

## EXCHANGE RATE POLICY AND REGIONAL INTEGRATION IN ASIA

*Asian foreign exchange markets are under pressure. Since 2007, good macroeconomic fundamentals, favourable growth prospects and high interest rates have made the emerging countries a favourite destination for capital. Though the crisis interrupted these flows at the end of 2008, the American monetary policy of "Quantitative Easing" accelerated the inflows of capital because it forced the emerging countries to raise their interest rates to combat inflation. Now, due to its increasingly integrated trade, price competitiveness and stable bilateral exchange rates are important factors in Asia's economic good health. The countries in the area intervene on the foreign exchange markets to prevent their currencies from appreciating. It is not just China that is resorting to this strategy; other countries have been much more active in bearing down on the exchange rate. How can the countries in the area maintain the stability of their exchange rates? As China is obviously the magnet for trade flows within the area, what role does the renminbi play in the exchange rate policies of the other Asian emerging countries?*

*When we look empirically at these questions, we have to ask ourselves whether a de facto monetary area is forming and therefore whether there now exists a process of decoupling from the dollar. Can a loose monetary area form implicitly, without the coordination of regional monetary rules?*

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### ■ The Asian emerging countries' exchange rate policies

A recent study by two economists from the BIS, Guonan Ma and Robert N. McCauley<sup>1</sup>, suggests that, after the pegging of the renminbi to the dollar was abandoned in July 2005, the Asian countries have managed their exchange rates within a loose band (*i.e.* one that allows them to move temporarily out of the band) around a regular movement in their nominal *effective*<sup>2</sup> exchange rate. For most of the countries this exchange rate policy has also had the virtue of stabilising the bilateral nominal exchange rate with the renminbi. The crisis interrupted this process. But, since 2009, these countries seem to have re-adopted the same policy, albeit at different dates.

We will illustrate this hypothesis by looking at the changes in the effective exchange rates of the renminbi, the Thai baht and the Singapore dollar. We could add that the Malaysian ringgit exhibits the same characteristics: these are all countries that have chosen not to let their currencies float freely. We have chosen bands of  $\pm 2\%$  around the average change in effective exchange rate, which corresponds to the initial objective of the authorities in Singapore. If economic integration, along with flexible management of exchange rates, was enabling this group of countries centred around China to maintain a *de facto* consistency of their reciprocal exchange rates, a embryonic

1. G. Ma & R. N. McCauley, The evolving renminbi regime and implications for Asian currency stability, *Journal of the Japanese and International Economies* (to be published).

2.2. The effective exchange rate is an average of the bilateral exchange rates, weighted by the weight of each partner in the external trade of the monetary area in question.

regional monetary area would exercise a force of attraction on the other countries in the region that currently have floating exchange rates. We could then foresee more formal exchange rate agreements leading to a real regional monetary area. Regional institutional cooperation in this field is limited to the Chiang Mai Initiative (signed in 2000 by the ASEAN member countries, China, South Korea and Japan) which provides for emergency help in cases of financial crisis, in the form of bilateral swap agreements. The inadequacy of the funds that can be mobilised and the cumbersome nature of the procedures have limited its effectiveness.<sup>3</sup>

Graph 1 shows the changes in the nominal effective exchange rates of China, Thailand and Singapore from January 2005 to September 2010. China targeted its nominal effective exchange rate from July 2005 to July 2008. The average appreciation over the period was 7.4%. After a six month transitional period (July 2005 to January 2006), the exchange rate no longer went out of the band. The Singapore dollar, with a 9.6% appreciation, and the Thai baht, with a 10.3% appreciation, followed the same trajectory, but with greater fluctuations for the latter currency.

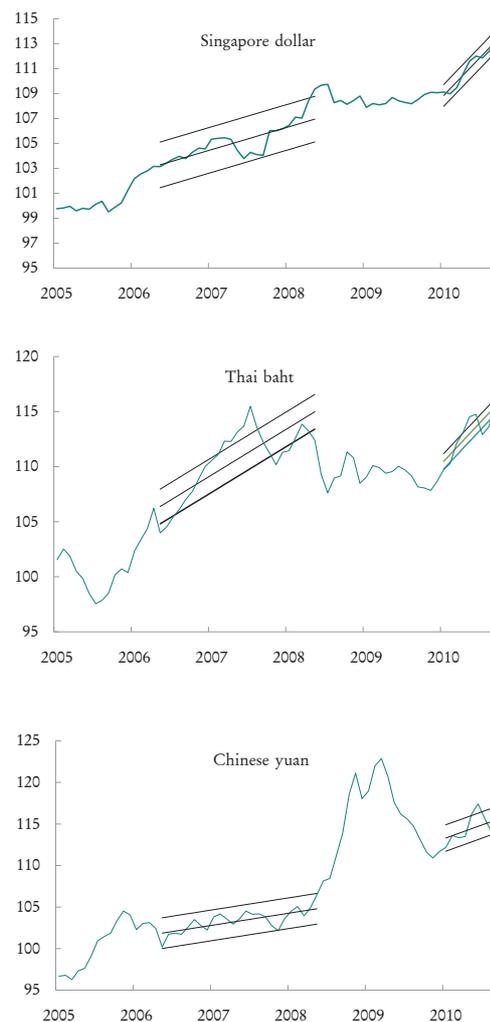
Therefore, even before the start of the recent crisis, effective exchange rate targeting policies had been set up in emerging Asia with, however, different paces of directional change (maybe because the underlying objective is the real effective exchange rate). Even though the countries have different rates of inflation and even if their leaders do not have the same point of view about the role of the real effective exchange in macroeconomic regulation, exchange rate policies with the same short-term tactics but different medium-term strategies can coexist.

## ■ A return to implicit coordination of exchange rate policies

The crisis blew apart the implicit exchange rate targets examined above. China re-established its link with the dollar leading, at first, to a vigorous appreciation in effective terms (around 20% in the six months after July 2008). The Singapore dollar continued to appreciate, though at a much slower pace, whilst the other Asian currencies declined.<sup>4</sup> However, it seems that an effective exchange rate targeting policy was implemented again in the three countries from January 2010 onwards, after a period of great instability, linked to the crisis.

The case of China is spectacular. The renminbi remained anchored to the American currency until June 2010 and, as the dollar depreciated during this period, the excessive appreciation

Graph 1 – Nominal effective exchange rates



Note: Direct effective exchange rate: a rise represents an appreciation of the currency in relation to those of the main trading partners. The bands traced on the nominal effective exchange rates correspond to the straight lines of the OLS over the period January 2006 to January 2008, then from January to September 2010. The periods have been chosen with reference to the changes in the exchange rate policy for the renminbi. The movements within the bands are likely to be due to strong variations in the dollar. The phenomenon of return to the average suggested by the graph is confirmed by an error correction model (Ma and McCauley, *op. cit.*).

Source: National central banks (Datastream), the authors' calculations.

of the effective exchange rate during the crisis was reabsorbed before the end of 2009. In total, the renminbi's effective exchange rate appreciated by around 5% compared to the level that it would have had if the crisis had not occurred and if the pre-crisis policy had been maintained without interruptions. When the effective exchange rate targeting policy was re-established in July 2010 the renminbi's appreciation resumed at a more buoyant rate than before the crisis.<sup>5</sup> But calculation of the real exchange rate shows that in reality the rate of appreciation is the same as before the crisis. This means

3. However, reserves increased to 120 billion dollars in February 2009, and a process of multilateralisation of the mechanism has been in progress since 2006.

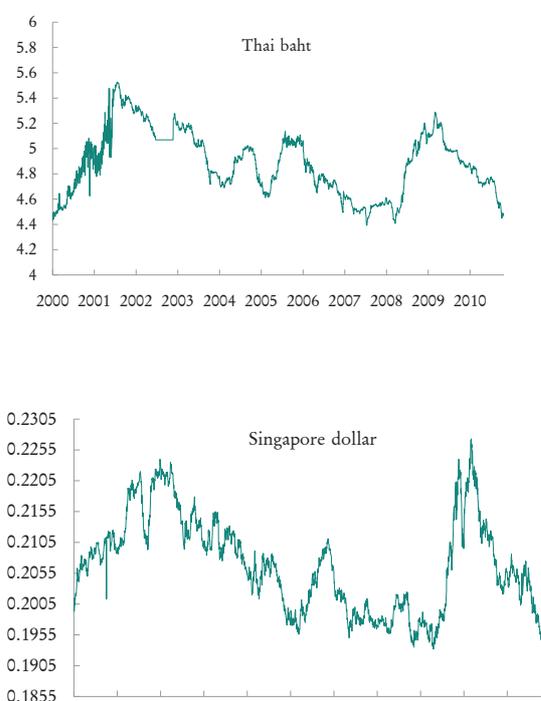
4. The won collapsed following massive withdrawals of capital from the Korean economy, which was heavily indebted in the short term.

5. In China, the exchange rate is controlled within a +0.5% band around a central exchange rate decided on daily by the PBOC.

that the People's Bank of China is using the appreciation of the nominal exchange rate as a means to fight against the inflation intensified by the steep increase in credit linked to the recovery plan in 2009.

As for the baht and the Singapore dollar, they also resumed a faster upwards trend than before the crisis. It follows that the common characteristics of exchange rate management in these countries are greater than the differences, over and beyond the major shock resulting from the world financial crisis. Therefore, we should examine what these exchange rate policies imply for the movements in bilateral exchange rates (graph 2).

Graph 2 – Nominal exchange rates against the renminbi



Note: Direct bilateral exchange rates: a rise represents an appreciation against the Chinese currency.

Source: National central banks (Datastream).

Before July 2005, each country followed a different exchange rate policy and the exchange rates against the renminbi varied a great deal. When the renminbi started to appreciate in mid-2005 the shock caused a heavy depreciation of the baht and Singapore dollar but this was absorbed in 6 months. From the start of 2006 to June 2008 the Singapore dollar remained remarkably stable against the renminbi. The adjustment of the baht took longer. The period of relative stability lasted two years: between June 2006 and June 2008 the Singapore

dollar was half as volatile<sup>6</sup> against the Chinese currency as against the American dollar. The same goes for the baht (0.026 against the renminbi, 0.056 against the dollar). These two currencies were also more volatile against the euro and the yen than against the renminbi.

Because the renminbi was anchored to the dollar during the crisis and the other currencies depreciated heavily, the stability of intra-regional trade became dislocated. It is interesting to look at what effects the re-establishment of effective exchange rate targets had on the bilateral exchange rates against the renminbi. In practice, what we find is a return to the exchange rates obtained before the crisis, for both the baht and the Singapore dollar. If we look at other currencies, the same phenomenon occurs for the Malaysian ringgit but not for the currencies of countries with flexible exchange rates. The Taiwanese dollar depreciated by around 15% and the won by around 30% against the renminbi compared to their levels before the crisis.

Though the exchange rates may settle at different levels, they are still marked by a great stability. Between March 2009 and September 2010 the Singapore dollar and Thai baht were more volatile against the euro (respective volatilities of 0.017 and 0.077) and the American dollar (0.018 and 0.036) than against the renminbi (0.010 and 0.029). The Malaysian ringgit shares this characteristic. It therefore seems that the Chinese currency has become the fulcrum of Asian exchange rates. This gives the Chinese authorities the opportunity to embark on a gradual process of internationalisation of their currency.

### ■ The convertibility of the Chinese currency for non-residents and the formation of an offshore foreign exchange market in Hong Kong

This possible monetary development is part of a wider structural change. The speed with which the emerging countries catch up will depend more on their internal dynamics and trade between themselves than on exports to western countries. The acceleration of economic integration in Asia is part of this phenomenon. China is the main partner in both intercontinental relations and Asian integration. The result of this is that trading partners engaged in two-way trade with China will find it advantageous to use the yuan as the means of payment, as long as they have facilities for managing their liquidities. All the more so because renminbi varies regularly against the American dollar.

6. Here, volatility is defined as the standard deviation of the log of the nominal exchange rate on daily data.

A significant development in this sense occurred in spring of 2010 with the creation of the *CNH market* (*Chinese Yuan Hong Kong*). This is an offshore yuan market for non-residents organised in Hong Kong. It establishes convertibility of the yuan for non-residents in a way that is, up till now, compatible with the maintenance of capital controls for residents. An agreement between the People's Bank of China and the Hong Kong Monetary Authority enables economic agents not domiciled in China, that are not banks and that do not have direct trade links with China, to open accounts in yuan on the books of qualified banks in Hong Kong. Access to the Chinese monetary market will remain restricted to the banks that participate in the settlement of offshore transactions. In addition, the *CNH market* will be accompanied by a central system of compensation and settlement in yuan for offshore transactions, which should promote liquidity, and an offshore bond market in yuan, called the *Dim Sun Bond market*, open in Hong Kong. This latter is intended to provide non resident investors with attractive securities. It has a bright future ahead because it will enable institutional investors worldwide to diversify their portfolios with Chinese assets under conditions that were inaccessible up until now, except to the restricted circle of qualified investors.

The *CNH market* will thus make Hong Kong the world financial centre for sino-yuans, just as London became the financial centre for eurodollars in the 1960s, when controls were put on the export of bank capital from the United States.

The consequence of all of these changes will be the development of a dual foreign exchange market in Hong Kong: the \$/CNY exchange rate for the commercial transactions which will be quoted with reference to the exchange rate on the Chinese onshore market, on the one hand, and the \$/CNH exchange rate for non-commercial transactions for which the quotation will be the endogenous result of the supply and demand balance of liquidity in offshore yuan, on the other. The spreads between the official spot market, the futures

market for contracts settled in Hong Kong (non deliverable forward) and the market for contracts settled in yuans (deliverable forward) will give valuable indications about the intensity of tensions affecting the Chinese currency.

## ■ Conclusion

The monetary developments examined in this Letter are part of a gradual process of exiting from the semi dollar standard system. They give greater credibility to the formation of a vast monetary area in Asia centred on the renminbi, even though that currency has not yet become fully convertible. The advantage of regional monetary areas is that they can manage financial disruptions that are internal to a region and stop them from spreading to the whole of the international monetary system.

The future will tell us whether an informal system, such as the one developing in Asia, is sufficient to provide the advantages of a regional area or if subsequent institutional arrangements, extending the Chiang Mai Initiative, will be necessary.

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