

**Legislative Council Panel on Financial Affairs**

**Meeting on 7<sup>th</sup> November 1998**

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## **1. Introduction**

I would like to thank the members of LegCo Financial Affairs Panel for this opportunity to discuss recent financial developments in Hong Kong. Based on my experience and interests as a monetary economist, I have concentrated in my written report on various aspects of Hong Kong's Currency Board system. I apologise for not having been able to submit my written paper earlier. This was due to unavoidable travel, mainly for family reasons.

## **2. Paths to Monetary Stability**

Although it is not often presented in this way, there are fundamentally only two ways to achieve monetary stability in a modern economy. The first way is for the central bank or monetary authority to concentrate on controlling the quantity of money in the system with a view to achieving some ultimate target such as controlling the inflation rate in the economy. This approach is suitable for a large economy with a relatively small external trade sector. Hence this has been the approach adopted at different times by the US Federal Reserve System, the Bundesbank in Germany, and the Bank of Japan. Note that as a logical by-product of this approach the exchange rate must be allowed to float fairly freely, and the authorities may need to allow interest rates to vary quite widely to achieve their objectives over time. In other words, if the quantity is controlled, the price of money must be free to vary.

Conversely, the second way to achieve monetary stability is to fix or control the price of local money (expressed as the exchange rate between local money and foreign money), and allow the quantity of money to vary in accordance with market demand at that price. This has been the approach adopted by most countries in the world -- for example under the Bretton Woods system of fixed exchange rates, under the ERM (the European Exchange Rate Mechanism), and wherever there have been currency board systems. This approach has been especially suitable for small open economies with large external sectors. The reason is that a high degree of openness makes it extremely difficult to forecast accurately what the required quantity of money may be at any point in the future. Since it is impossible for the monetary authority to anticipate correctly such future conditions, a better policy is to fix the price of money and allow the quantity to expand or contract in line with market requirements.

If the theory is so clear, why has implementation been so difficult, and why is modern history so replete with monetary and exchange rate crises?

The problem in controlling the quantity of money is that the uses and hence the definitions of money have been subject to unpredictable and sometimes substantial shifts due to deregulation, financial innovation, and technological changes. Nevertheless, countries with a history of generally lower and more stable monetary growth have typically also enjoyed lower inflation and more stable economic growth.

The problem in controlling the price of money is that central banks have seldom confined their activities to fixing the exchange rate alone. Simultaneously with maintaining the fixed exchange rate they have often pursued other objectives such as promoting higher investment spending through lowering interest rates, or reducing unemployment by promoting economic growth. To use an analogy, they have not only used one arm to intervene in the external foreign exchange market, but they have also used a second arm to operate in the domestic money markets. These additional activities in the domestic money market often undermined what they were trying to achieve in the foreign exchange market. The resulting policy was not compatible with maintenance of the fixed exchange rate, and all too often was overwhelmed by a foreign exchange or currency crisis. (This analysis applies directly to the experience of most of the Southeast Asian currencies over the past two years.)

The essence of a Currency Board system such as Hong Kong has adopted is that the monetary authority fixes the price of the currency and simultaneously undertakes to forego any other transaction which will be inconsistent with maintaining the fixed exchange rate. This is the rule or discipline of the Currency Board system. Later on I shall explain how the HKMA has formally adopted operating rules which enshrine this principle in its day-to-day operations. Consequently I believe it is correct to say that the Currency Board as adopted in Hong Kong is inherently stronger and more robust than the supposedly fixed rates pursued by other central banks.

### **3. The Evolution of Hong Kong's Currency Board Arrangements**

Every monetary system is a product of the particular political, geographical, banking and institutional history of the country or economy concerned. Hong Kong is no exception. Hong Kong's currency board arrangements were introduced in October 1983 to address a peculiar weakness in the monetary system which, until that time, had not widely been recognised. The problem was that the Exchange Fund, as a customer of the main settlement banks, had no more power over the monetary system than, say, General Motors or IBM had or has over the US monetary system. As a customer of the major banks the Exchange Fund was unusual in that authorised the issue of Certificates of Indebtedness (CI's) required to back the note issues of the note-issuing banks when they wished to increase the note issue, and it redeemed CI's on demand when the note-issuing banks wished to retire currency notes. In other respects it was just like any large corporation, maintaining HK\$ deposits with the local licensed banks and managing those deposits to its best advantage. However, unlike any central bank, it did not have the power to manage the money markets either by setting interest rates or by conducting open market operations to increase or decrease the quantity of funds available in the money market or in the wider monetary system. This turned out to be a fatal flaw in August and September of 1983 when the Hong Kong dollar began to slide rapidly against other currencies in the face of large-scale and persistent selling of the local currency because it meant that the Hong Kong monetary authorities could not stop the slide either by raising interest rates or by buying up Hong Kong dollars and thereby reducing the supply of local funds in the

market. Instead, any Hong Kong dollars the authorities bought were simply re-circulated back into the system - just as any US dollars bought by General Motors or IBM would be re-circulated back into the system if they bought greenbacks to support the currency.

It was my hope at the time that the new Currency Board was introduced in 1983 that the new mechanism would operate largely automatically, enabling the process of easing and tightening of the money markets to occur in conformity with inflows and outflows of funds respectively. The new Currency Board arrangements required the banks to pay US\$ at a fixed rate of HK\$7.80 = US\$1 to obtain the Certificates of Indebtedness which would enable them to issue new Hong Kong dollars. Conversely, the banks were entitled to redeem CI's in exchange for US\$ at the same rate with the Exchange Fund. The intention was that if the free market rate for the HK\$ deviated significantly from the fixed parity of 7.80, this would open up opportunities for the banks or the public to conduct cash arbitrage operations which would either contract or expand the quantity of money in the direction indicated by the inflow or outflow of funds. (For example, in the event of an outflow which pushed the spot rate down on the weak side of 7.80, it would become possible for the banks to buy HK\$ deposits "cheaply" at (say) 7.85 in the foreign exchange market and redeem CI's with the Exchange Fund at the higher price of 7.80. This would create an arbitrage profit for the banks while at the same time reducing the amount of notes outstanding and thereby bring about a reduction in the total quantity of funds in the system.) In this way inflows would create an incentive for the banks to engineer a

monetary expansion, while outflows would create an incentive for banks to ensure a monetary tightening.

In practice, this mechanism did not work well. The reasons are perhaps too technical to explain in detail here, but can be summarised by saying that the asset which is used to set the price of the HK\$ in the foreign exchange market should also be the asset with the lowest transaction costs, the highest liquidity, and greatest interchangeability among the various assets that the banks deal in. (Since it is the banks who are the major participants in the domestic money markets and the local foreign exchange market, their activities will effectively determine the market interest rate as well as the market exchange rate). In a modern economy with electronic transmission of funds the relevant asset is not cash currency but the settlement balances of the banks.

Recognising this problem the monetary authorities introduced a device in July 1988 which would give them ultimate control over the amount of funds and hence the level of interest rates in the local money market. The so-called Accounting Arrangements required the Hongkong and Shanghai Banking Corporation (HSBC) to maintain a balance with the Exchange Fund equal to the net balance of the clearing accounts of other banks held with HSBC. This gave the authorities the power they needed to ensure that interest rates responded in the correct direction in the event of substantial inflows or outflows. Subsequently the Accounting Arrangements were refined in various stages so that today all banks maintain their clearing or settlement

balances with the HKMA, and there is real time gross settlement (RTGS) between banks on a continuous basis throughout the business day.

The key points for the purpose of the discussion today are first that the fulcrum of our currency board system is no longer the stock of cash currency notes in circulation, but rather the much smaller quantity of interbank clearing balances, and second that under a Currency Board system, interest rates must be responsive to net inflows or outflows of funds so that they constructively support the fixed exchange rate -- rising when a monetary tightening is needed, and falling when a monetary easing is required.

#### **4. An Assessment of the Seven Technical Measures of September 7<sup>th</sup>, 1998**

In view of the small size of banks' clearing balances in relation to the overall size of the monetary system and in relation to the potential volume of foreign exchange activity, it is perhaps not surprising in retrospect that interest rates in Hong Kong would prove highly sensitive to significant inflows or outflows. This became increasingly apparent following the successive attacks on the currency during 1998, and was exploited by numerous investors who took the opportunity to short the Hang Seng Index as well as individual interest-sensitive stocks at the same time that they sold the Hong Kong dollar in the spot or forward markets.

However, I believe these investors made at least two errors in their strategy. First, they mistakenly believed that the Hong Kong dollar's link to the US dollar was



no different from other allegedly fixed rates operated by other central banks. They believed, erroneously, that like other central banks the HKMA had been operating in a manner inconsistent with Currency Board rules -- in terms of the analogy I used earlier, using both domestic and foreign arms of policy instead of just the external arm of policy. Consequently, they believed that the currency could be toppled by speculative attack. Whatever the sources of their view that the Hong Kong dollar was vulnerable to devaluation risk, it should be clearly understood that the principles under which the HKMA operates are entirely consistent with Currency Board discipline. These are (1) the principle of *full backing* i.e. that all components of the monetary base are fully backed by a 100% reserve of US dollars, and (2) the principle of *full offset* i.e. that if any action is taken by the HKMA in the domestic money market such as to inject funds, then equal and opposite action is taken virtually simultaneously to drain an equivalent amount of funds from the system, and conversely for a withdrawal of funds. Together these two principles will, if followed diligently, ensure that Hong Kong's Currency Board is as robust as it is possible to be, and should make it invulnerable to speculative attack. (Of course I do not mean that it will not be attacked - I mean that the Hong Kong dollar will not need to be devalued or re-valued in face of such attacks.)

Second, whereas the banks and supervisory systems of other countries have proved to be highly susceptible to external shocks, Hong Kong's banks and financial institutions have proved to be highly resilient in the face of such shocks. This brings out another point of principle which I think it is worthwhile emphasising to this Panel. If the Hong Kong SAR is to maintain a Currency Board system in the future, then it

must expect to experience occasional external shocks. Given the rigidity of the currency vis-a-vis the US dollar, then it is essential that there is as much flexibility as possible in the rest of the economy. This means that asset prices, interest rates, wholesale and consumer prices, wages, the structure of employment and the output mix of the economy - and much more besides -- must all remain free to vary in response to such shocks. In terms of Hong Kong's financial institutions, they need to be as robust, well-capitalised and prudently managed as it is possible to be while remaining internationally competitive. They are inevitably one of the frontline shock absorbers in a Currency Board system.

With that as background I wish to discuss the measures taken by the the Government and the HKMA in the aftermath of the speculative attack on the currency in August. I am not going to defend the purchase of stocks and HSI Futures contracts by the authorities. While I believe one can sympathise with their predicament at the time, it is neither appropriate nor desirable that the Hong Kong SAR Government should hold substantial equity shares in privately managed companies on an on-going basis. Now that those shares are held and managed by a separate entity it is highly desirable that the government should distance itself as far as possible from the day-to-day management of the portfolio, and indeed should extricate itself from holding these positions as expeditiously as possible. A variety of strategies is available including institutional placements, auctions of index-based packages of shares, as well as straightforward sales. What is indisputable is that the sooner the government can dispose of its holdings, the sooner it will escape the unavoidable conflicts of interest which will come from being both referee and player on the playing field.

More constructively, I would like to comment on the seven technical measures implemented by the HKMA on September 7<sup>th</sup>. I referred earlier to the need for Hong Kong's economy to maintain various kinds of shock-absorbers against future external shocks if the economy was to continue to operate with a Currency Board system. In my judgment, the purpose of the measures taken by the HKMA in September seem to be consistent with these principles. They essentially enable the banks to utilise their holdings of Exchange Fund Bills and Notes as an additional cushion with which to absorb the interest rate shocks from unexpectedly large sales of Hong Kong dollars in the foreign exchange market. This is because the new facility will enable banks to meet overdrafts in their clearing balances by discounting Exchange Fund paper on an overnight or temporary basis with the HKMA. Insofar as that goes, this should mean that the Hong Kong market can absorb greater sales of local currency without triggering the drastic interest rate increases that previously occurred. It might seem that the wider the range of eligible instruments that can be covered by this mechanism, the better. However, the instruments must be liabilities of the HKMA, not paper issued by banks or other institutions since there is no reason why the Hong Kong SAR should honour the private obligations of banks. Moreover, since any such HKMA debt instruments must only be issued subject to the principles of *full backing* and *full offset* which I mentioned earlier, there are likely to be practical limits to their potential volume. (If not, then in the limit banks would end up using all their funds to lend to the HKMA via purchase of Exchange Fund Bills and Notes, leaving no funds available to lend to the private sector.)

## **5. Conclusion**

In summary and in conclusion. I believe that the Currency Board system has served Hong Kong well over the years, but that it has had to evolve to keep pace with the rapid pace of financial innovation and technological changes which have made the global capital markets a much more integrated financial system than ever before. It remains a sound basis for monetary stability, and has protected the savings of the poorer members of community during the past 18 months of the Asian crisis. The seven innovations introduced in September should enhance Hong Kong's ability to deal with future speculative attacks on the currency, but they cannot be a panacea. Hong Kong cannot simply decouple from the rest of Asia. Its trade and financial transactions are too closely bound up with the rest of the region to be able to avoid the pains that much of the rest of the region is suffering. However, if other Asian economies had been able to display the same financial disciplines as Hong Kong has shown in specific areas of macro-economic policy and micro-economic management, then it seems highly likely that the crisis in Asia would not have been so severe, and Hong Kong's path to recovery would be that much shorter.

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**Comments on Other Measures Taken by Government**

Turning to the topic of market regulations for equities, index futures and derivatives, I believe it is important to ensure a level playing field by means of more disclosure. While Hong Kong has certainly come a long way since the dark days of October 1987, there is much more still to be done. The following suggestions are only the most urgent of a longer list of improvements which should be carried out if Hong Kong is to maintain its pre-eminent role as a key regional stock market and, in particular, as a serious provider of long-term funds for China.

1. Quarterly Corporate Accounts for all listed companies. While it may not be necessary to produce a full set of audited accounts every three months, the more often the market is provided with this vital information, the more likely it is that the share price will reflect the true value of the company. Among major listed Hong Kong companies only Dickson Concepts and Sasa have recently given any public forewarning of impending profit declines.

2. Publication of weekly or daily aggregate margin positions. (Total loaned and/or value of collateral held against such loans.) Both stockbrokers and banks lend to customers for share purchases. It is important for investors to be aware of the build-up or rundown from both sources of margin lending, either for the market as a whole or for individual companies. These data could readily be collected from stockbrokers' reports, but less easily from banks. Nevertheless publication of such data would help investors come to more rational investment decisions and would help curb irrational upward or downward bandwagon effects.
3. Broker members of HKSE should be required to disclose to the public the volumes of their transactions and the split of those transactions between plain vanilla agency transactions (purchases and sales of equities) and derivative-related transactions.
  4. Tightening up on T+2 settlement for short sales etc. Appears justified on the basis that there is an asymmetry between short selling where the rules were somewhat lax, and cash purchases, but it should be remembered that severe penalties for non-compliance could also deter long-only investors to the detriment of market development.
5. Lack of an uptick rule. The NYSE and other exchanges require that no short sales can be made without there first having been some purchase at the particular price. The

result in HK of the lack of an uptick rule has at times been a spiralling or bandwagon downward impact on prices.