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Hong Kong and the Internationalisation of the RMB

MAN KWONG LEUNG*

ABSTRACT: The Chinese currency, Renminbi Yuan (RMB), has had restricted convertibility outside the mainland, namely in Hong Kong, from early 2004. From July 2009, much wider convertibility has been permitted, with the RMB being used as a cross-border trade settlement currency. This paper attempts to assess the factors that have motivated RMB internationalisation, and the role Hong Kong has played in the process, against the background of China's evolving foreign exchange markets and the RMB exchange rate benchmarking to the Hong Kong market. It shows that China's ultimate goal of full convertibility of the capital account has provided the underlying motivation for RMB internationalisation, and that the 2008 global financial crisis acted as a catalyst in the process. With the political blessing of the central authorities and its extensive business and financial links with the mainland, Hong Kong has gradually established an RMB offshore market to supplement capital account liberalisations on the Mainland. The prospects for RMB internationalisation will be determined by the growth of the Chinese economy, reinforcing flows of RMB funds between the offshore Hong Kong and onshore Shanghai markets, and the balanced development of these two markets.

KEYWORDS: Hong Kong, China, RMB Internationalisation

Introduction

Since the 1978 reform, while maintaining a rigid official exchange rate pegged to the US dollar (USD) under capital control, China has allowed the operation of a restricted market-determined swap rate in a bid to promote the country's trade and foreign direct investment. In 1994 the dual exchange rates were merged, and a national foreign exchange market was subsequently established in Shanghai. Since 1996, the Chinese currency, Renminbi Yuan (RMB), has been fully convertible on the current account on the mainland, and until 2004 China allowed very limited convertibility of RMB outside the Mainland, namely in Hong Kong. Starting in July 2009, prompted by the global financial crisis of the previous year, China allowed the use of RMB in the settlement of its cross-border trade. Since then, the pace of RMB internationalisation has quickened, with Hong Kong gradually emerging as an RMB offshore market. This paper aims to assess the factors motivating RMB internationalisation, and the unique role Hong Kong has played in the process, against the background of China's evolving foreign exchange (FX) markets and the RMB exchange rate benchmarking to the Hong Kong markets. The paper is organised as follows: The first section reviews the institutional arrangements of the evolving FX markets on the mainland. In the second section, the determination of the RMB exchange rate is analysed, using the flows of funds approach. The factors motivating RMB internationalisation will be assessed in the third section, and the unique role of Hong Kong in the process is examined in the fourth section. The prospects for RMB internationalisation are evaluated in the fifth section, while the sixth section concludes the paper.

Structure of the evolving Chinese FX markets

In line with the open-door policy underpinning the 1978 reforms, China has started to implement gradual reform of its rigid foreign exchange system pegged to the USD. From March 1979, the newly established State Administration of Foreign Exchange (SAFE), a specialized bureau under the People's Bank of China (PBOC),⁽¹⁾ has been assigned the role of regulator in the Chinese FX markets. During the period 1979 to 1994, SAFE allowed domestic and foreign enterprises in China to balance their needs for FX among themselves in designated FX Swapping Centres, using market-determined swap rates, along with the official exchange rates for the RMB.

In January 1994, the official and swap rates were unified at USD 1 = RMB 8.7, reflecting China's acceptance of Article VIII of the International Monetary Fund that multiple and discriminatory exchange rates should not exist in the country.⁽²⁾ Three months later, a national foreign exchange market, the China Foreign Exchange Trading System (CFETS), was established in Shanghai. Financial institutions have to be assessed and approved by the PBOC before they are admitted as members of the market. In December 1996, the RMB was made fully convertible on the current account

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1. PBOC was formally appointed as the central bank by the State Council in September 1983. At present, Mr. Gang Yi, who is the Director of SAFE, is also one of the deputy governors of the PBOC.

2. In December 1993, the official rate and swap rate were 5.7 and 8.7, respectively. The unified rate followed the swap rate, as more than 80 percent of the FX transactions used the swap rate.

Table 1 – CFETS: FX products and members (31 March 2011)

	Exchanges with RMB				Exchanges between foreign currencies (spot)
	Spot	Forward	FX Swap	Currency Swap	
Currency pairs*	7	5	5	5	9
Members	295	75	71	24	84

*one of which is RMB, except in exchanges between foreign currencies (spot).

Source: Chinamoney website.

of the balance of payments. Capital account restrictions are still imposed on direct investments and financial investments within and outside China.⁽³⁾

Since the country's accession to the World Trade Organisation as a developing country in December 2001, the bank-dominated Chinese financial sector has made significant improvements in its money markets and monetary policy operations.⁽⁴⁾ These provided China with the foundation upon which the country could switch from a USD peg system to a managed float system in July 2005, allowing increased flexibility for changes in the RMB exchange rate with reference to a basket of currencies.⁽⁵⁾ Since then, the Chinese FX markets have seen a steady increase of member institutions and the introduction of new products.

Table 1 shows the structure of FX products and their member institutions in CFETS.

FX Spot

FX spot trading refers to buying one currency with another for immediate delivery. Seven major foreign currencies (FC) are now traded spot against RMB (CNY) in Shanghai.⁽⁶⁾ They are: US dollar (USD), Japanese Yen (JPY), HK dollar (HKD), Euro (EUR), Great Britain Pound Sterling (GBP), Malaysian Ringgit (MYR), and Russian Rouble (RUB). With the dominant role of the USD in international trade and investment, the currency pair USD/CNY has accounted for more than 90 percent of the total spot trading in China.

Following the break-up of the Bank of China's monopoly position in FX trading from 1994, more financial institutions have been approved by PBOC to trade FC against CNY on the CFETS platform. Table 2 shows that the membership for spot trading has been dominated by domestic and foreign banks in cities.

Table 2 – Types of member institutions for spot trades with CNY (March 2011)

Type	Number
Chinese policy, nationwide, and city commercial banks	99
Foreign banks and their branches	100
Rural financial institutions	72
Finance companies	23
Non-financial companies	1
Total number	295

Source: Chinamoney website.

Enterprises and individuals in China must sell and buy FX through designated banks. Hence, the big five state-owned banks (the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the Bank of China (BOC), the China Construction Bank (CCB), and the Bank of Communication (BCOM)), with their extensive operations and branch networks across the country, have accounted for the bulk of spot trading.⁽⁷⁾ The tight control over the FX market is also reflected in the fact that no insurance companies, securities companies, or fund management companies are members of CEFTS.

FX Forward

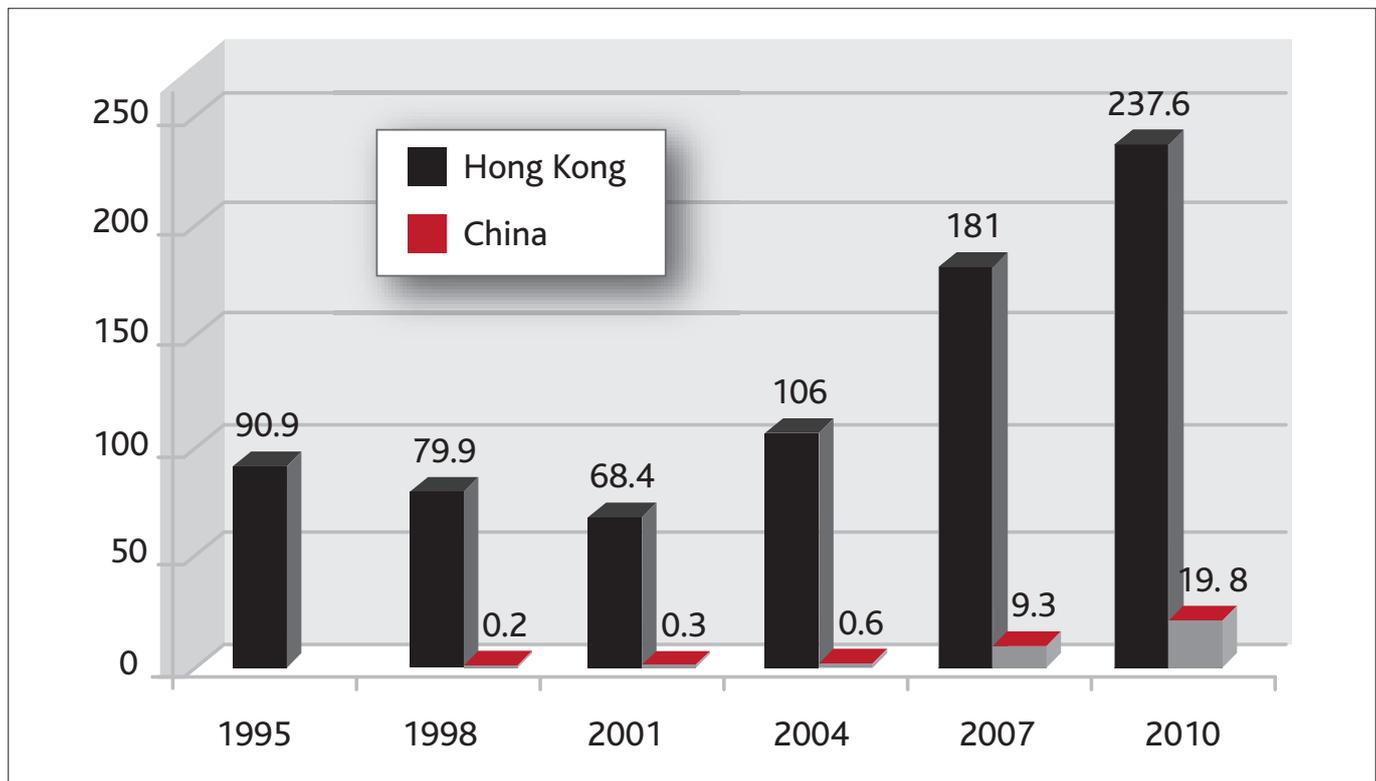
With forward trading, the currencies will be delivered at a future date at the pre-agreed exchange rate. FX forward therefore helps international traders manage FX risks. In April 1997, BOC first launched FX forward products to its clients. Three of the other big banks (CCB, ICBC, and ABC) followed its example in 2003. FX risks became more significant when the RMB exchange rate was determined with reference to a basket of currencies from July 2005. Subsequently, CFETS started the forward market for its members in August 2005. At present, there are fewer members for forward than spot trading. Excluding MYR and RUB, five international currencies can be traded forward against CNY. Meanwhile, as foreign firms and investors outside China could not gain access to its FX Forward market, USD-settled contracts, RMB Non-Deliverable Forward have been offered by international banks in the offshore markets of Singapore and Hong Kong from 1996.⁽⁸⁾

FX swap and currency swap

An FX swap is a purchase of one currency against another now (spot), and an agreement to reverse that transaction at a future date (forward), and in a currency swap, while maintaining a FX swap, interest payments

- For a more detailed analysis of the FX market in China from 1978 to September 2005, see Jikang Zhang and Yuanyuan Liang, "The Institutional and Structural Problems of China's Foreign Exchange Market and Implications for the New Exchange Rate Regime," *China: An International Journal*, vol. 4, no. 1, 2006, pp. 60-85.
- See Man Kwong Leung and Qianjin Lu, "Changing Money Market and Monetary Policy Operations in China: An Institutional Perspective," *Journal of Contemporary China*, vol. 20, no. 69, 2011, pp. 287-305.
- The constituent currencies and their weights in the basket have not been disclosed. However, the USD is expected to have the largest weight, as the USA was China's largest trading partner between 2005 and 2010.
- ISO 3-letter codes are adopted for the currencies in international FX markets. CNY is the code for the RMB traded onshore on the mainland. For the currency pair USD/CNY = 6.50, USD is the base and CNY is the counter such that USD 1 = RMB 6.5.
- Zhang and Liang, *op.cit.*
- See Hung-Gay Fung, Wai K. Leung, and Jiang Zhu, "Nondeliverable Forward Market for Chinese RMB: A First Look," *China Economic Review*, vol. 15, 2004, pp. 348-352.

Figure 1 – The Average Daily Turnover in the Chinese and Hong Kong Foreign Exchange market (USD billion) from 1995 to 2010



Source: Bank for International Settlements.

from the holding of the two currencies are also swapped. CFETS started the FX swap and currency swap for its members in April 2006 and August 2007, respectively. The two products have provided two more risk management tools in the Chinese FX markets. As in the forward market, only five currencies are traded using FX and currency swap.

Foreign currency pairs

CFETS has allowed spot trading of foreign currency pairs since May 2005. At present, nine foreign currency pairs are traded. They are: AUD/USD, EUR/JPY, EUR/USD, GBP/USD, USD/CAD, USD/CHF, USD/HKD, USD/JPY, and USD/SGD.⁽⁹⁾

From the outset, trading in CFETS has been conducted using the centralised auto-matching system, with order priority based on price and time. From January 2006, a market-making system has been introduced. With market makers providing bid and offer quotes, a bilateral trade between two members can be concluded. Figure 1 shows that from 1995 to 2010, the turnover values of the Chinese FX market have been very small when compared with the Hong Kong market. The Chinese market started from a very low base, with a daily average turnover of USD 0.2 billion in 1998 to USD 19.8 billion in 2010, whereas the corresponding figures for the Hong Kong market were USD 79.9 billion and USD 237.6 billion. In fact, Hong Kong has been among the world's top six largest FX markets in turnover value over the past two decades.⁽¹⁰⁾

In respect of the structure of FX products in the two markets in 2010, Table 3 shows that the sum of "outright forward" and "FX and currency swap" was more than 90 percent of the turnover value in Hong Kong

whereas the corresponding figure for the Mainland market was about 32 percent. Given more than 90 percent of the spot trading were concentrated on the currency pair of USD/CNY, this reflects the fact that by aiming for steady development via control over market entry and the set of products offered, the competitiveness, product range and risk management of the Mainland markets have had to be compromised.

Determination of the onshore RMB exchange rate

Given the importance of the USD under the managed float from July 2005, the central parity exchange rate for USD/CNY will first be determined, based on the rates quoted by the 26 banks as market-makers. CFETS has not, however, disclosed the number of top and bottom rates to be trimmed, or the weightings attached to the remaining banks in arriving at the central rate. Given the USD/CNY rate, the central parity rates for HKD/CNY, GBP/CNY, JPY/CNY, and EUR/CNY are then derived from the cross rates of USD/CNY with the prevailing market rates of USD/HKD, GBP/USD, USD/JPY, and EUR/USD in the international FX markets.⁽¹¹⁾ All the central parity rates are announced at 9.15 a.m. on each trading day.

At present, a trading band is imposed on each central parity rate.

9. AUD and CAD stand for Australian dollar and Canadian dollar, respectively.

10. No published figures are available after the revaluation of the RMB in July 2005, and the figures for 2007 and 2010 are derived from those in the BIS Triennial Survey on the global foreign exchange markets.

11. Given their small trading volumes, the central parity rates for CNY/MYR and CNY/RUB are the undisclosed weighted average rates quoted by the three and four banks, respectively, as the market makers for the two currencies.

Table 3 – Structure of the FX markets in China and Hong Kong in 2010

	China		Hong Kong	
	(USD billion)	Percent (%)	(USD billion)	Percent (%)
Spot	13.4*	67.7	43.8	18.4
Outright forward	0.5	2.5	32	13.5
FX and currency swap	5.9	29.8	184	77.4
OTC options	0	0	7.7	3.2
TOTAL	19.8	100	237.6	100

*Derived from the sources in Table 1 and 2. Turnover value of USD 0.2 billion for foreign currency pairs inclusive.
Source: Bank for International Settlements, SAFE Annual Report.

Whereas USD/CNY is subject to a daily movement capped at ± 0.5 percent from its central rate, the trading bands for HKD, JPY, EUR, and GBP are ± 3 percent, and for MYR and RUB they are ± 5 percent.⁽¹²⁾ During the trading day, commercial banks in China are allowed margins of 1 percent and 4 percent, respectively, from the parity rates in their FX and FC notes exchange dealings with their customers.

Sources of supply and demand for USD

Foreign exchange has been increasingly received as another asset class in the global FX markets.⁽¹³⁾ As a financial asset, the pricing of FX will be affected by relative interest rates and the expected movements of the exchange rate. In developed markets, FX transactions are further dominated by the portfolio investments denominated in different currencies.

Given the foreign exchange controls in China, the asset market approach to its exchange rate determination is not a valid tool. Instead, the CNY exchange rate can be analysed with the flow of funds underlying the sources of supply and demand of FC against CNY in the Chinese FX market. When the exchange rate for USD/CNY increases, Chinese goods, as well as direct and financial investments in China, will become cheaper for foreign investors. More USD will then be supplied to China. The supply (S_0) curve for USD against the exchange rate of USD/CNY is composed of:

- USD earnings of exporting firms in China;
- Foreign direct investment in China (FDI);
- Qualified Foreign Institutional Investors (QFII).⁽¹⁴⁾

Similarly, when the exchange rate (USD/CNY) decreases, foreign goods and direct and financial investments abroad will become expensive for Chinese investors, decreasing the demand for USD in China. The demand (D_0) curve for USD is made up of:

- USD requirements of importing firms in China;
- Outward direct investments of Chinese firms (ODI);
- Qualified Domestic Institutional Investors (QDII).⁽¹⁵⁾

Assuming that all transactions are settled in USD, Table 4 shows that due to capital control, FDI plus QFII, together with ODI and QDII, have accounted for very limited shares of the sources of supply and demand for USD in the Shanghai FX market. It can be seen that, even though QFII were

marginally smaller than QDII, there were net inflows of USD funds arising from the consistent trade surplus, and an excess of FDI over ODI during the period 2005 to 2010.

Moreover, given a stable exchange rate, the net inflow of USD will be taken up by SAFE, leading to an increase in the FX reserve. Table 4 shows, however, that the increase in FX reserves has been higher than the inflows of funds from these authorised sources. This may provide an indication of the quantity of "hot" money, or unauthorised short-term capital into China, triggered by the expected appreciation in recent years and in pursuit of speculative gains by way of artificially high salaries and export earnings of Chinese firms, and falsified foreign direct investments in China.

Figure 2 shows how the exchange rate can be determined with the total sources of supply and demand for USD, and government policy actions. The central parity rate for USD/CNY is illustrated by the intersection of the D_0 and S_0 at K, which is subject to the daily cap and trading band of ± 0.5 percent. The greater supply over demand of USD funds is represented by a net rightward shift of the supply curve to S_1 . The resulting downward movement of USD/CNY, or the depreciation of USD against CNY, is now assumed to go to L, beyond the trading band. SAFE will intervene and purchase USD so that the demand will increase to D_A and the exchange rate will be pushed back to the lowest daily limit allowed at M.

Meanwhile, inflow of hot money can also be represented by a rightward shift of the supply curve. SAFE has responded with heavy penalties and more frequent checks on capital flows, and these added costs will shift the supply curve back to the left and offset the impact of hot money on the exchange rate. In addition to the fixing of central parity rates and trading bands, the Chinese government would also be able to influence the exchange rate on a long-term basis with liberalisation policies on trade, direct investment, and financial investment at home and abroad. For example, with more liberalisation policies on import and outward investment abroad, and by enlarging the quota for QDII, a rightward shift of the de-

12. RUB/CNY is also traded in MICEX, the Moscow Interbank Currency Exchange from December 2010.

13. Bank for International Settlements (2010) reported that there was a considerable increase in FX spot trading due to the more active participation of other financial institutions such as insurance companies, hedge funds, and retail investors.

14. Authorised by SAFE from December 2002, QFII permits foreign financial institutions abroad to purchase RMB with a given quota in USD so that they can invest in the financial products listed on the stock exchanges in China. In September 2010, 93 financial institutions subscribed a total quota of USD 19 billion.

15. Started in May 2006, SAFE allowed domestic and foreign financial institutions in China quotas to purchase USD with RMB so that they can invest in financial markets abroad. In September 2010, 87 financial institutions took up an investments quota amounting to USD 67 billion.

Table 4 – Sources of supply and demand for USD in the FX market

Supply of USD (USD billion)	2005	2006	2007	2008	2009	2010
Exports	762	969	1218	1431	1202	1578
FDI	60.3	63	74.8	92.4	90	105.7
QFII Quotas	2.2	3.3	1	2.8	3.2	2.5
Total (S)	824.5	1035.3	1293.8	1526.2	1295.2	1686.2

Demand for USD (USD billion)	2005	2006	2007	2008	2009	2010
Imports	660	791	956	1133	1006	1395
ODI	12.3	17.6	26.5	55.9	56.5	50.2
QDII Quotas	-	9.7	30	3.3	8	7
Total (D)	672.3	818.3	1012.5	1192.2	1070.5	1452.2

(S) - (D)	152.2	217	281.3	334	224.7	234
Δ FX reserves	119	247.4	461.9	417.8	453.1	448.3

Source: China Statistical Yearbooks. State Administration of Foreign Exchange.

mand curve would increase the rate for USD/CNY, or the pressure on appreciation of CNY would be reduced.

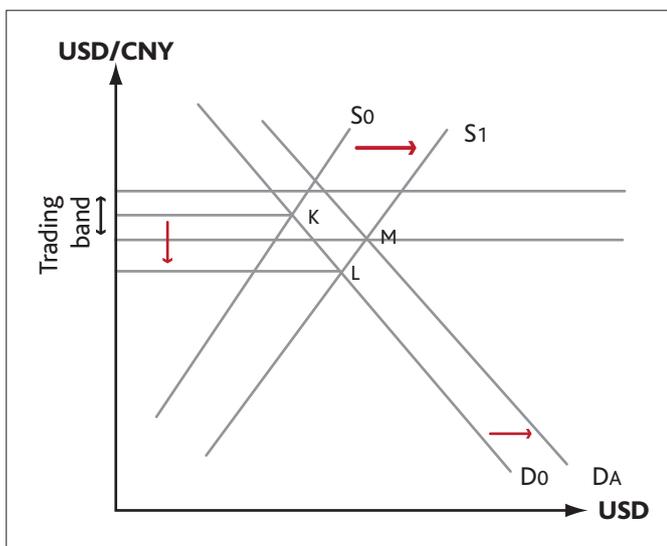
Exchange rate movements

Between January 1994 and July 2005, the RMB exchange rate was kept stable at around USD/CNY = 8.28. In July 2005, there was a one-off revaluation of the RMB to USD/CNY=8.11.⁽¹⁶⁾ Figure 3 shows the movements of the USD/CNY exchange rate and the Real Effective Change Rate (REER) Index between July 2005 and April 2011.⁽¹⁷⁾ As the USD has carried the largest trade weight, the Chinese government has tried to achieve exchange rate stability by way of managing the USD/CNY rate. CNY was first

allowed to respond to market forces and appreciated 17 percent nominally against USD from 8.11 in August 2005 to 6.93 in July 2008. The REER Index showed a trend loss of external competitiveness by 8.7 percent from 101.4 to 110.2 over the same period.

When the impact of the global financial crisis on the Chinese economy started to be felt in July 2008, China reverted to pegging its currency to the USD and maintained a stable exchange rate, with USD/CNY moving narrowly around 6.83 for the next two years. With the depreciation of currencies of Chinese trading partners, the REER Index rose steadily to 126 in February 2009 and dropped to 118 in July 2010 following the depreciation of the USD to which the RMB was linked. When the global economy became stabilised in July 2010, China reactivated its currency link to a basket of currencies and allowed its exchange rate to respond to market forces. As a result, USD depreciated by more than 3.2 percent, from 6.79 in August 2010 to 6.57 in April 2011.⁽¹⁸⁾

Figure 2 – The FX market for RMB in Shanghai

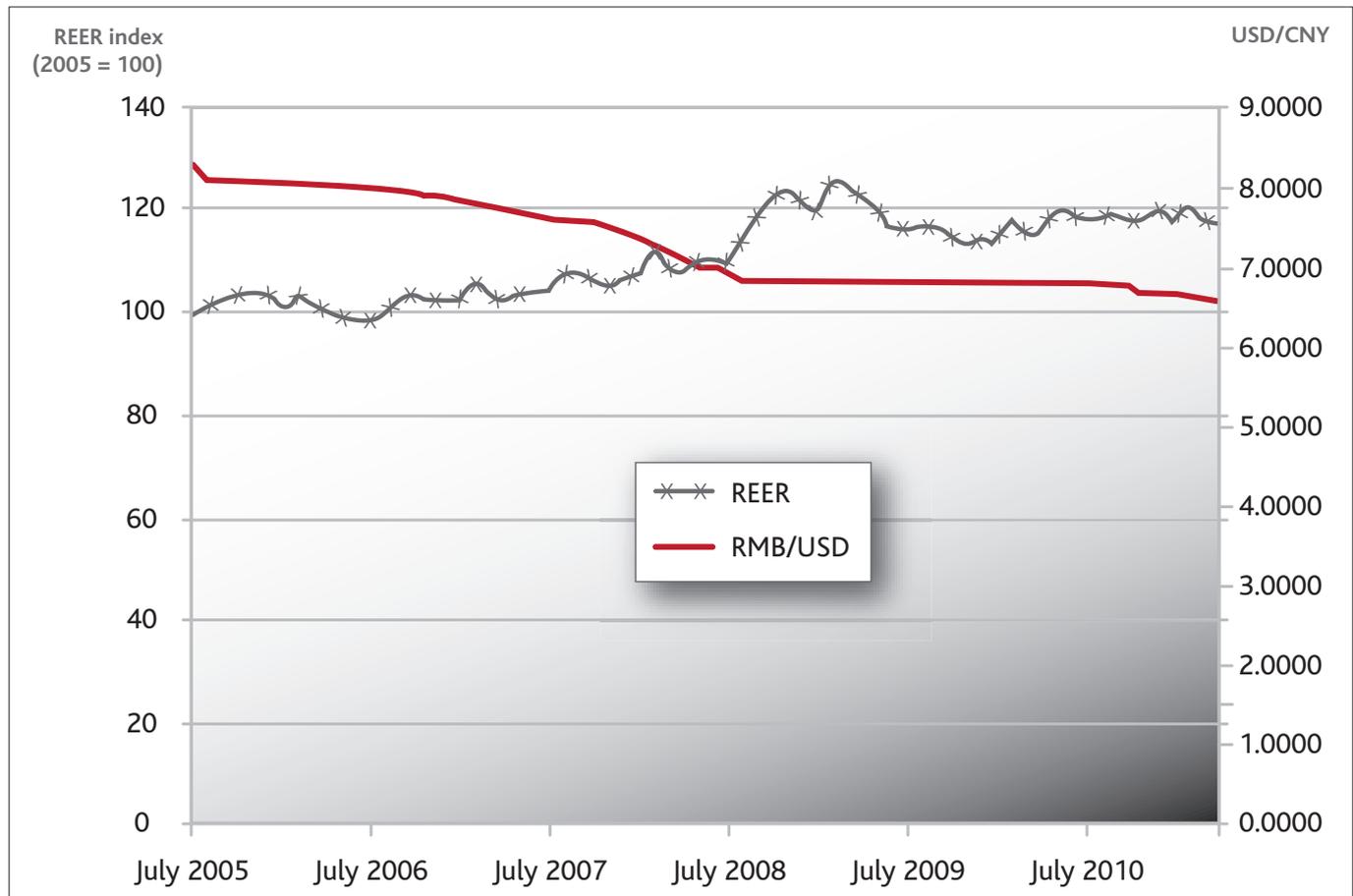


Factors motivating RMB internationalisation

When compared to the Hong Kong markets, the development of the Chinese FX markets and the process of RMB exchange rate determination have been heavily influenced by government policies on capital control. The country's ultimate goal of the full convertibility of the capital account has provided the underlying motivation for RMB internationalisation, or

- The one-off revaluation of RMB on 21 July 2005 was not in response to international pressure, but rather aimed to dampen the surge of hot money and to signal the official start of the move to flexibility. See Michael Goujon and Samuel Guerneau, "The Modification of the Chinese Exchange Rate Policy," *China Perspectives*, no. 64, 2006, pp. 34-44.
- The RMB Real Effective Exchange Rate Index is defined as a trade-weighted average of bilateral exchange rates of China's trading partners, adjusted by their respective price deflators. A rise in the RMB REER Index would mean the currency is appreciating on a real, trade-weighted basis, suggesting a loss in external price competitiveness.
- It will also be in the interests of China to allow for appreciation of RMB, albeit slowly, as this can help reduce imported inflation from raw commodities, and reduce inflationary pressure from reduced supply of RMB bank reserves with the purchase of USD by the PBOC.

Figure 3 – Movements of USD/CNY and REER Index from July 2005 to April 2011



Sources: State Administration of Foreign Exchange and Bank for International Settlements.

the wider use of the Chinese currency by individuals and firms domiciled outside the Chinese mainland, which is expected to contribute to capital account liberalisations and exchange rate flexibility in offshore and on-shore markets. RMB internationalisation entails three different phases in which the role of RMB will evolve as a trade settlement currency, an investment currency, and a reserve currency.⁽¹⁹⁾ With the restricted access to the Chinese financial markets, RMB has been at the preliminary stage of this process, which kick-started in the late 1990s.⁽²⁰⁾ The 2008 global financial crisis acted as a catalyst in accelerating the pace of the RMB internationalisation strategy undertaken by China.

The Chinese authorities have stated publicly that both capital account convertibility and exchange rate flexibility are their medium-term goals. When these goals are achieved, China, already the second largest single economy in terms of national incomes, can gain independence in its operation of monetary policy and better absorb external shocks.⁽²¹⁾ During this transitional period, the Chinese authorities have recognised that premature opening of the capital account poses risks if regulations and supervision arrangements in the financial sector are inadequate.⁽²²⁾ Despite financial reforms, especially those after China's entry to the WTO, the Chinese financial sector has not yet been ready for capital account convertibility, given its state-controlled banking sector, tightly regulated corporate bond market, and highly speculative stock market.⁽²³⁾ Rather, the policy response has been to adopt the "crossing the river by feeling for stones" approach,⁽²⁴⁾ namely by gradually allowing greater exchange

rate flexibility, along with cautiously easing controls on its capital account. The strategy of RMB internationalisation via Hong Kong is a reflection of this policy stance. The advantages of this strategy are to provide time for Chinese industries to adapt to gradual changes in exchange rate, and for the Chinese authorities to improve the regulatory

- To internationalise a currency to the fullest extent is to make the currency a widely adopted currency by private sectors to settle trade deals and make financial investment denominated in the currency, and by national governments to hold their official reserves and to anchor their currencies. USD is a case in point and is the most internationalised currency. See Haihong Gao and Yongding Yu, "Internationalization of the RMB," BOK-BIS Seminar in Seoul, 19-20 March 2009.
- Since the late 1980s, China opened up trade with neighbouring countries such as Vietnam, Myanmar, Mongolia, and Russia. The RMB has gradually become one of the major currencies for these border trades. Since the 1997 financial crisis, the exchange rate stability exhibited by the RMB and the strong Chinese economy have prompted the expanded use of the currency in these border trades. This RMB regionalisation was the beginning process of RMB internationalisation. See Jing Li, "Regionalization of the RMB and China's Capital Account Liberalization," *China & World Economy*, vol. 12, no. 2, 2004, pp. 86-100.
- This is a deduction from the Mundell-Fleming model of the Impossible Trinity. At present, under FX control, China can set its own interest rates in its monetary policy and maintain a stable exchange rate. When RMB becomes fully convertible on the capital account, China has to adopt a flexible exchange rate regime if the country intends to maintain an independent monetary policy. See Eswar Prasad, Thomas Rumbaugh, and Qing Wang, "Putting the Cart before the Horse? Capital Account Liberalization and Exchange Rate Flexibility in China," IMF Policy Discussion Paper no. 05/01, January 2005.
- On this topic, see Eswar Prasad and Kose M. Ayhan, "Liberalizing Capital," *Finance and Development*, 2004, pp. 50-51.
- For a more detailed discussion, see Nicholas Lardy and Patrick Douglass, "Capital Account Liberalization and the Role of the Renminbi" Peterson Institute for International Economics, Working Paper Series, no. 11-6, 2011.
- This phrase of Deng Xiaoping describes the gradualist approach that has exemplified reform in Post-Mao China.

and supervisory framework and corporate governance of its financial sector.⁽²⁵⁾

The 2008 global financial crisis initiated in the USA has made RMB internationalisation a topical issue worldwide.⁽²⁶⁾ To revive the US economy at near zero short-term interest rates, the Federal Reserve has resorted to purchasing a large volume of long-term Treasury debt in a bid to lower the long-term interest rates, in a monetary policy strategy known as quantitative easing. The policy has resulted in a marked increase in USD liquidity at home and around the globe, increasing the currency's volatility and downside risks. As a result, most countries, especially emerging markets, have found it less attractive to hold USD as an investment and as a reserve currency. China, which holds the largest reserves of USD, has been hit particularly hard.⁽²⁷⁾ Moreover, China also has to address the growing political pressure on a faster appreciation of the RMB from the USA and EU, which have attributed their slower growth and higher unemployment to their trade deficits with China. All these developments have prompted China to take action to reduce its reliance on USD assets in its reserves and the USD influence on its exchange rate flexibility. The RMB internationalisation strategy that formally started in Hong Kong in February 2004, but has grown rather slowly since then, has to be undertaken at a faster pace.⁽²⁸⁾ It is expected that the internationalisation of the RMB would reduce the vulnerability of RMB against USD in the long term, and China would be able to diversify its reserves through the purchase of natural resources from emerging markets, which are increasingly willing to accept RMB.⁽²⁹⁾ More specifically, China will be able to have greater influence in the region, as ASEAN countries have started to accept RMB assets for their trade surplus with China. The RMB internationalisation is also likely to further enhance China's political influence in the International Monetary Fund and World Bank after decisions were made to increase the country's voting rights in these two supranational institutions.⁽³⁰⁾

Prompted by the underlying and more immediate motivating factors for RMB internationalisation, in July 2009, China allowed its cross-border trade to be settled in RMB in a pilot scheme between four cities in Guangdong Province and Shanghai on the mainland; and Hong Kong, Macau, and South East Asian countries abroad. From 23 June 2010, the scheme was extended to operate between a total of 18 provinces in China and the rest of the world. A breakthrough in the internationalisation process of the RMB was made when PBOC and BOCHK (Bank of China, Hong Kong), the RMB Clearing Bank, signed an agreement in July 2010 allowing banks in Hong Kong to clear and settle RMB transactions through BOCHK. All Hong Kong firms would also be able to transfer funds between RMB accounts held in different Hong Kong banks without any restrictions. This has effectively allowed other financial institutions such as insurance companies and fund management companies to come up with new RMB insurance policies and fund products for sale to customers in Hong Kong and abroad. Overseas banks and customers can also have access to this newly-established RMB interbank market if they open settlement accounts with an RMB participating bank in Hong Kong.

With these liberalisations, the average monthly amount of RMB settlements rose quickly from RMB 4 billion in the first half of 2010 to RMB 57 billion in the second half. In 2010, over 75 percent of the cross-border trade in RMB went through Hong Kong. The rise in RMB deposits in Hong Kong has been attributable to the net inflows of RMB from more exports than imports from the mainland settled in RMB.⁽³¹⁾ Table 5 shows that both RMB deposits and participating banks in Hong Kong have increased significantly from 2009 to 2011.

Table 5 – The RMB deposit market in Hong Kong

	RMB Deposits (RMB billion)	Number of banks engaged in RMB business
January 2009	54.4	39
July 2009	55.9	41
June 2010	89.7	77
February 2011	407.7	113

Total number of banks is 143.

Source: Hong Kong Monetary Authority.

The unique role of Hong Kong

It has often been taken for granted, and it is indeed the case, judging from the rapid growth of the RMB business in Hong Kong (Table 5), that Hong Kong, being part of China and having its own developed financial sector, will emerge as the natural choice for the Chinese authorities to push forward RMB internationalisation. However, given the strategic importance of RMB internationalisation for the Chinese mainland and Hong Kong economies, the question of why the Chinese authorities have chosen to use Hong Kong as a substitute for actual liberalisation of capital flows onshore in the form of the US international banking facilities, or instead of Singapore as an offshore banking centre, warrants in-depth analysis from political, economic, and risk management perspectives.

Hong Kong returned to Chinese sovereignty from British administration in July 1997 under the innovative concept of "one country, two systems."⁽³²⁾ The continuing development of Hong Kong as an international financial sector clearly depends on the political blessings of the Chinese

25. Along with a more stable and robust financial system, greater exchange rate flexibility is regarded as a prerequisite for undertaking a substantial liberalisation of the capital account in China. See Eswar Prasad, Thomas Rumbaugh, and Qing Wang, *op. cit.* The limits of this strategy are that China needs to withstand political pressure from other countries for faster liberalisation in its exchange rate and capital account, and to regulate the unauthorised flows of short-term funds across its borders by administrative means.
26. Fearing an economic slowdown after the 2008 global financial crisis, the Chinese government undertook a large fiscal stimulus worth RMB 4 trillion, and adopted expansionary monetary policies. As a result, China managed to sustain high real growth rates of 9.2 percent in 2009, and 10.3 percent in 2010. The massive increase in RMB liquidity has been perceived as the underlying reason for high inflation in 2011, which is another topic for future research. On the limitations of the monetary policy in China, see Anne-Laure Baldi-Delatte, "A 1 Trillion dollar Question: Is the Current Exchange Rate Regime Sustainable?" *China Perspectives*, 2006, vol. 67, pp. 11-20.
27. For this topic, see Shalendra D. Sharma (2010), "China as the World's Creditor and the United States as the World's Debtor: Implications for Sino-American Relations," *China Perspectives*, no. 4, pp. 100-115.
28. From February 2004, banks in Hong Kong have been allowed to provide RMB business in deposits, remittances, currency exchange, and credit cards on a personal basis.
29. Melissa Murphy and Wen Jin Yuan, "Is China ready to challenge the dollar? Internationalization of the RMB and its Implications for the United States," Centre for Strategic and International Studies, October 2009.
30. China's voting rights in the IMF and World Bank were increased from just 4 percent and 2.27 percent to 6.4 and 4.42, respectively, in 2010. Sources: the International Monetary Fund and World Bank.
31. Peter Pang, "Hong Kong's Expanding Role as an Offshore RMB centre," Hong Kong Monetary Authority, 22 February 2011.
32. Article 109 of Chapter 5 of the Basic Law, the constitution of the Hong Kong Special Administrative Region (HKSAR), reads, "The Government of the Special Administrative Region shall provide an appropriate economic and legal environment for the maintenance of the status of Hong Kong as an international financial centre."

leadership.⁽³³⁾ Since the political changeover, the Chinese mainland and Hong Kong economies have become increasingly integrated due to policy adaptations made by the HKSAR government, especially in its financial sector under the auspices of its economic, monetary, and financial autonomy.⁽³⁴⁾ Given the closed and underdeveloped Chinese financial sector, Hong Kong's banks, stock, and bond markets have helped the economic and financial development of the Chinese mainland, taking advantage of their extensive business ties and geographical and cultural proximity.⁽³⁵⁾ Moreover, through the operations of Chinese mainland banks, and the listing of Chinese shares and bonds on the Hong Kong markets, expertise in business practice, product development, and corporate governance can be brought back to the mainland.

Hong Kong has been entrusted with a vital role in the development plan of China's Pearl River Delta region since 2009. The latest Five-Year Plan or Blueprint on Economic and Social Development (2011-2015) of the central government has also explicitly stated that Hong Kong is to become the offshore RMB centre and wealth management centre. This can be perceived as another balancing act to ensure the future of Hong Kong, as Shanghai has received the central government's endorsement to become an international financial and shipping centre by 2020.⁽³⁶⁾ However, when compared with Hong Kong, Shanghai's financial development has to be incremental and gradual in order to serve China's long-term and balanced interests.

Apart from political considerations, Hong Kong's financial sector is better equipped than Shanghai's to launch RMB internationalisation. Hong Kong has more expertise in financial product development, and its sophisticated financial market infrastructure will better connect the mainland with the rest of the world in financial investment. Hong Kong has a more competitive international FX, banking, and money market than Shanghai, building on its free capital flows and well-established legal and regulatory framework, and a low and simple taxation system. In December 2010, whereas Hong Kong had 122 foreign banks and 23 local banks offering both onshore and offshore business, there were around 20 domestic commercial banks and 70 foreign banks operating branches and subsidiaries undertaking onshore business in Shanghai. Banks in Hong Kong can engage in insurance, securities, and trust business directly, whereas their counterparts on the mainland must focus only on commercial banking business. The money markets in Hong Kong are also actively traded with the Hong Kong Interbank Offered Rate (HIBOR), providing a benchmark measure for the cost of interbank unsecured HKD funds.⁽³⁷⁾ In China, despite the introduction of the Shanghai Interbank Offered Rate (SHIBOR) in 2007, the interbank market for unsecured lending is not active due to the trading limits of participant banks and restricted use of funds.⁽³⁸⁾ Instead, the use of collateralised bond repurchase has become a more active means of interbank borrowing in China.⁽³⁹⁾

Hong Kong has been playing an important intermediary role in the economic and financial development of China. Foreign and local firms from Hong Kong were the earliest to trade and undertake investment in China after the country's reforms started in 1978. Over the past three decades, Hong Kong has been making the largest foreign direct investment (FDI) in the mainland, accounting for more than 50 percent of the total in 2009. Benefiting from the international expansion of Chinese enterprises, Hong Kong is now the largest recipient of overseas direct investment (ODI) flows from the mainland, with 60 percent to Hong Kong or via Hong Kong to other destinations. Furthermore, the mainland has been Hong Kong's largest trading partner since 1985, and accounted for 48.9 percent of Hong Kong's total trade in 2010, broken down into around 53 percent each

of its total exports and re-exports to the mainland, and 45.4 percent of its total imports from the mainland. As a result, Hong Kong has emerged as the mainland's third largest trading partner after the US and Japan.

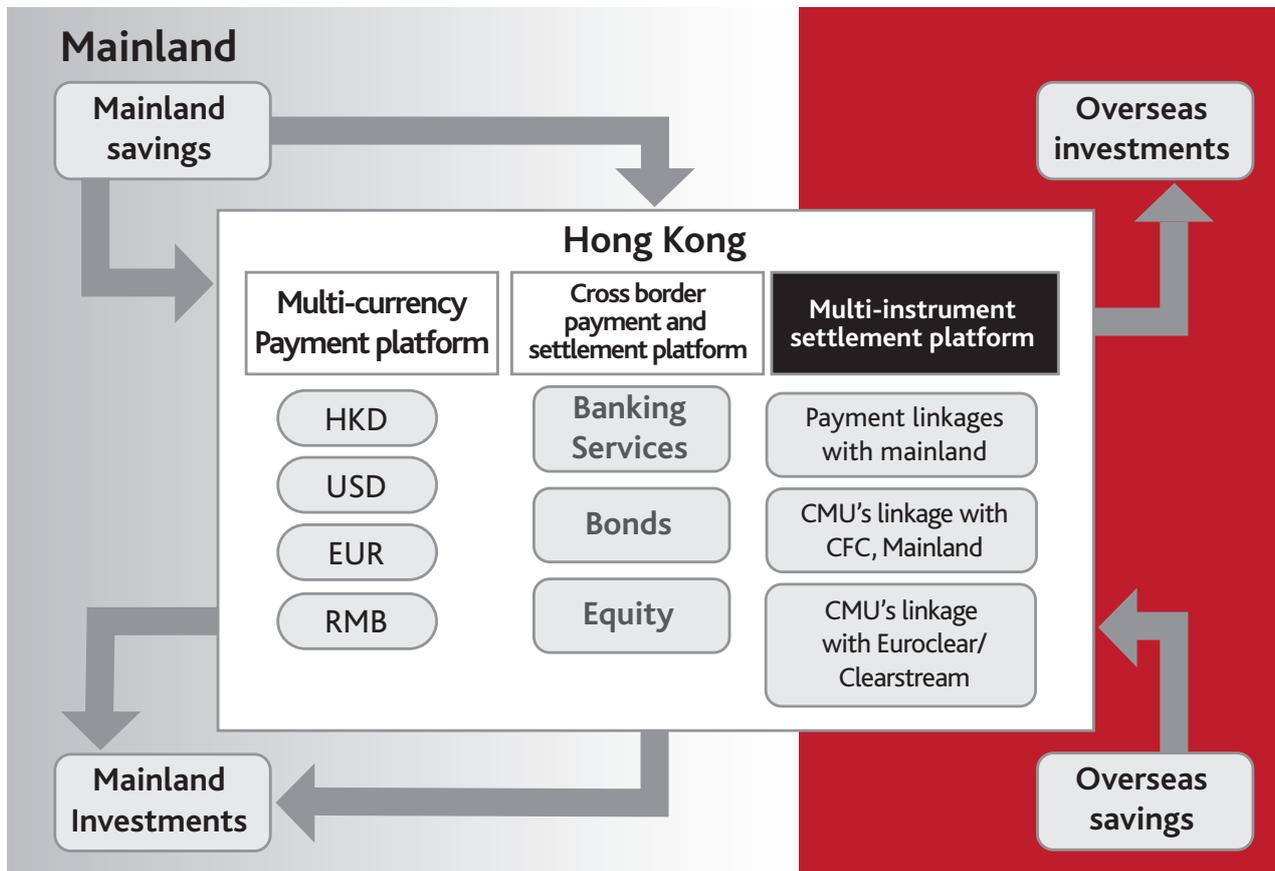
Prompted by these extensive direct investment and trade links, long-established foreign and local banks in Hong Kong, such as HSBC, Standard Chartered, Citibank, and the local banks HSBC and Bank of East Asia, followed their customers and were early entrants to the Chinese banking market. The mainland banks, led by BOCHK, a subsidiary of PBOC, and the subsidiaries and branches of CCB, ICBC, and ABC, hold more than 20 percent of the market share by assets in the Hong Kong banking market. The unique position of the BOCHK, with its extensive branch network and as one of the note-issuing banks, has led to it being assigned the role of clearing and settlement bank for RMB businesses in Hong Kong and other parts of the world.

Chinese companies have issued shares on the Hong Kong stock market to raise funds since 1994. In December 2010, out of the 1,244 listed companies on the Hong Kong stock market, 225 mainland companies issued shares amounting to 46 percent of the total market capitalisation and around 40 percent of the daily average turnover value in the secondary market. Hong Kong also has the only RMB bond market outside the mainland. Since 2007, RMB bonds have been issued by Chinese banks, followed by foreign banks, the Ministry of Finance, and other multinational firms such as McDonalds and Caterpillar. As of December 2010, there were 31 issues of Hong Kong-delivered Chinese Yuan (CNH) bonds in Hong Kong, with a total gross issue value of RMB 73.8 billion. Strong international demand has driven CNH bond yields far lower than onshore CNY bond yields of the same maturity.

Hong Kong has a comprehensive and sophisticated multi-currency platform for clearing and settlement of financial transactions. The Central Moneymarkets Unit (CMU), the computerised clearing and settlement facilities for HKD and foreign currency bonds, operated by the HKMA, is now linked with the Real Time Gross Settlement System in interbank payments for HKD, USD, EUR, and CNY to ensure Payment versus Delivery of debt instruments denominated in the four currencies at the end of the transaction day. More specifically, CMU has also been linked to China Government Securities Depository Trust and Clearing Co. Ltd since April 2004, and HKMA has been allowed to invest in the interbank market in China since

33. See Anne-Laure Delatte and Maud Savary-Mornet, "Made In China, Financed in Hong Kong," *China Perspectives*, no. 2, 2007. Before 2003, Jiang Zemin wanted to elevate the status of Shanghai, as Hong Kong in the south was too rich and developed. The marked economic decline in Hong Kong brought about by the SARS epidemic prompted the central government to come to Hong Kong's aid with schemes encouraging more individual travels to Hong Kong and the Closer Economic Partnership Arrangements.
34. *Ibid.*, pp. 58-67.
35. For banking integration, see Man Kwong Leung, "Banking Integration: Hong Kong and the People's Republic of China," *China Report: A Journal of East Asian Studies*, vol. 33, no. 3, 2007, pp. 367-381. For stock market integration, see Man Kwong Leung and Wai Sing Lee, "Stock Market Integration: Hong Kong and the PRC," *Asian Profile*, vol. 23, no. 4, 1997, pp. 267-279. For Bond market integration, see Man Kwong Leung and Trevor Young, "Bond integration: The Chinese Mainland and Hong Kong," *Journal of Contemporary China*, vol. 15, no. 47, 2006, pp. 297-309.
36. *China Daily*, 26 March 2009.
37. In 2010, the ratio of interbank unsecured lending for banks in Hong Kong to GDP was 650 percent, and that with banks outside Hong Kong was 640 percent. (Source: HKMA).
38. Leung and Lu, *op.cit.*
39. In 2010, the ratio of turnover value of bond repo to GDP was 220 percent, and that for unsecured lending to GDP was 70 percent in China. (Source: the PBOC Monetary Policy Implementation Report 4th Quarterly 2010)
40. CMU was also connected to the Central Securities Depositories in Australia in 1997, New Zealand in 1998, and Korea in 1999, to allow investment in each other's debt markets.

Figure 4: – Hong Kong’s role in financial intermediation with the mainland



Note : CMU = Central Moneymarkets Unit / CDC = China Government Securities Depository Trust & Clearing Co. Ltd.

Source : Hong Kong Monetary Authority (2006).

December 2010.⁽⁴⁰⁾ Figure 4 shows how Hong Kong’s financial infrastructure has enabled it to effect trade and payments in four currencies, and against deliveries of debt, equity, and banking services across the border. More specifically, Hong Kong has established the only RMB Real Time Gross Settlement (RTGS) clearing platform outside the mainland. This means that banks from outside Hong Kong (if they do not opt to go through correspondent banks in Shanghai) must settle their RMB transactions with correspondent banks (which have maintained RMB with the BOCHK) in Hong Kong. This is both a first-mover and a unique advantage of Hong Kong as an RMB offshore centre, arising from collaboration between the mainland and Hong Kong financial authorities.

The extensive business and financial ties and market infrastructure links between the mainland and Hong Kong have provided the Chinese government with the incentive and capability to monitor the process of the RMB internationalisation, and have given Hong Kong the incentive and opportunity to reinforce its role as an international financial centre in the region.

Prospects for RMB internationalisation

Under the Mainland’s FX control, the onshore and offshore financial markets are segregated. Hence, the interest rate and exchange rate in the RMB offshore markets are determined by their respective market conditions. On the mainland, PBOC Shenzhen Branch pays 0.72 per-

cent on the RMB deposits BOCHK collects, and pays 0.629 percent to other banks. Bank customers then receive 0.6 percent on their RMB one-year deposits in Hong Kong, whereas mainland depositors obtain the benchmark rate of 3.25 percent.⁽⁴¹⁾ The lower rates reflect the relative lack of RMB-denominated financial products for investment in Hong Kong.

The offshore FX market for RMB also made a significant start in Hong Kong in September 2010 when a newly tradable currency pair, USD/CNH was launched globally.⁽⁴²⁾ By November 2010, the average daily FX turnover for CNH had risen to USD 400 million, which was about 3 percent of the total spot turnover value in the onshore market.

Sources of supply of CNH

CNH deposits can be accumulated in bank deposits through (a) Hong Kong firms receiving RMB from selling goods and services to China, (b) spending by mainland tourists in RMB in Hong Kong, and (c) the currency swap between HKMA and PBOC. For the currency pair USD/CNH, the sources of supply of CNH are equivalent to the sources of demand for USD. Therefore, the higher the USD/CNH, the smaller the amount of USD will be demanded from sources (a) to (c) as the USD becomes more expensive.

41. PBOC Shenzhen branch lowered the interest rate from 0.99 percent to 0.72 percent on deposits from BOCHK on 1 April 2011. Along with all other benchmark deposit and loan rates, the PBOC has raised the one-year deposit rate on the mainland from 3 percent to 3.25 percent from 6 April 2011.

Sources of demand for CNH

Demand for CNH in bank deposits against USD come from (a) Hong Kong firms buying goods in RMB from China, and (b) Hong Kong investors purchasing CNH-denominated bonds and other CNH financial products. For the currency pair USD/CNH, sources of demand for CNH are the same as the supply of USD. The higher the USD/CNH, the greater the amount of USD that will be supplied from these two sources.

Hong Kong residents can convert RMB into HKD, subject to a quota of RMB 20,000 per day per person.⁽⁴³⁾ Other foreign firms outside Hong Kong can pay and receive RMB through Hong Kong. For example, the increasing acceptance of RMB as a trade settlement currency by importers in Europe and North America has increased the demand for CNH in Hong Kong. All these transactions need to be cleared in Hong Kong.⁽⁴⁴⁾ To avoid excess FX risk, HKMA has also required banks in Hong Kong to limit their RMB net open positions (whether net long or net short) to 10 percent of their RMB assets or liabilities.

In Figure 5, the prevailing market rate for USD/CNH is illustrated by the intersection of D_0 and S_1 at N. Assuming the same demand D_0 on both onshore and offshore markets, S_1 , the supply of international capital, is greater than the restricted supply S_D in the onshore market. It follows that the USD/CNH is trading at a discount, x , to the USD/CNY in Shanghai. For example, on 20 Jan 2011, USD/CNY was 6.5860, and USD/CNH was 6.5805, such that x was 55 pips and the RMB carried a premium of 0.08 percent in the offshore compared to the onshore market. When the premium of CNH increases, more mainland parent firms will arrange to pay their foreign suppliers in USD through their Hong Kong subsidiaries, which could convert CNH received from parents for more USD. This can be illustrated by a shift in demand to D_1 , thus reducing the premium of CNH over CNY.

Figure 4 provides the framework within which we may examine the factors facilitating the process of the RMB internationalisation, using Hong Kong as an RMB offshore centre.

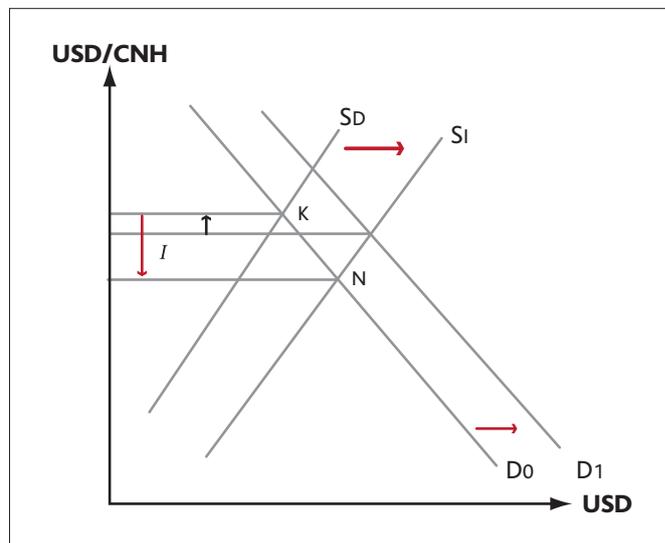
Sustained growth of the Chinese economy

China's GDP increased from USD 200 billion in 1978 to USD 5.8 trillion, registering an annual real growth rate of 10 percent from 1978 to 2010. This has been sufficient to allow China to overtake Japan as the second largest economy in the world. According to the IMF projections, China will contribute 35 percent to the world's growth in 2015. The sustained strong growth of the Chinese economy will instil more confidence in international traders and investors for holding RMB. This will provide the underlying economic force shifting the supply curve of USD for CNH in the offshore market.

Supply of RMB in the offshore market

In December 2010, HKMA and PBOC collaborated to establish two channels to ensure a stable supply of RMB for cross-border trade settlement. First, banks in Hong Kong can purchase RMB for their customers through the BOCHK in CFETS in Shanghai when there is a shortfall of RMB for settling a trade transaction within three months. The quota for this conversion between the PBOC and BOCHK was RMB 8 billion in 2010. The quota was set at RMB 4 billion for the first and second quarter of 2011. Second, the HKMA could provide RMB funds up to 20 billion through its currency

Figure 5 – FX market for RMB in Hong Kong



swap arrangement with the PBOC for cross-border RMB trade settlements.⁽⁴⁵⁾

As an additional source of supply of RMB, from January 2011, the Chinese government has allowed Chinese firms to make their overseas direct investment (ODI) in RMB.⁽⁴⁶⁾ Non-financial Chinese enterprises can make ODI in RMB, subject to the approval of the Ministry of Commerce. At present, 80 percent of China's ODI are from the state-owned enterprises and in USD. If China's ODI can be financed in RMB, more RMB will be expected to return to Hong Kong, investing in a growing range of RMB financial assets. At present, outward portfolio investment (OPI) from the mainland is only around 5 percent of its GDP, still far below 57 percent for East Asia, 42 percent for the US, and over 100 percent for the UK. There exists a large potential for the mainland's OPI to grow faster with a rise in income per capita and further liberalisation measures. The increases in the supply of CNH will translate into increased demand for USD, as indicated in Figure 5.

Returning RMB to mainland investments

The increases in both demand and supply over time mean that the turnover values in the Hong Kong offshore market can grow dynamically. Through the conversion quotas and approved channels for flows of RMB between Shanghai and Hong Kong, PBOC could also have an effective control over the exchange rate for USD/CNH.

Despite the growing RMB bond market and other RMB financial products in Hong Kong, their sizes are still small. From August 2010, RMB clearing banks, central banks, and commercial banks participating in RMB business have been allowed by the PBOC to invest their RMB in China's large inter-

42. The currency pair USD/CNH was launched and listed by ICAP, an international interdealer broker, on its EBS platform. All CNH trades will be settled in Hong Kong, using the RMB Real Time Cross Settlement.

43. The daily conversion quota is two-way, but Hong Kong residents have increasingly built up their RMB deposits through selling foreign currencies.

44. See *Hong Kong Economic Times*, 25 January 2011.

45. Since 2008, the PBOC has signed bilateral currency swap agreements for RMB with central banks in Hong Kong, South Korea, Singapore, Indonesia, Malaysia, Belarus, Argentina, and Iceland, totalling RMB 803.5 billion. This provides liquidity needed to settle trade with these eight economies in RMB.

46. Financial firms such as securities firms have already done this on a case by case basis with approval from SAFE.

bank bond market. In December 2010, 12 banks from Hong Kong received this permission. Banks in Hong Kong could capture a higher rate of return on CNY bonds than on CNH bond investments. These banks can in turn offer higher interest rates to attract more CNH deposits so that more people are willing to convert their foreign currencies to CNH in Hong Kong.⁽⁴⁷⁾

Balanced development of the onshore and offshore financial markets

Taking advantage of a large pool of RMB liquidity and opportunities to launch RMB financial products, Hong Kong helps to attract increasing flows of RMB funds from other parts of the world. More specifically, Hong Kong can focus on wealth and risk management of RMB products.

CNY Non-Deliverable Forward (NDF) has now been actively traded in Hong Kong as a hedging tool for RMB exchange risks.⁽⁴⁸⁾ The contracts are to be settled in USD and involve no delivery of RMB. Now with the operations of the RMB offshore markets, major international banks such as HSBC can also offer CNH-denominated structured investment products, including CNH Deliverable Forward such that RMB can be delivered in Hong Kong.

The growth of the offshore markets will provide benchmarking for pricing and regulations in the Shanghai onshore markets. Shanghai acknowledges the need for implementing reforms to its financial markets and institutions aimed at increasing their efficiency and international competitiveness. Through the flow of RMB funds between Shanghai and Hong Kong, the two markets are likely to benefit from an increase in their competitive and adaptive efficiency, particularly in the areas of RMB financial products and their risk management. This will make the mainland better prepared for full RMB convertibility. It has been argued that there should be restrictions on the RMB raised in Hong Kong coming back to the mainland. The onshore market in Shanghai should be fully and well developed ahead of Hong Kong so that China can maintain robust con-

trol over the RMB interest rate and exchange rate. China therefore needs to strike a good balance in the development of offshore and onshore markets.

Conclusion

China has emphasised the need for a controlled, gradualist approach to capital account full convertibility and a flexible exchange rate. This has provided the underlying motivation for RMB internationalisation. However, the 2008 global financial crisis has prompted China to quicken the pace of RMB internationalisation so that the currency has been made more widely convertible outside the mainland, with Hong Kong in a unique position to emerge as an RMB offshore centre. Nevertheless, China has only reached the preliminary stage of RMB internationalisation. The country has made good progress in promoting RMB as a cross-border trade settlement currency, but Hong Kong is still far from functioning in the same way for offshore RMB as London does for the Eurodollar market. Hong Kong needs to collaborate closely to ensure that internationalisation of the RMB is a gradual and well-controlled process.

To make RMB an investment currency, Hong Kong markets need to provide a wide range of RMB wealth and management products, while the mainland needs liberalisation of the exchange rate and interest rate in the onshore financial markets, together with balanced development of the onshore and offshore financial markets. This will pave the way for the full convertibility of the currency on the mainland, which is a necessary condition for full RMB internationalisation. With well-developed and large money and capital markets on the mainland and the continuing strong growth of the Chinese economy, it is expected that more international enterprises and national governments will be willing to invest in RMB-denominated assets as an essential part of their portfolios and reserves.

47. The Chinese government is looking into the possibility of allowing RMB holders overseas to purchase shares on the mainland stock market under the Mini-QFII scheme.

48. In response to a managed float for RMB, the trading for nominal value RMB Non-Deliverable Forward for corporate clients in offshore markets was estimated to have registered a rapid increase from around USD 250 billion in 2005 to USD 350 billion in 2007. In fact, standardised RMB NDF contracts were also formally launched for retail clients by 16 banks in Hong Kong from November 2005.