart fell from nearly 700 bp in early September to around 100 bp by early November. At the longer end of the yield curve, the spread of the 10-year Exchange Fund Notes over the US Treasuries fell from 456 bp to 246 bp over the same period.

On 14 September, market anxiety over a reportedly imminent move of the exchange rate under the Convertibility Undertaking from 7.75 to 7.80 triggered a significant outflow of HK dollars. The day end forecast Aggregate Balance of the banking system on 16 September shrank to a negative level of HK\$7.5 bn. Helped by a greater assurance of day end liquidity through the Discount Window, the money market reacted calmly and in an orderly manner to the liquidity shortage. Overnight HIBOR rose moderately from around 5.5% to a high of 9.25% (16 September) while 1-month HIBOR firmed from 8.25% to a high of 12.25% (14 September). By the end of 16 September, overnight and 1-month HIBOR eased back to 7% and 9% respectively. Compared to the June round of currency attack during which overnight and 1-month HIBOR reached the intraday high of 17% and 20% on 15 June, the interest rate adjustment in mid-September was more moderate. Notwithstanding the more orderly interest rate adjustment, the auto-pilot mechanism of the currency board system was not undermined. Outflows of funds were quickly reversed as a result of the firming up of interest rates and the shortage of interbank liquidity, and exchange rate stability was maintained throughout the episode. The forecast Aggregate Balance quickly returned to a positive level on 16 September. ☺

- Prepared by the Research Department