ASIAN RESEARCH

Hong Kong

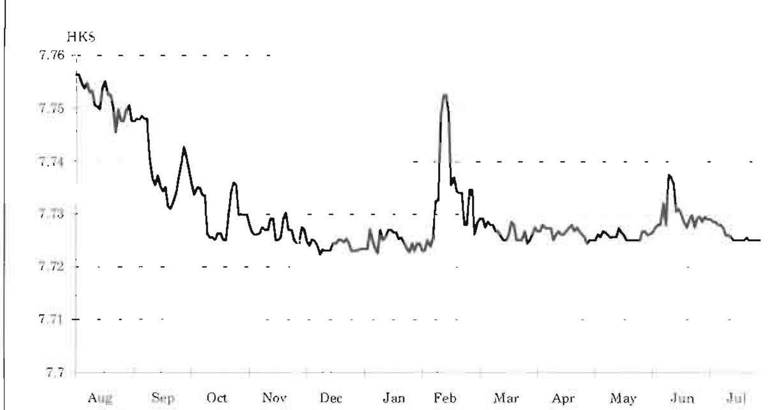
Bankers Trust Research

PROSPECTS FOR THE HONG KONG DOLLAR: THE PEG WILL STAY

The Hong Kong dollar will stay pegged to the US dollar at least until the end of the century

- Hong Kong's currency stability can be attributed to the peg with the US dollar since 1983.
- Even though the peg imposes painful adjustment on the real economy, the price is worth paying for social stability.
- The Hong Kong Monetary Authority (HKMA), with support from China, is determined and has the ability to maintain the peg. Hong Kong's US$45 billion in foreign reserves provide the ability to keep the exchange rate within a narrow range.
- We expect the market exchange rate to remain in the range of HK$7.725 - 7.735/US$ in 1995, to become slightly weaker for a while after Deng Xiaoping dies, but generally to strengthen as confidence regarding the post-1997 environment improves.

HK$/US$ Exchange Rate



Source: Datastream

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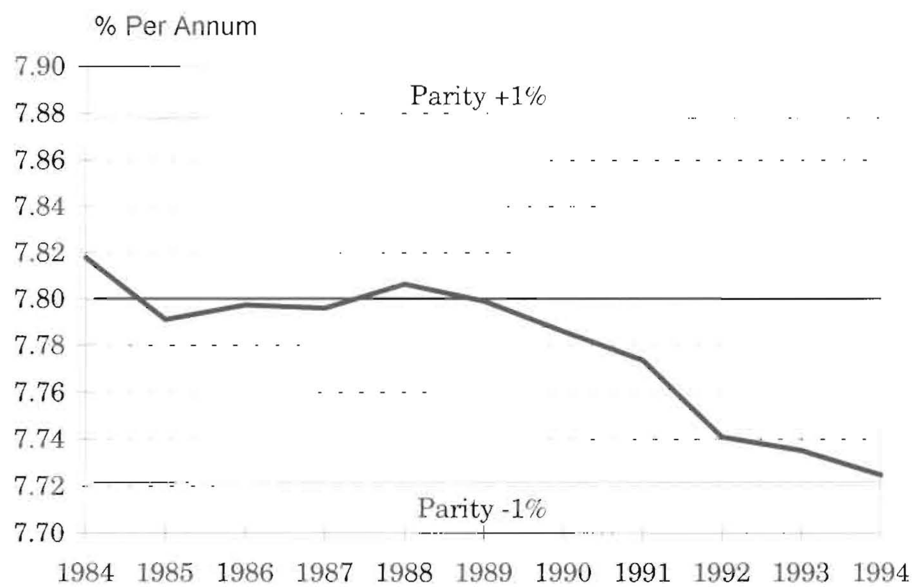
Hong Kong's Linked Exchange Rate System: The Peg

Peg maintains currency stability

The Hong Kong dollar exchange rate was fixed at an official rate of HK$7.8 per US$ in 1983 under the Linked Exchange Rate System (the peg), when the government had to take drastic action to stem a run on the currency caused by fears that China and the UK might be unable to resolve their differences over the future status of Hong Kong. The peg has played a critical role in maintaining currency stability at several crisis points, including the October 1987 stock market crash and the June 1989 Tiananmen Square demonstration.

Figure 1: HK$/US$ Exchange Rate



Source: Datastream

How Does It Work?

Notes issued by three banks

Upon receipt of US$, the Exchange Fund of Hong Kong (the Fund) issues non-interest bearing Certificates of Indebtedness (C.I.) at the fixed rate of 7.80 HK$/US$ to the three note-issuing banks, namely, the Hongkong and Shanghai Banking Corporation (HSBC), the Standard Chartered Bank., and the Bank of China. The C.I., in turn, allows the latter to print HK$ notes up to its full face value. Upon receipt of US$, the note-issuing banks will issue HK$ notes and coins at the fixed rate of 7.80 HK$/US$ to all other licensed banks in the territory.

Cash arbitrage the mechanism for maintaining the peg,

Deviations between the fixed exchange rate of 7.80 HK$/US$ and the interbank market exchange rate do occur and create cash arbitrage opportunities which should cause the market rate to gravitate towards the fixed rate. In practice, however, such exercises involve substantial transaction costs as actual deliveries of large sums of HK$ notes and coins would have to take place. As a result, cash arbitrage has never been an effective means of maintaining the peg.

but covered interest arbitrage works better

On the contrary, covered interest arbitrage involves only electronic money transfers and is hence very efficient in establishing the covered interest rate parity:

1 + HK$ HIBOR = (1/Spot HK$/US$) * (1 + US$ LIBOR) * (Forward HK$/US$)

By lifting the HK$ HIBOR through increasing interbank liquidity, for instance, the Hong Kong Monetary Authority (HKMA) can strengthen the HK$ against the US$ with the help of covered interest arbitragers as the latter converts US$ assets into more attractive HK$ assets.

HKMA manipulates liquidity

The HKMA can also defend the currency by directly changing the liquidity in the currency market. If the exchange rate deviates by 1 percent on either side of the official rate of HK$7.8/US$, the HKMA can inject or remove liquidity into the market, so as to restore the desired supply-demand balance of Hong Kong currency. With a foreign reserve of US$45 billion at the end of 1993, the HKMA has the ability to defend the peg.

The Peg Will Stay at Least until the End of This Century

Peg helps stability...

The peg has been quite successful in maintaining Hong Kong's currency stability in the face of crisis regarding confidence about the colony's future. For instance, without the peg the value of the HK$ would have been destroyed by massive capital flight during the June 4th Tiananmen Square Crisis.

...but at enormous economic costs

The peg represents a deliberate choice by the Hong Kong Government to have painful price and income adjustments, which are considered to be relatively tolerable in a free and flexible economy, as compared to exchange rate fluctuations that could undermine social stability if the currency plunged during a political crisis. The peg costs Hong Kong its independent monetary policy. Under the peg, Hong Kong's monetary policy is virtually set by the US Federal Reserve. At times when the two countries' actual economic conditions are quite different, the peg could severely hurt Hong Kong economy. It drove Hong Kong into a recession in 1985, when the strong US$ dealt a severe blow to Hong Kong's exports, followed by a wild swing up to 13 percent growth rates as the US$

weakened. This jerking around of the real economy is a heavy price to pay for currency stability. However, the fear of a Tiananmen Square type incident followed by currency collapse followed by social panic has created a Hong Kong consensus that the price is worth paying.

The Peg - cornerstone of Hong Kong's economic policy.

Although in theory a system in which the Hong Kong dollar is linked to a basket of foreign currencies is more desirable, the psychological cost of such a move would be very high. The fact that the peg has successfully provided political security and has since become an integral part of the rubric of "stability and prosperity" is comforting and important to the people of Hong Kong. The peg has become a cornerstone of Hong Kong economic policy and all the market participants have formed their business expectations based on the peg.

Thus, we can predict with confidence that the peg will not be removed or changed before 1997. Even after the resumption of Chinese sovereignty, the incoming Special Administrative Region (SAR) government will very likely wish to retain the peg in order to preserve stability. (The Basic Law of the SAR states that Hong Kong will continue to have a separate currency from China.). We therefore predict the peg to stay at least until the end of this century.

China to maintain peg

Furthermore, any changes to the fixed rate now require the consent of the Chinese government which has publicly acknowledged its strong opposition to any measures that would threaten Hong Kong's continuing prosperity and stability. Any changes to the peg would involve lengthy British-Chinese consultations which would give adequate warning of forthcoming change.

Market expectations of currency stability best defence for peg

The peg has survived so far without any changes to the 7.80 HK$/US$ fixed rate level largely because of the repeated demonstrations of the Fund's resolve to repel speculative attacks. For any fixed exchange rate system, the best defense against speculative attacks is a widely shared expectation that the exchange rate will remain fixed. Acting on self-interest, private speculators will help anchor the actual exchange rate around the fixed level. On the contrary, if the fixed rate level were considered to be adjustable, the resultant loss of credibility would simply invite speculation. For example, a burst of speculative activity was triggered on October 6, 1993 when the Chairman of the Hongkong and Shanghai Banking Corporation Holdings suggested that the link was not immortal. The government was forced to take quick action: the HKMA injected an unprecedented sum of HK$1 billion into the market on October 13, 1993, to send a strong signal to the speculators to back off. This episode demonstrates the importance of maintaining the peg for the sake of stability, especially in the run up to Hong Kong's 1997 return to China.

Government's will to keep the peg repeatedly proven

The Hong Kong government has therefore stated consistently that the threat of economic and political upheaval makes it impossible to shift or remove the peg. It has also consistently taken actions to defend the peg when the currency is under pressure to deviate more than one percent from the fixed exchange rate of HK$ 7.8/US$. In late 1987 and early 1988, the Hong Kong government successfully resisted a revaluation of the HK$ against the US$ by enacting legislation to permit the imposition of interest charges on credit balances of large denominations maintained with the banks (i.e., to pay negative nominal interest rates on these balances). Through legislative changes, HK$ deposit rates can now be negative while HK$ lending rates can be higher than the legal ceiling of 60% per annum if necessary.

The capability of the Fund to influence interbank liquidity and interest rates has also been enhanced by the establishment of the new accounting arrangements with the HSBC and the Exchange Fund bills program. Under the new accounting arrangements, the Fund can alter the level of interbank liquidity by buying or selling assets denominated in foreign currencies or the HK$ without worrying that its effect on interbank interest rates will be neutralised by private banks or individuals. These Exchange Fund bills, as HK$ denominated liabilities issued against the Fund but not the government, provide an additional instrument for the Fund to influence interbank liquidity and interest rates. With the secondary market for the Exchange Fund bills deepening, the Fund has more effective control of interbank interest rates to ensure exchange rate stability.

The discount window of the Fund, which started operating on June 8, 1992, helps to stabilize overnight interbank interest rates. This gives the Fund an additional tool to influence the HK$ interbank interest rate structure.

Since the establishment of the Hong Kong Monetary Authority (HKMA)--a quasi-central bank--in October 1992, the Hong Kong government has become increasingly active in maintaining the peg. In 1992 and 1993, HKMA repeatedly used liquidity injection as a tool to prevent the market exchange rate from deviating from the pegged rate, whenever the value of the Hong Kong dollar is under pressure reaching the upper bound of the HK$7.722/US$ rate.

The HK$ is Likely to Remain on the Strong Side of the Peg against the US$

HK$ may be overvalued by PPP calculation...

By Purchasing Power Parity (PPP) calculation, and assuming that the fixed rate of 7.80 HK$/US$ represents the PPP rate in late 1983 when the peg was first put into place, the HK$ has become overvalued since tradable prices in HK (proxied by export and import prices) have grown 30.3 percent to 33.3 percent while those of the U.S. have grown only 16.7 percent by December 1993. If we adjust for the substantial improvement in product quality, and the dramatic reduction in land- and labor-related costs of such products due to outward processing in China, the Hong Kong dollar may well be undervalued.

...but irrelevant in the short-run.

In any case, PPP considerations have very limited influence over short-term directions of exchange rates. It is the capital movements caused by investment opportunities that determine the short-run fluctuation of exchange rate.

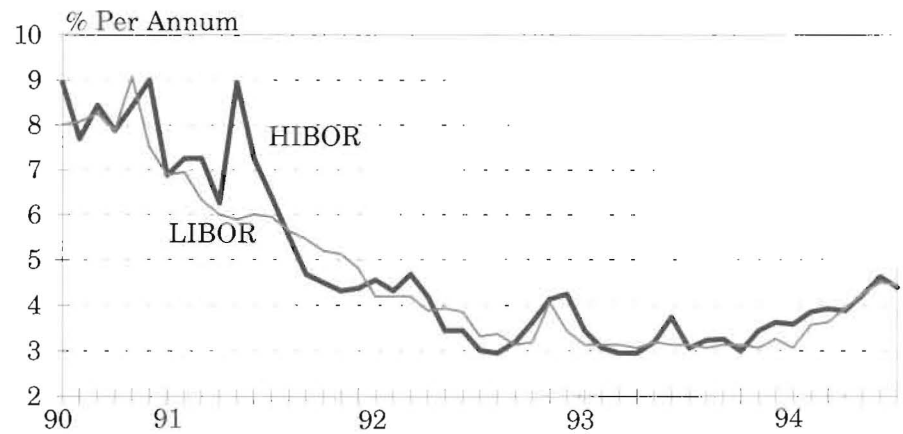
Large capital inflows pushing up the HK$

Since 1980, Hong Kong has been running merchandise trade deficits of up to HK$30.3 billion a year except in 1985 and 1989. The service account, on the contrary, has grown to a HK$61.1 billion surplus in 1993. As a result, since 1984, Hong Kong's trade and service account has been in the black. Since Hong Kong does not publish net factor payments data, the current account balance of Hong Kong is not readily available.

It is, however, possible to estimate net capital flows using a measure called private non-trade capital flows. Specifically, by making use of the accounting fact that the sum of visible and invisible trade balance as well as the changes of foreign-currency assets of the Fund must be equal to private non-trade capital flows, we can determine that Hong Kong has experienced net outflows of HK$7.9bn and HK$17.9bn in 1988 and 1989 but net inflows since 1990. The net non-trade capital inflow was HK$29.6bn in 1993.

These observations are certainly consistent with the strengthening of the HK$ against the US$. The Hong Kong dollar has come under upward pressure during the past three years. While interest rates have been kept in line with US rates, the real interest rate in Hong Kong has been negative due to high inflation. The residential property market boom since 1991 and the stock market boom in 1992 and 1993 have pulled a lot of hot money into the territory. To maintain the peg in the face of speculators seeking capital gains, the Fund injected liquidity into the interbank market several times in 1992 and 1993. Subsequent lowering of HK$ HIBOR then sent a strong signal to speculators to back off. As a result, the HK$ has been kept from breaking its unannounced "ceiling" of 7.72 against the US$.

Figure 2: 1-Month HIBOR and 1-Month US$ LIBOR

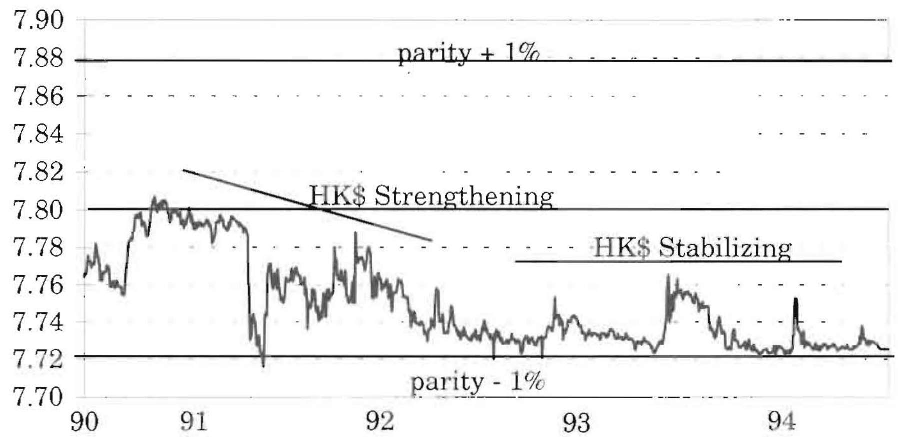


Monthly Average *Source: Datastream*

Rate has hovered at HK$7.725-7.735/US$ in recent years...

Figure 3 shows that the market exchange rate of HK$/US$ has been maintained in the narrow range of HK$7.725-7.735/US$ since mid-1992, except for several short periods of external disturbance. This stability is actually the result of the interaction of conflicting forces: increasing demand for HK$ due to large capital inflow on one hand, and a determined HKMA to defend the exchange rate from breaking HK$7.72/US$--widely believed to be its "tolerance limit"--on the other. As long as foreign capital continues to flow in, the Hong Kong dollar will hover around HK$7.725/US$, except when there are strong external disturbances.

Figure 3. Daily HK$/US$ Exchange Rate



Source: Datastream

...except for four blips

It is very instructive to look at the exchange rate jumps in recent years. Figure 3 shows that there have been four major blips in the exchange curve since mid-1992. The first blip occurred at the end of 1992 and the beginning of 1993, mainly due to the political jitters between China and Britain after Patten's announcement of political reform in October 1992. Many investors were nervous about the political uncertainty and pulled their funds out.

The second blip started in late June 1993, when the Hong Kong dollar value fell to HK$7.76/US$, while 1-month HIBOR rose to 3.8 percent from the long-held level of 3.2 percent per annum. These changes were associated with fund repatriation by Chinese firms from Hong Kong to China in the wake of the austerity plan in China. But the market quickly turned around and headed for a strong HK$ again.

The third blip was in February 1994, when the US Fed first raised short-term interest rates and surprised the market. And the last blip happened in early June, 1994 when Hang Seng Index declined sharply on rumors that Deng Xiaoping had died.

Investors confident in Hong Kong's future

Looking at the market reactions to these four incidents, one sees a clear trend of a decreasing impact of external shocks on the exchange rate. We interpret this as a strong indication that most investors are becoming increasingly confident of Hong Kong's stability after 1997.

Three forces to affect rate

In the period from now to 1997, there will be three major factors affecting the market exchange rate of Hong Kong dollar. The first is the gradually rising confidence in Hong Kong and China's future stability and prosperity that we just mentioned. The second factor is closely related to the first one: the disappearance of the annual nuisance of MFN debate in the US would lead to increased foreign capital inflow into Hong Kong and China over the next a few years. The third factor is that, as we approach 1997, some investors (mainly foreigners with limited knowledge of Hong Kong) may become nervous and pull money out of Hong Kong. The first two factors would push the Hong Kong dollar up, while the third works in the opposite direction and increases the market reaction to any external shocks.

Exchange rate to maintain around HK$7.725-7.735/US$

We expect the last factor to be much weaker than the first two. Thus, the fundamental upward pressure will keep the exchange rate near the "tolerance limit" level, i.e., around HK$7.725/US$. But the nervousness of some poorly-informed investors may cause the market over-react to any external shock, especially if a prolonged political struggle ensues after the death of Deng Xiaoping. We therefore expect the Hong Kong dollar to become slightly weaker for a period of time after Deng Xiaoping dies, whenever that occurs.

Table 1: HK$/US$ Exchange Rate Forecast

	1994	1995	1996	1997
HK$/US$	7.730	7.735	7.740	7.740

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