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The price of virtue: 25 years of the currency board in Hong Kong

Adopted in October 1983, the currency board has allowed Hong Kong to face the economic storms and to maintain the markets' confidence in one of the world's main financial centres. However, exchange rate stability has not been achieved without hitches. The adjustment costs related to this system are high, like they were during the Asian crisis of 1997, and the economic performance of Hong Kong tends to be lower than that of its neighbours. In a context of international financial instability and growing integration to an increasingly more open Chinese economy, what is the assessment of the 25 years of operation of this regime and what are the prospects?

The choice of discipline

1983 was marked by the political conflict between the British and Chinese authorities regarding the handover of Hong Kong to China in 1997. Uncertainty about the outcome of this power struggle resulted in repeated attacks on the Hong Kong dollar and it was in an exchange crisis context that the Hong Kong government decided to restore, on October 17th, 1983, the linked exchange rate system or Currency Board Arrangement (CBA). Such a system was nothing new since, after the collapse of the silver standard that had been in place since 1863, the Hong Kong dollar had been tied to the pound sterling from 1935 to 1972 and then to the American dollar from 1972 to 1974[1]. The American dollar thus resumed its role as the anchor-currency and the exchange rate has since then been established at a rate of one American dollar for HK$7.80. Twenty-five years later this system has become perpetual, despite the return of Hong Kong to China and the financial storm of 1997.

It should be said that this monetary anchoring strategy answers well to the characteristics of a country that has made of finance the driving force of its economic development and whose success depends on the inflow of external capitals.

The Hong Kong currency board is a sui generis system, which differs from other currency boards in force (boxed text 1). Thus, there is no true central bank in charge of issuing notes. Commercial banks, the note-issuing banks are the ones that assume this function[2]. The system is supervised by the Hong Kong Monetary Authority (hkma), created in 1993 to deal with the problems of inefficiency arising from the lack of coordination between the private actors. However, the HKMA does not have clear arbitration rules for the foreign exchange market and prefers to maintain a "constructive ambiguity"[3] à la Bagehot. This results in slight fluctuations in the exchange rate against the American dollar. Also, the quite relative fluctuation of the Hong Kong currency was made official with the adoption

1. J. Nugée (1995), "A Brief History of the Exchange Fund", *Quarterly Journal*, Hong Kong Monetary Authority, May 1-17.
2. Three banks share the monetary emission market (Hong Kong Monetary Authority [2008], "Annual Report 2007", Hong Kong): Hong Kong and Shanghai Banking Corporation Limited (66.3% of the notes in circulation at the end of 2007); Standard Chartered Bank (Hong Kong) Limited (13.7%); Bank of China (Hong Kong) Limited (20%).
3. S. Tsang (2000), "The Currency Board Arrangement in Hong Kong China: Viability and Optimality Through the Crisis", in *Rising to the Challenge in Asia*, vol. 3: A Study of Financial Markets, Manila: Asian Development Bank.

Boxed text 1 - The operation of the currency boards

The currency board is a particular fixed exchange rate system, in which the central bank loses its control over the amount of currency in circulation, which depends on monetary reserves in the anchor–currency. Consequently, the money creation sources are exclusively external and are the product, primarily, of a trade surplus and of foreign investment.

The main advantage of this system, which involves total convertibility, lies in the automatic adjustment mechanism that governs it. In the event of a deficit in the current account, the national currency is exchanged for the standard currency. This operation results in a contraction of the money supply, which causes two types of effects: on the one hand, an immediate increase in the interest rates generating a capital inflow that makes it possible to finance the recorded deficit and, on the other hand, a general price level reduction that contributes to improving the competitiveness of the economy and promotes the return to external balance.

In addition to Hong Kong, several economies have chosen the currency board, in particular Bermuda, the Cayman Islands and Djibouti, which are tied to the American dollar, and Bulgaria, Bosnia, Estonia and Lithuania, which are anchored to the euro. Argentina, whose peso was tied to the dollar, had to give up this system after the financial crisis of 2000-2001.

of an exchange band ranging between HK$7.75 and 7.85. The role of the Exchange Fund, placed under the supervision of the HKMA, is to guarantee the backing of the monetary base with currencies. For this purpose, its level of foreign exchange reserves is among the highest in the world. At the end of June 2008, these reached 158 billion American dollars, that is, more than seven times the monetary base and approximately 40% of the M3 money supply.

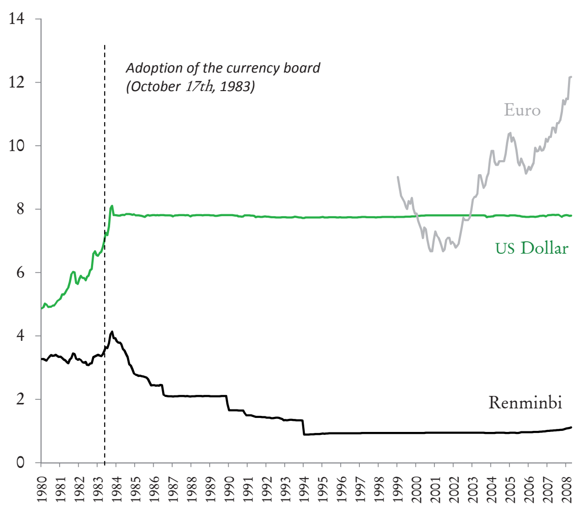
A contrasting balance

The currency board was able to sustainably stabilize the exchange rate against the American dollar (graph 1). The elimination of the exchange rate risk encourages the inflow of external capital making Hong Kong, after China but ahead of India, the second recipient of direct foreign investment in Asia. This strategy has, in particular, consolidated Hong Kong's position as one of the main international financial centres (boxed text 2). The commitment of the Hong Kong Monetary Authority to preserve the exchange rate between both dollars at all costs, as during the Asian crisis of 1997, contributed to monetary credibility, thus eliminating devaluation expectations.

However, this system also involves many adjustment costs for the Hong Kong economy. The lack of independence of the monetary policy, together with strict public expenditure control rules, does not allow the authorities to implement stabilization policies for the economic situation. The currency board thus has a pro-cyclical effect: capital outflows linked to the slowing down of economic activity produce currency depreciation pressures, which are compensated by interest rate increases that help to further depress economic activity. The average growth rate of the GDP per capita in Hong Kong, though relatively high between 1983 and 2007 (4% per year), was lower than that of the other countries in the region; this can be partly explained by the catch-up process in economies with initially lower standards of living (except for Singapore). Moreover, over the last ten years, the growth per capita of Hong Kong (4.5%) was within the regional average (Table 1). However, it is the strong volatility of the Hong Kong gdp, measured by the variance of the average rate, which is striking. In fact, the exchange rate stability transfers the adjustment to prices and wages, as is indicated by an appreciably higher variance of the inflation rate in Hong Kong (24.9 between 1983 and 2007; 10.0 between 1998 and 2007) than for the other countries (except for China over a long period). However, the wage discipline entailed by the existence of the currency board is not sufficient to allow the prices to play their part in the adjustment, resulting in a strong volatility of the growth and unemployment rates, thus confirming the pro-cyclical character of this system. It would also seem that the strong volatility of the economic activity produces a hysteresis phenomenon, the unemployment rate being higher than the regional average.

These adjustment costs were specially felt at the time of the Asian crisis of 1997. The repeated speculative attacks against the Hong Kong dollar have entailed massive capital outflows causing a significant increase in the interest rate, with the interbank rate reaching even 280% from day to day at the end of October 2007. In addition, in order to avoid the contagion effect that affected all the currencies of the region, the HKMA decided to intervene actively on the exchange rate and stock exchange[4] markets,

Graph 1 – Hong Kong dollar exchange rate 1980-2008



Note: amount of Hong Kong dollars for 1 euro, 1 American dollar and 1 yuan (an increase indicates a depreciation of the Hong Kong dollar).
Source: International financial statistics, IMF.

Table 1 – Compared performances of some Asian economies

	GDP growth rate per capita				Inflation rate				Unemployment rate			
	1983-2007		1998-2007		1983-2007		1998-2007		1983-2007		1998-2007	
	$\bar{x}$	σ^2_x	$\bar{x}$	σ^2_x	$\bar{x}$	σ^2_x	$\bar{x}$	σ^2_x	$\bar{x}$	σ^2_x	$\bar{x}$	σ^2_x
Hong Kong	4,0	14.8	4.5	17.8	4.1	24.9	-1.2	10,0	3.7	4.5	5.7	2.6
China	8.9	7.5	8.9	1.8	6.2	57.3	1.3	3.9	3,0	3.8	0.6	0.3
South Korea	5.6	12.6	5,0	18,0	4.3	4.8	2.7	2.9	3.4	1.5	4.2	1.7
Singapore	4.4	13.3	4.1	18.1	3.6	4.1	2.2	5.6	2.3	1.3	2.4	0.6
Taiwan	5.5	7.1	3.7	5.8	n.d	n.d	0.8	0.8	n.d	n.d	4,0	0.8

Notes: $\bar{x}$ = annual average in % (geometric average for growth and inflation rates; arithmetic average for unemployment rate). σ^2_x = variance. The GDP per capita is measured in constant dollars of 2005.
n.a.: information not available.
Sources: calculations made by the author from the CHELEM for the GDP and from International Financial Statistics, IMF, for inflation and unemployment.

unlike most of the other Asian countries which let their currencies slip. While the public intervention was able to safeguard the system, it also caused a strong recession of the Hong Kong economy. One of the main driving forces of the activity, the real estate sector, which is particularly sensitive to credit costs, was greatly affected and the actual GDP dropped by 6% in 1998[5]. After the recovery of 1999, the growth rate settled below the regional average (except for 2004). Prices, for their part, fell by 4% in 1999 and only started to increase again after 2004 (0.9% in 2005; 2% in 2007). Finally, the unemployment rate almost tripled between 1997 (2.2%) and 1999 (6.3%) and, though it started to drop again after 2003 (7.9%), by 2007 it had not regained the levels that it had before the crisis (4%).

Boxed text 2 - The Hong Kong economy in short

With a GDP per capita of 29,582 American dollars in 2007, the people of Hong Kong are among the richest inhabitants of the planet. Such a performance is explained by an unmitigated opening strategy, which has made this small country a hub for maritime trade and international finance. Having based its industrial development on the textile sector, with the benefit of cheap labour, the Hong Kong economy is today primarily directed towards services (approximately 85% of the GDP). Thanks to a particularly generous tax policy, the Hong Kong money market, in strong competition with that of Singapore, attracts capital from all over the world. The high demographic density (approximately 6,350 inhabitants/km2), due both to the geography and to economic success, has in addition involved a race for construction which makes real estate one of the leading activities of the country.

Ultimately, the main problem of the currency board arises from the fact that the Hong Kong economy is strongly dependant on the decisions of the FED, and thus on the situation in the United States. The monetary policy is logically determined by the interests of the US economy and is not intended to take into account the situation of Hong Kong (or any other partially or completely dollarized economy). Variations in interest rates in particular, are disconnected *a priori* from the Hong Kong cycles and can thus produce pro-cyclical effects (an increase in the interest rates in the United States causes an outflow of capital in Hong Kong, which is compensated, according to the logic of the currency board, by an increase in the Hong Kong interest rate). Nevertheless, this situation may become positive when, as has been the case over these last years, the American dollar tends to depreciate. The Hong Kong economy has thus benefited from a favourable price-effect which has made it possible to reinforce the competitiveness of its companies and resulted in a significant improvement in the trade balance as from 2002.

Another 25 years?

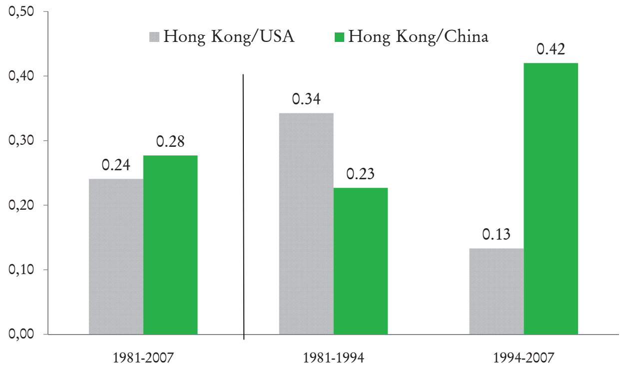
The first 25 years of the currency board reinforced the position of Hong Kong as an international money market thanks to the exchange rate stability and the confidence that the latter affords foreign investors. However, nothing guarantees that the Hong Kong currency board will survive for another 25 years. The gains in terms of credibility were partly offset by the adjustment costs that harmed macroeconomic performance and the future of the currency board will largely depend on the capacity of the system to face future financial storms. In this respect, the current crisis could constitute a new ordeal by fire. The banking crisis that started in the United States should indeed affect the Hong Kong economy for at least three reasons: first of all, because many financial institutions all over the world, including Asia, bought bonds related to the American subprimes; secondly, because the banks that are today in difficulty are present in Hong Kong; and finally, because the instability of the international financial system is the source of a generalized crisis of confidence.

4. For a detailed review of the measures adopted by the monetary authorities given the speculative attacks, see B. Rzepkowski (2001), “The Credibility of the Hong Kong Currency Board”, Economic Review, 52.2:285 - 301.
5. In comparison, in 1998, the growth rate of the GDP was +7.8% in continental China, +4.5% in Taiwan, -1.4% in Singapore and -6.9% in South Korea.4

If it is followed by significant capital outflows, Hong Kong could have difficulty resisting the interest rate increase which retaining the currency board would involve.

But especially, the future of the currency board is closely related to the evolution of the Hong Kong-China economic relations. The handover of Hong Kong to China was carried out based on a "one country, two systems" principle. Until now, this principle has been upheld and the currency board should thus not be called into question by the Chinese authorities. However, the Hong Kong economy is becoming increasingly more integrated with China. The portion of exports bound for continental China went from 34% of the total exports in 2000 to 47% in 2006. This redirecting of trade flows in particular took place to the detriment of the United States, whose share of the total of Hong Kong exports at this same time dropped from 23% to 15%. For the time being, Hong Kong is thus benefiting from the progressive revaluation of the renminbi, implemented since 2005 to conquer market shares in China (between June 2005 and July 2008, the American dollar lost 17.4% of its value against the renmimbi). However, is it still important to maintain a fixed exchange rate against the American dollar when the Hong Kong economy is increasingly less synchronized with that of the United States and increasingly more synchronized with that of continental China (graph 2)? Current uncertainty regarding the exchange strategy of China make the pegging of the Hong Kong dollar to the Chinese currency an unlikely assumption, at least in the short run. However, other solutions are possible, the first of which, as for Singapore, is the anchoring to several currencies. Comprised by the dollar, the euro, the yen and possibly the renmimbi, such a system would allow the risk related to individual currency vicissitudes to be diversified and the extent of the adjustments to be limited. However, one of the advantages of the current regime lies in its simplicity and it is not certain that currency weighting promotes the transparency, and therefore the credibility, of the currency board.

Graph 2 – (De)synchronization of economic cycles



Notes: The figures correspond to the correlation coefficient between the growth rates of the actual GDP.
Source: International financial statistics, IMF.

The total dollarisation of the Hong Kong economy is also possible, but it would only accentuate the inherent problems of a fixed exchange system.

The path of flexibility thus remains. The advantages obtained by the adjustment through the exchange rate and the independence of the monetary policy could contribute to the improvement of economic performance. Some economies that are even more open than that of Hong Kong, such as those of Malaysia or Taiwan[6], do not hesitate to allow their currencies –more or less freely– to fluctuate. The experience of many emerging markets over these last years show especially that, contrary to the precepts of the Washington Consensus, flexible exchange rates do not make external capital flee.

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6. The commercial opening coefficient (the relationship between the sum of the exports and imports and the GDP) was 0.92 in 2006 in HongKong, 1.14 in Taiwan and 1.84 in Malaysia.

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