

## Currency Board and Market Intervention in Hong Kong

**W**hen the Asian financial crisis broke out in 1997, many countries' currencies tumbled and their economies suffered. However, the Hong Kong Monetary Authority (HKMA) mounted a successful defense of the Hong Kong dollar under the currency board arrangement.<sup>1</sup> In one of the most unusual episodes in recent exchange-rate history, the HKMA intervened simultaneously in the foreign exchange, stock, stock futures and interbank markets. In August 1998, at the height of the currency turmoil, it purchased \$15 billion worth of local blue-chip stocks.

Since Hong Kong's 1997–98 crisis, the financial markets have stabilized. The stock market has recovered. Although its economy underwent five quarters of contraction from 1998 to early 1999, Hong Kong survived the crisis with relatively light damage compared with many of its neighbors. By April 2001, the HKMA had not only recouped the initial cost of the intervention but had done so with significant gains from equity appreciation.

The unprecedented intervention seems to have worked. Nevertheless, the intervention broke the Hong Kong government's laissez-faire tradition and drew significant criticism. Now, with the benefit of hindsight, we may be able to better gauge the intervention's effects and consequences.

### Why the Currency Board?

Hong Kong's currency board was set up in October 1983 to deal with the loss of confidence caused by property devaluation, banking sector deterioration and the uncertain political transition from British colonial rule to Chinese sovereignty. In 1993, the HKMA was established to oversee the currency board, which is Hong Kong's approach to providing a nominal anchor for price stability.

Under the currency board, both the stock and the flow of Hong Kong's monetary base are fully backed by U.S. dollar reserves held in the Hong Kong Exchange Fund, which the HKMA manages.<sup>2</sup> The

Exchange Fund issues and redeems Certificates of Indebtedness, which three designated commercial banks hold as backing for the banknotes they issue<sup>3</sup> at the official rate of 7.8 Hong Kong dollars per U.S. dollar. The HKMA also stands ready at any time to buy back Hong Kong dollars in the market.<sup>4</sup> In the past decade, the total foreign currency reserves have averaged over three times the size of the monetary base, giving the HKMA ample room to maneuver. In addition to strong foreign currency reserves, the Hong Kong government's fiscal prudence and the city's robust banking system and flexible economic structure are important underpinnings of the currency board.

Under the currency board, interest rates are automatically adjusted in response to changes in the monetary base. When there is depreciation pressure on the Hong Kong dollar, the HKMA is obliged to buy Hong Kong dollars at the official rate. This causes the monetary base to contract, pushing interest rates higher and attracting foreign capital inflows so as to maintain exchange-rate stability. If the exchange rate strengthens, banks may purchase Hong Kong dollars from the HKMA. This expands the monetary base,

pulling interest rates down and, thus, discouraging further capital inflows.

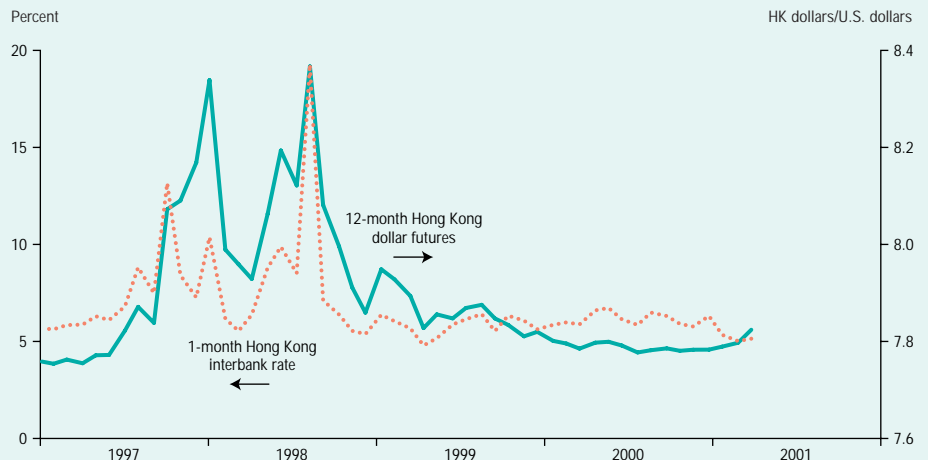
### Facing Down the Crisis

During the Asian financial crisis, speculators exploited this interest rate predictability. They took short positions in the Hong Kong stock and stock futures markets. At the same time, they sold borrowed Hong Kong dollars against the U.S. dollar. Under the currency board, the HKMA stood ready to buy back Hong Kong dollars. And herein lies the dilemma under the currency board. On the one hand, continued buyback shrank the monetary base and drove the short-term interest rate up sharply, arresting the outflow of U.S. dollars in defending the currency board. On the other hand, overnight interest rate upsurges—300 percent at one point in October 1997—triggered precipitous drops in stock and stock futures prices, producing hefty profits for short-sellers. After every attack, market confidence plummeted.

The HKMA feared Hong Kong's economy could very well bleed to death if the situation persisted. If the economy were dead, what good could the mere preservation of the currency board possibly

Chart 1

### Markets Stabilize after HKMA Intervention



SOURCES: Bloomberg; Hong Kong Association of Banks.

do? If the situation got out of hand, the only choice might be to abandon the currency board. That's the last thing the HKMA wanted to see.

Few options were available to reverse the trend of depleting foreign currency reserves and bleeding equity markets. Among them, two stood out—outright capital control and direct intervention. While during the crisis Malaysia adopted the former, Hong Kong chose the latter. When the speculative attack intensified again in August 1998, the HKMA intervened simultaneously in the money, stock and stock futures markets in addition to buying back Hong Kong dollars. During the last two weeks of August, it imposed penalty charges on targeted borrowers that served as settlement banks for the speculators and bought \$15 billion worth of Hang Seng Index stocks (8 percent of the index's capitalization). In addition, it took long positions that pushed the stock futures 20 percent higher. After the intervention, the exchange rate quickly stabilized, and currency futures and short-term interest rates returned to sustainable levels (*Chart 1*).

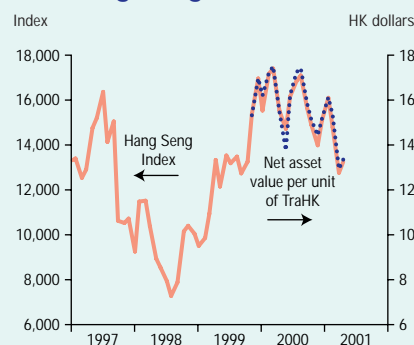
Facing harsh criticism for deviating from its long-standing nonintervention policy, the HKMA argued that the intervention was justified by Hong Kong's strong economic fundamentals as well as the extreme global financial turmoil. The HKMA contended that without forceful intervention, not only would the currency board have collapsed but there would also have been ripple effects. One only need recall that about the same time, Russia's debt default triggered the Long Term Capital Management crisis in the United States, which forced the Federal Reserve to step in with a rescue package and lower the federal funds rate to prevent a global financial meltdown.

## Revisiting the Intervention

In retrospect, the intervention could not have had a lasting stabilizing effect without the favorable developments that followed. These included the lower U.S. interest rate mentioned earlier, the continued recovery of the regional economy, the rebound of foreign trade in China and, particularly, China's pledge not to devalue its currency.<sup>5</sup> Meanwhile, the HKMA adopted a series of technical

Chart 2

### TraHK Closely Tracks the Hang Seng Index



SOURCE: Bloomberg.

measures to enhance the currency board.<sup>6</sup> There has even been discussion about writing the currency board into the Basic Law (Hong Kong's constitution) to further deter any speculative attack.

From an operational point of view, whether the intervention was ultimately a success hinges on the government's ability to properly dispose of the large portfolio of Hang Seng Index stocks it acquired during the intervention without incurring a huge loss or causing the kind of market turmoil it tried to subdue in the first place. In November 1999, the HKMA launched TraHK, a unit fund tracking the Hang Seng Index (*Chart 2*). A large portion of the portfolio is being sold back in batches through TraHK. By April 2001, the sales had reached \$15 billion, the same amount the HKMA purchased during the intervention. With equity appreciation, the remaining portfolio currently amounts to \$14 billion. The HKMA will continue to dispose of its holdings through TraHK, except for a minor portion that will be held in the Exchange Fund's long-term investment portfolio.

## Long-Term Effects

In the long run, will Hong Kong's deviation from its traditional nonintervention policy spell doubt for future investor confidence, capital flows and corporate governance? Will the intervention induce more risky behavior by both foreign and local investors?

We don't have all the facts yet. The stock market has enjoyed a quick recov-

ery since mid-1999 and peaked in 2000 before the Nasdaq bubble burst. A number of major initial public offerings were pushed through in 2000. International capital continues to flow in and out unhindered. Because the intervention was targeted at preserving the currency board and maintaining exchange-rate stability instead of simply propping up the local stock market or controlling individual stocks, the impact on corporate governance has been kept to a minimum.

The moral hazard related to the intervention is definitely a downside risk that requires careful handling. To the extent that the Hong Kong government created the impression that it would bail out the stock market over and over again, regardless of the reason for intervention, the effect on private-sector risk taking might make policymakers wish they had followed a less interventionist policy.

The Hong Kong dollar's long-term stability depends on the continued refinement of the exchange rate regime to achieve a fine balance between the monetary authority's discretion and rules of a strict currency board arrangement.

—Dong Fu

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## Notes

- <sup>1</sup> Hong Kong's exchange rate arrangement differs from a pure currency board in several aspects. There is a market exchange rate in addition to the official rate. The HKMA also runs a discount window operation using the Exchange Fund notes and bills. See also footnotes 2, 4 and 6.
- <sup>2</sup> Hong Kong's monetary base also includes Certificates of Indebtedness, the aggregate balance of banks' settlement accounts at the HKMA and the Exchange Fund notes and bills. The fact that banks use the Exchange Fund notes and bills in discount window borrowing instead of selling them directly in the secondary market seems to suggest a discrepancy in the complete backing of the notes and bills. Further research needs to be done to clarify this.
- <sup>3</sup> For historical reasons, the Hong Kong currency notes are issued by three commercial banks and not by the HKMA.
- <sup>4</sup> During the financial crisis, the HKMA intervened at a rate slightly lower than the official rate. The rule was changed later. Now, the HKMA buys the Hong Kong dollar if it weakens below the official rate but maintains certain discretion in selling if it appreciates above. So the market rate may deviate slightly upward from the official rate from time to time.
- <sup>5</sup> The HKMA and the People's Bank of China acted independently but moved in concert during the currency turmoil. Although the HKMA had enough foreign currency reserves to conduct the market operation, it would have been entirely feasible for the People's Bank of China to step in had the need arisen. Currently, mainland China and Hong Kong rank second and third in the world in foreign currency reserves.
- <sup>6</sup> Among them are the formal introduction of the discount window and stricter rules for backing Exchange Fund notes and bills.