

Vallée, Shahin

Working Paper

The internationalisation path of the renminbi

Bruegel Working Paper, No. 2012/05

Provided in Cooperation with:

Bruegel, Brussels

Suggested Citation: Vallée, Shahin (2012) : The internationalisation path of the renminbi, Bruegel Working Paper, No. 2012/05, Bruegel, Brussels

This Version is available at:

<https://hdl.handle.net/10419/77993>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

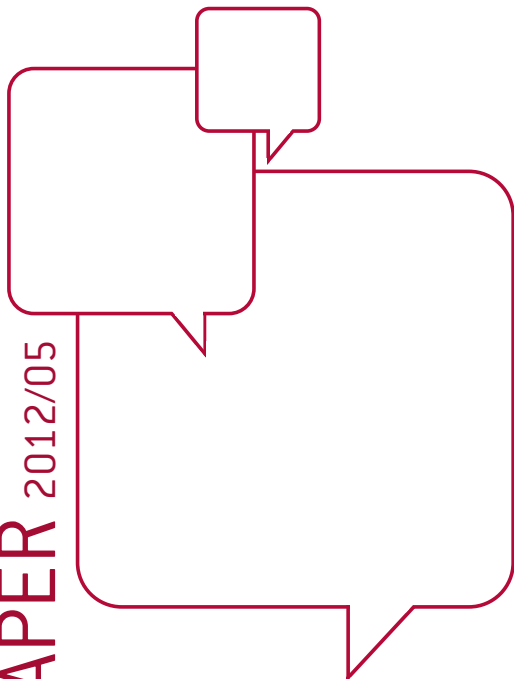
Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



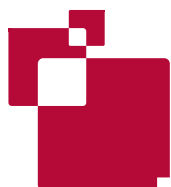
THE INTERNATIONALISATION PATH OF THE RENMINBI

SHAHIN VALLÉE

Highlights

- As China's economic might grows, its standing and that of its currency in the international monetary system become increasingly pressing issues. The crisis seems to have reminded the Chinese authorities of the dangers of a unipolar monetary system, and they have therefore accelerated their plans to internationalise the renminbi (RMB). The goal of this internationalisation strategy is not clear and China has not defined publicly the monetary system it aims to achieve. Nevertheless, there are more and more signs that the internationalisation of the RMB is progressing, notwithstanding major challenges. Conventional wisdom and the majority of the literature posits that the RMB will not succeed in its internationalisation process until China fully opens its capital and financial accounts, makes its exchange rate flexible and liberalises its financial sector. These three obstacles are real but circumventable. However, if China's internationalisation strategy follows a path that concentrates on overcoming immediate challenges in order to raise the status of the RMB to that of a second-tier world currency, the Chinese authorities will still have to undertake substantial reforms if they intend to place the RMB on a footing comparable to the dollar or the euro.

Shahin Vallée (shahin.vallee@bruegel.org) is a Visiting Fellow at Bruegel. The author would like to thank Christophe Gouardo from Bruegel for excellent research assistance and colleagues at Bruegel and CEPII for their challenging comments and constructive feedback. This working paper was prepared in relation to a study on the International Monetary System commissioned by the European Commission, and published by Bruegel and CEPII as: *Global currencies for tomorrow: a European perspective*, Bruegel Blueprint 13, July 2011.



Executive summary

Over the last three years, the Chinese authorities have taken a number of steps to internationalise the renminbi. This process raises a number of important questions, which have led to a lively academic debate to which this paper hopes to make a contribution. In particular, there two major categories of arguments and disagreements: first, on the current internationalisation sequence, its meaning and its outlook, and the second on the consequences for the international monetary system and the world economy.

This paper focuses on the former but was part of a broader work, which concentrated on the consequences for the international monetary system as a whole (*Global currencies for tomorrow: a European perspective*, Bruegel Blueprint 13, July 2011).

Although, there seems to be a general consensus that China's place in the world economy is not matched by the standing of its currency, there is a disagreement about the scope and internationalisation potential of the RMB in the current policy framework. Indeed, most of the literature on the matter argues that the RMB's potential as an international currency is limited while China maintains a largely closed financial account, while its exchange rate remains managed and while its financial sector remains state controlled and closed to foreign participation. This argument is largely based on the impossible trinity but it fails to see the cracks that China's policy can open in the traditional Mundell-Flemming stylised fact.

We analyse the process through which the RMB is starting its internationalisation process and notice that its path largely allows the circumventing of capital account restrictions. We also note that while the net creditor position of China could substantially slow the internationalisation process, there is an active strategy to encourage international investments by corporates, which ought to gradually rebalance China's net investment position and provide scope for further issuance of RMB denominated securities by Chinese corporations. The creation of the RMB offshore market is an important step in this process and means the domestic financial system can be insulated, thereby circumventing financial-account restrictions. Second, we argue that the managed nature of the exchange rate does not really preclude a degree of internationalisation and that in any case, currency flexibility will follow relaxation of the capital account and not the other way around. Finally, the argument about financial sector liberalisation is often used in a self serving and misleading way. An international currency certainly needs to rest on a solid banking system, on effective and well-regulated financial markets, and the formation of the underlying interest rate needs to be as transparent as possible. However, we argue that China has decided to largely outsource this function to the offshore financial system in order to allow more time for its own fragile domestic financial system to adapt. In this context, one should see the offshore RMB market (which is primarily located in Hong Kong but likely to extend to other financial centres such as Singapore or even London) as a proxy Chinese financial sector and as a levee to prevent uncontrolled capital flows in mainland China which have proven to be the source of financial crises in other emerging economies.

All in all, we argue that the usual challenges brought forward by the economic literature on the matter are manageable. But this doesn't mean that there are no challenges. The first one is regional in nature because it is so far unclear if China would like to use the regional role of the RMB as a stepping-stone towards its establishment as an international currency or whether it can afford to leapfrog this step. The experience of the euro area provides both a model and a test case and China's involvement in regional endeavours is often constrained by its fundamental appetite for bilateral engagement.

Second, beyond economic challenges, there are more structural reforms that need to be undertaken for the RMB to be in a position to credibly rival the dollar and the euro. These reforms will raise important policy and political trade-offs that exceed by far questions pertaining to capital account restrictions. We conclude by suggesting that the RMB has a considerable potential to reach the

internationalisation status of the yen, sterling or the Swiss franc in the next few years, through organic forces with relatively small changes to the current policy framework. But, we identify significant medium to long-term policy challenges for China if it truly intends the RMB to reach the internationalisation status of the dollar or the euro.

Index

1. Introduction.....	4
2. Planting the seeds of RMB internationalisation	5
2.1 International trade and the RMB	6
2.2 Increasing international assets in RMB	12
2.3 A potential official reserve asset	16
3. The roadmap towards internationalisation.....	20
3.1 Financial account openness	20
3.2 The place of the RMB in international reserves.....	26
3.3 Openness and currency flexibility: the horse and the cart.....	31
4. Conclusion	33
References	35

1. Introduction

As China's position in the world economy strengthens, it is becoming all the more apparent that it is not matched by China's standing in the international monetary system nor by the importance of the renminbi (RMB) on the global stage. This raises a number of questions about the consequences for the monetary system of China's rise. There is a general academic consensus on the benefits of issuing a global reserve currency, although more recently this has been questioned (Bergsten, 2009; Truman, 2007) or refined (Gourinchas, Rey and Govillot, 2010). The general intuition is still that there are inherent gains linked to the ability to issue a reserve currency, which generally yields substantial dividends in alleviating the cost of trading, the cost of funding, and which tends to improve the ability of a country to manage its net international investment position and the associated balance-sheet effects.

It is therefore natural to expect that China would, over time, seek to capture some of these benefits by internationalising its own currency and playing a role in the international monetary system commensurate with its economic power. Evidence suggests that this is happening: in recent years and especially since the 2008 crisis, the Chinese authorities have taken a number of significant steps in this direction. However there is considerable uncertainty, and a vivid academic debate about what exactly is happening and about the course, pace and obstacles along the internationalisation path of the RMB.

This paper first describes how China has and slowly continues to establish its currency on the international stage. It analyses the most recent set of measures taken in the aftermath of the crisis and how they have enhanced the RMB's potential as an international currency. We then propose a roadmap that challenges the current conventional wisdom looking at the sequencing and timing needed to achieve a successful internationalisation. In particular, we dispute the idea that the RMB cannot establish itself as an international currency if China does not concede on: (i) the flexibility of the exchange rate; (ii) the convertibility of its capital and financial accounts; and (iii) the opening of the domestic financial sector to enhanced foreign participation. We argue that this consensus and the way it frames the debate overlooks several important factors to which we give more space in this research: (i) the political economy of the currency-flexibility question in China; (ii) the effective possibility of achieving a considerable degree of internationalisation despite a relatively closed or controlled financial account through the expansion of the offshore market; (iii) the relevance/necessity of the openness of the financial sector for the purpose of effective capital allocation and domestic financial stability.

2. Planting the seeds of RMB internationalisation

The literature on what constitutes an international currency generally reaches a consensus on three essential functions of a global currency: its use as a medium of exchange, as a store of value and as unit of account. These three functions are then assessed differently for official and private actors. A medium of exchange is a currency in which international trade and financial transactions can be invoiced and settled. A store of value is achieved by a currency that guarantees a certain internal and external stability (ie no frequent and large inflation or exchange rate debasing) thanks to the sound macroeconomic policy of its issuer. Finally, a currency can serve as a unit of account when it is widely used to denominate financial assets and corporate balance sheets.

A medium of exchange for the private sector allows the exchange of goods and services, and allows central banks to make foreign exchange interventions. A store of value allows the private sector to accumulate savings, and central banks to accumulate foreign exchange reserves. A unit of account serves as an anchor for currency pegs for less established currencies, and is used to denominate balance sheets, assets and transactions for the private sector.

The current global currency map presented Table 1, illustrates these quantitative measures but this is just a snapshot and it ignores the dynamics of the ongoing changes in the monetary system. Nevertheless, the current situation can be characterised by the existence of one hegemon (the dollar), a challenger (the euro) and three second-tier contenders with no real ambition or ability to raise their status to that of the first two. The RMB is so far absent from this picture but this could change relatively rapidly if the RMB internationalisation strategy proves successful.

Table 1: Benchmark for internationalisation of the RMB (%)

Percent	EUR	USD	JPY	GBP	CHF	Other/unallocated
Share of world trade (euro area)	14.5	12.3	5.6	3.3	1.3	62.9
Share of world GDP ppp (euro area)	14.6	19.7	5.8	2.9	0.4	56.5
Share of global cross-border deposits	22.5	59.2	2.1	-	-	16.2
Share of international debt outstanding	31.4	45.8	5.8	7.4	3.6	6.1
Share of global FX transactions*	39.1	84.9	19.0	12.9	6.4	37.8
Share of global reserves	14.5	33.9	2.1	2.2	0.1	47.3

Source: ECB, Annual Report on International Role of the euro (2010), IMF (COFER, WEO, DOTS), BIS. * The sum of these shares adds up to 200 percent because there are two currencies involved in an FX transaction.

Although it is tempting to simplify, it is not clear if currencies rise and fall on the global stage as a mere reflection of the strength of the underlying economy or if there are other contributing factors. Essentially, the question is if, beyond sheer economic might, policymakers can influence this process or if it is largely an organic process outside of their control. In other words, can this be purely policy driven or is it an organic process?. Evidence is mixed. There are examples of currencies turning out to be reserve currencies despite the irrelevance of the underlying economy and the absence of policy strategy to that effect (Canada and increasingly Australia today, for instance). There are also experiences of failed activist internationalisation attempts, such as Japan's in the 1980s. Finally, the euro provides an example of an accidental reserve currency, one for which policymakers officially did not explicitly aim to reach reserve status. Of all these possibilities, it is unclear what the RMB will turn out to be. Subramaniam (2011) or Eichengreen (2011) argue that the RMB will undoubtedly

come to challenge the dollar as the central reserve currency in the next few years, but very much the same could have been said of the yen in the late 1980s or the euro in the late 1990s. History shows that the internationalisation process of any currency is tricky and tortuous and does not always follow economic logic or policy decisions.

2.1 International trade and the RMB

Internationalisation through trade is certainly the most obvious path for China, whose international trade represents 29.4 percent of its current dollar GDP, 10.5 percent of world exports and an aggregate USD 2.9 trillion in international trade in 2010, according to the IMF. This would also be more consistent with China's existing degree of balance-of-payments controls, which are more geared towards the financial account while the current account is far more open. Although trade is a natural vector for currency internationalisation, it is not a self-evident one. Other large exporters or trading states do trade in currencies other than their own. Commodity-exporting countries are a prime example, but others saw their share of the global economy and in particular of global trade rise without a proportionate increase in their currency's share of international trade. The yen is a good example of a currency whose place in international trade grew much more modestly than its share of world trade or of world GDP, despite a fairly activist internationalisation policy that did not manage to raise the amount of yen invoicing above 49 percent of its exports and 25 percent of its imports at its peak, and which contributed to the failure of the internationalisation experience of the yen (Kawai and Takagi, 2010).

i. Pilot scheme of RMB cross-border trade settlement

The RMB started to be used outside China in the late 1990s, in Hong Kong in particular. Hong Kong banks developed some settlement capacity as early as 2005. But these were relatively marginal developments until more recent initiatives. The most significant Chinese trade settlement initiative is known as the '*cross border trade settlement pilot scheme*'. It was introduced in April 2009, and gave rise to a Memorandum of Understanding between the Hong Kong Monetary Authority (HKMA) and the People's Bank of China (PBoC) in June 2009. The PBoC effectively launched it when it promulgated *The Administrative Rules for the Pilot Scheme for Settlement of Cross-border Trade in RMB* in July 2009. The PBoC and other mainland agencies govern the arrangement, which has already evolved and been expanded considerably since its inception.

In essence the pilot scheme allows local exporting companies in the pilot areas to export and settle in RMB. Applications to become a pilot company have to be reviewed by the PBoC and local authorities¹. Local companies in the pilot areas that provide cross-border services (such as settling banks) need to register their corporate information with the PBoC.

Mainland designated companies under the pilot scheme have to be granted approval by the central authorities, based on a recommendation from their respective provincial governments. No specific eligibility requirements have been set for the companies outside the Chinese mainland for participation in the pilot scheme, although there is a strong emphasis on all trade settlements in RMB having a genuine trade purpose with the mainland designated companies.

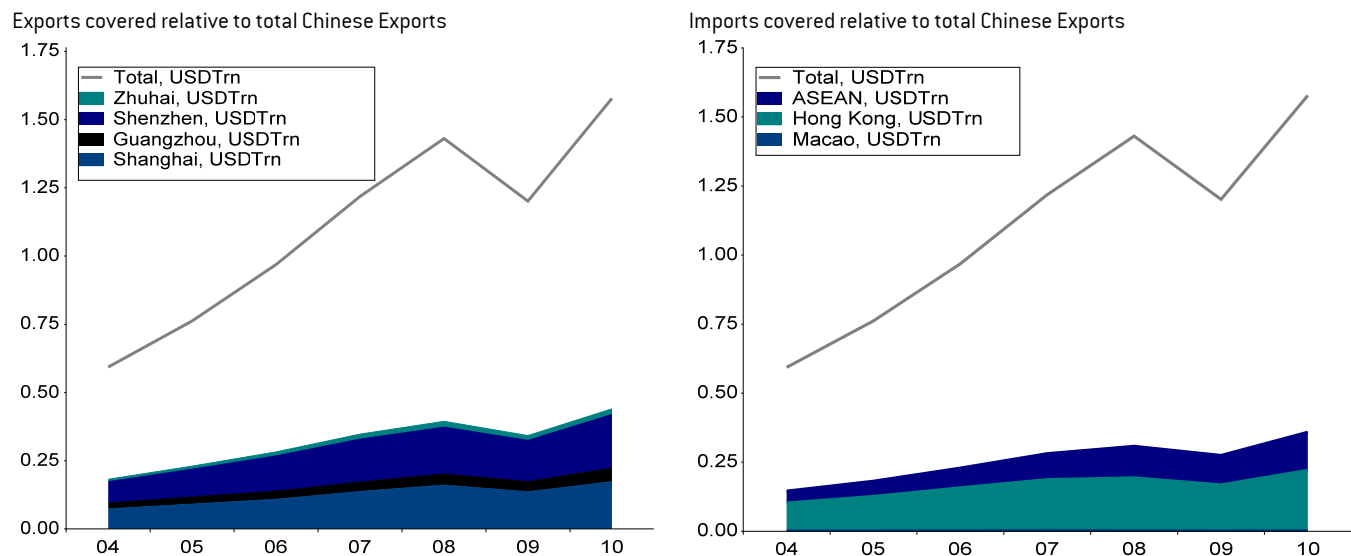
Initially, the pilot scheme only covered five mainland cities (Shanghai, Guangzhou, Shenzhen, Dongguan and Zhuhai), Hong Kong, Macau and the ASEAN² member countries. This was in fact less

1 The Ministry of Finance, Ministry of Commerce, General Administration of Customs, State Administration of Taxation and China Banking Regulatory Commission.

2 ASEAN, the Association of Southeast Asian Nations, consists of the following 10 countries: Singapore, Indonesia, Malaysia, Philippines, Thailand, Vietnam, Cambodia, Laos, Brunei and Myanmar.

than one third of Chinese exports. In June 2010, the scope of the scheme was expanded to 20 provinces/cities on the mainland (Beijing, Tianjin, Inner Mongolia, Liaoning, Jiangsu, Zhejiang, Fujian, Shandong, Hubei, Guangdong, Guangxi, Hainan, Chongqing, Sichuan, Yunnan, Jilin, Heilongjiang, Tibet, Xinjiang)³ and no geographical limitations were given outside of the mainland, effectively expanding the pilot from a regional (ASEAN) project to a global one.

Figure 1: Trade covered by phase 1 of the Pilot Scheme



Source: National Bureau of Statistics of China. Note: Data for the city of Dongguang (China's 20th largest city in the region of Guangdong) is not available at the NBERC but given its GDP is about 0.6 percent of China's GDP we can consider its contribution to total exports is considerably smaller than the four other cities in the phase 1 of the pilot.

According to the PBoC, this pilot initially involved 365 firms on the mainland approved by the authorities (Ministry of Finance, the Ministry of Commerce, the General Administration of Customs, the State Administration of Taxation, the CBRC and the PBoC). With the expansion, some 67,000 companies were approved. By the end of 2010, the scheme had given rise to RMB 340 billion, or about seven times the amount achieved during the first year under the phase I of the pilot.

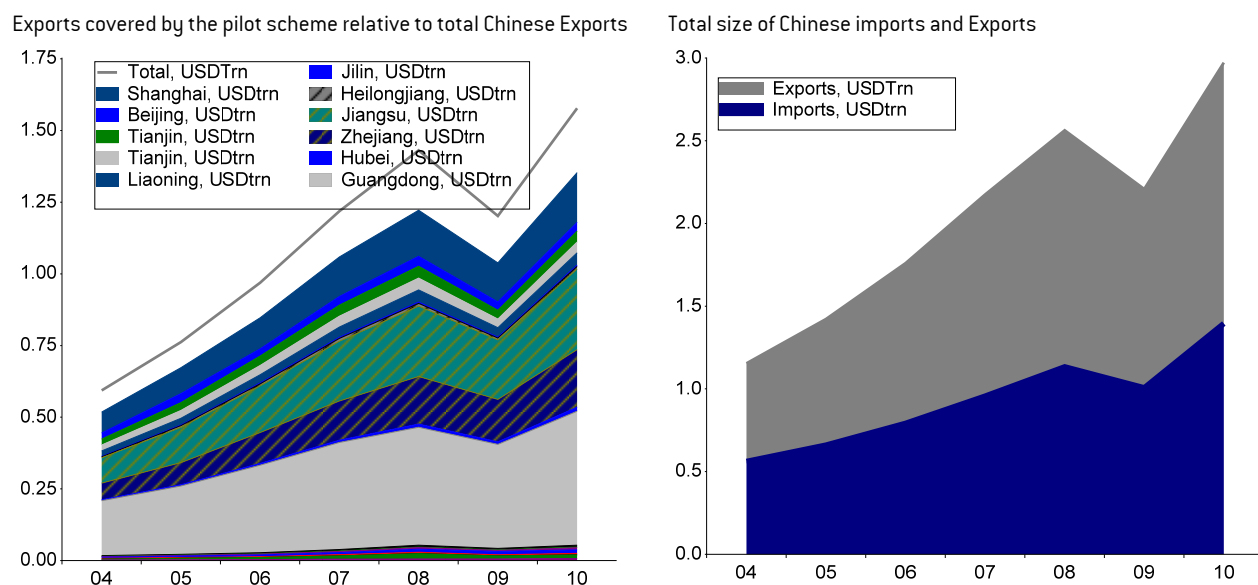
³ Note that there are 34 provinces in China and that the 20 chosen regions represent about 58 percent of the total Chinese population.

Table 2: The Trade Settlement Pilot Scheme: key facts

Scope	Mainland	Outside of Mainland	Potential Coverage
Phase 1 (from 1 July, 2009)	Shanghai, Guangzhou, Shenzhen, Dongguan and Zhuhai	ASEAN, Special Administrative Regions (Hong Kong, Macao)	<ul style="list-style-type: none"> ■ 28% of Chinese Exports ■ 16.8% of Chinese Imports ■ USD 100bn Annual Transactional Turn Over
Phase 2 (from 22 June, 2010)	Beijing, Tianjin, Inner Mongolia, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Hubei, Guangdong, Guangxi, Hainan, Chongqing, Sichuan, Yunnan, Jilin, Heilongjiang, Tibet, Xinjiang	International	<ul style="list-style-type: none"> ■ 96% of Chinese Exports ■ 100% of Chinese Imports ■ USD 1.52trn Annual Transactional Turn Over

It is quite striking to note in Table 2 that over a relatively short period of time (a bit less than a year), the Chinese authorities decided to expand what was a modest Asian and regional trade settlement experiment to a large-scale global pilot scheme covering almost all of China.

Figure 2: Trade covered by phase 2 of the Pilot Scheme

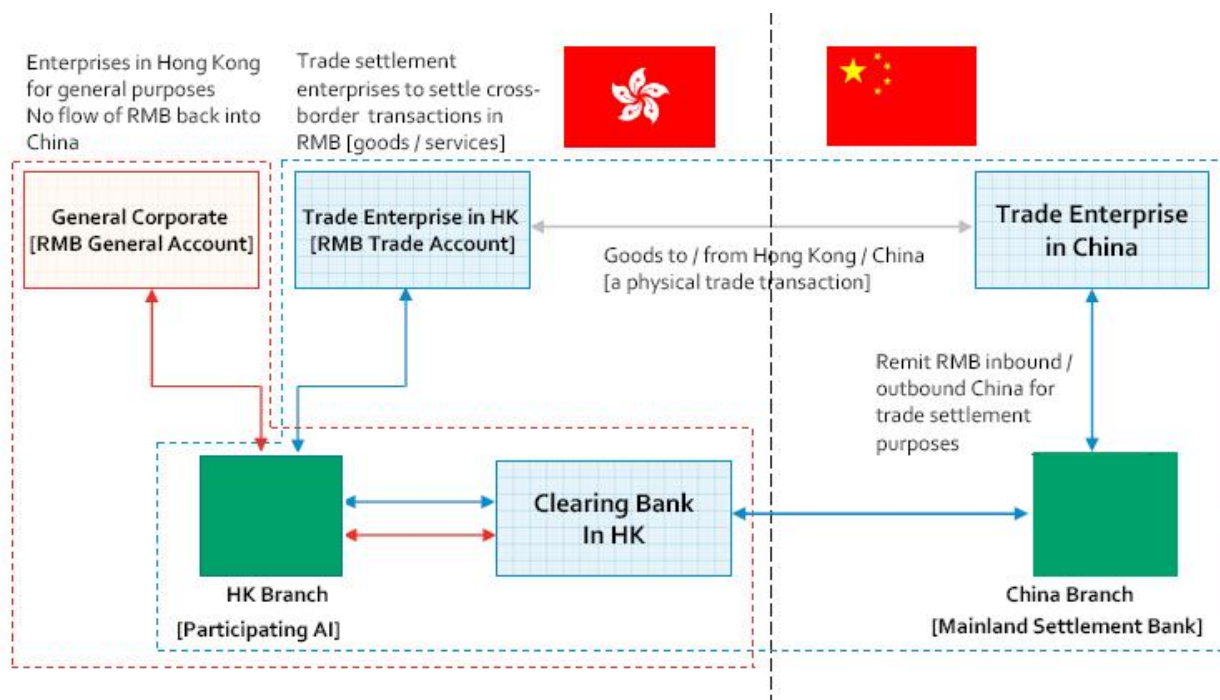


Source: National Bureau of Statistics of China.

The pilot necessitates a fairly complex financial settlement architecture illustrated in Figure 3. It has been established between Hong Kong and the PBoC and is centred around a trading settlement backbone that expands to give access to a range of financial services offered primarily by the settlement banks in Hong Kong, but more generally all institutions established in the pilot zone. In August 2010, HKMA issued a circular allowing all authorised institutions to take part in the interbank

bond market in RMB through a settlement agent and after approval by the PBoC.

Figure 3: Pilot Scheme settlement diagram



Source: HKMA, PBoC, BNP Paribas

Banks in the selected areas outside the Chinese mainland participating in the Pilot Scheme (non-mainland participating banks) can provide RMB services to companies that choose to settle trade transactions in RMB with the mainland designated companies⁴. Such services include:

- **Deposit-taking:** Companies in areas covered by the pilot scheme can open RMB deposit accounts with non-mainland participating banks. Such deposit accounts are primarily for handling RMB receipts and payments related to the settlement of trade transactions with the mainland designated enterprises. The deposits can then be used for investing in RMB securities.
- **Currency exchange:** FX services can be provided, although the exchange for RMB is limited to the amount of actual trade transaction.
- **Remittance:** Two-way remittances can be conducted between the companies outside the mainland and designated mainland companies for genuine trade transactions.
- **Trade finance:** RMB trade finance can be provided for trade transactions with the mainland designated companies. Such trade finance is limited to the amount of a corresponding trade transaction, and should be paid to the mainland designated company directly.

Hong Kong banks started in 2004 to offer basic RMB banking services such as deposit taking, remittance and foreign exchange. The scope of the RMB in Hong Kong has been expanded twice in 2005 and in 2007 through relaxation of national regulations by HKMA, but the introduction of the pilot scheme gave a new scope to the RMB-denominated financial activity in Hong Kong.

⁴ The list of designated enterprises is updated regularly by Chinese authorities.
<http://www.pbc.gov.cn/publish/huobizhengceersi/3131/2010/20100915162829888267153/20100915162829888267153.html>

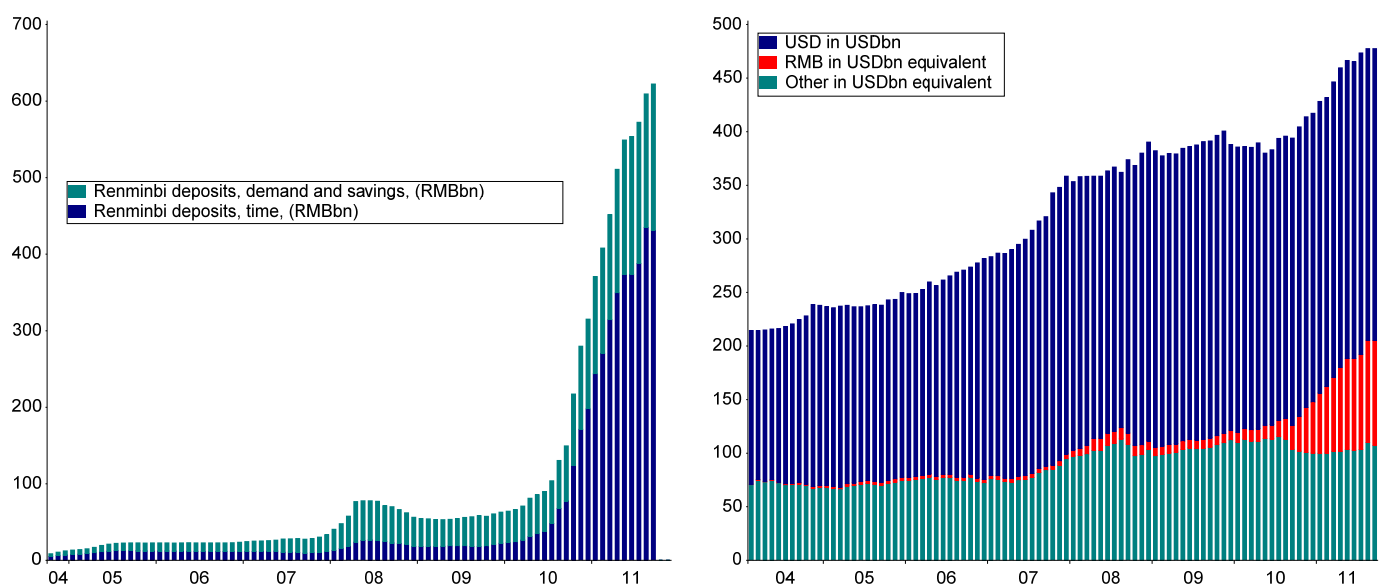
But beyond the transactions undertaken strictly under the pilot scheme, RMB holdings outside of China are growing fast because there are no more restrictions forcing them to be remitted or exchanged back into another currency. As a result, the natural growth of RMB deposits will be at minimum equal to the trade surplus of the participating regions with the rest of the world. In addition, importers seem to be very active users of the settlement scheme and are rightly positioned to raise trade finance in RMB offshore, and to take advantage of the lower interest rates offshore due to excess deposits and a dearth of RMB offshore securities.

In 2010, ASEAN countries were running a trade surplus of some USD 16.1 billion with China. This means that if just half of the exporting companies in the pilot region took advantage of the option to settle in RMB, it would give rise to about USD 7.7 billion of deposits each year accumulated in ASEAN countries, and by analogy about USD 87 billion in the rest of the world. This would create a large natural deposit base and subsequent demand for RMB assets. Note that these estimates are quite conservative because it is very possible that agents decide to keep more of their net trade with China in RMB, which is what has been observed so far.

In addition, reports by investment banks⁵ suggest that part of the deposit growth was driven by opportunities to generate risk-free income through arbitrage. Chinese importers can take advantage of a low offshore rate versus a high onshore RMB deposit rate. This could also explain the rapid rise in deposits outside of the mainland if mainland importers are bigger users of the scheme than exporters despite China's net trade surplus. It has therefore been suggested that far from being the sign of an internationalisation drive, the rise in RMB deposits in Hong Kong was simply the reflection of a risk-free speculative opportunity given to Chinese importers. This is correct and Yongding Yu (2011) has explained this phenomenon in some detail. As long as there is an expectation that the RMB is undervalued, there will be a distortion between the Hong Kong (CNH) and the Chinese mainland (CNY) markets. Indeed, this difference between the two exchange rates incentivises Chinese importers to accumulate RMB offshore because the offshore exchange rate is more favourable for their purchases of dollars. But if doubts emerge about the appreciation potential of the RMB, this difference between the two exchange rates could vanish or even reverse. In this case, Chinese importers would gain no benefit from holding CNH and the growth of the RMB offshore market would then stall if not drop. This argument is factually correct but it gives a disproportionate importance to speculative motivations in the holding of the RMB offshore. It is certainly true that speculation has been an important driver of the growth in the CNH market and the market turmoil experienced at the end of 2011 actually precipitated a rapid reduction in those deposits but did not change the broader trend. Indeed, offshore RMB deposits declined in December 2011 by some 6.2 percent month on month to RMB 588.5 billion. Yet, even though speculation fuels a rapid expansion of the RMB market beyond its natural expansion rate, it doesn't neglect completely the existence of a genuine and organic appetite for offshore RMB. This phenomenon should be taken into account and one should therefore forecast the expansion of the CNH market with caution, without simply extrapolating the recent rapid growth seen in 2010 and illustrated in Figure 4. In fact, even if the amount of CNH deposits in Hong Kong contracted in the latter part of 2011, settlements in CNH continued to rise rapidly over that period, highlighting that the speculation in RMB didn't challenge the fundamental use of RMB in settlement transactions.

5 Becky Liu, RMB Offshore Bonds: Credit market in infancy and risks not well understood, HSBC Fixed Income Research, June 2011

Figure 4: Foreign exchange and RMB deposits in Hong Kong



Source: Hong Kong Monetary Authority and author's calculations.

RMB deposits in Hong Kong have effectively quadrupled since the inception of the pilot scheme. Deposits in ASEAN countries have also started to grow rapidly although not all ASEAN central banks provide this data. RMB deposits in Hong Kong now represent about 20 percent of foreign currency deposits in the banking system. Interestingly, the substitution in private deposits is happening against the USD, while holdings of other foreign currencies remain roughly stable.

But for the offshore market to work effectively, and to convince the authority that it does not create a threat to the monetary equilibrium, there needs to be a balance between the RMB that leaves China or that is created outside of China, and that on the onshore market, which is controlled locally by monetary authorities. In August 2010, the PBoC allowed central banks and RMB clearing banks in Hong Kong and Macau, as well as international banks participating in the cross-border trade pilot, to access the interbank onshore market. But they still need approval from the PBoC and can only invest within a certain quota limit that tends to be relatively small. This is an essential feature allowing a degree of controlled circulation between offshore and onshore markets. The RMB offshore (ie CNH) is now effectively a deliverable, convertible currency, and financial products denominated in CNH are relatively freely accessible to a range of international investors. This is an important landmark in the internationalisation process of the RMB. The co-existence of the CNH (offshore) and CNY (onshore) market allows Chinese authorities to control the communication valve between the two markets, and to control their domestic financial system while effectively establishing a currency that is accessible internationally.

ii. Chinese trade promotion institutions

Beyond agreements for trade settlements, which necessitate thinking about the financial architecture and the appropriate controls underpinning those exchanges, Chinese institutions involved in the promotion of trade have always indirectly promoted the RMB if not as a settling currency, at least as a reference currency. The Chinese Ex-Im Bank (the largest such institution in the world, about 25 percent bigger than the US Ex-Im Bank in terms of assets) denominates all its loans in RMB. The Chinese Development Bank, which has an essentially domestic mandate (asset size is more than USD 300 billions) but which has some role in international investments, also plays

a role in the international stature of the RMB. In particular, those institutions not only help to denominate China's international assets in RMB (loans from these institutions are always in RMB), they are also large suppliers of RMB assets through their borrowing programme recently available to international investors through the offshore market.

All in all, the combination of pilot scheme and the verbal commitments made vis-à-vis other emerging countries suggests an activist policy of internationalisation of the RMB through international trade, which is still in its infancy. During 2009, almost every Chinese state visit to a large emerging economy was marked by a bilateral trade agreement that set as an objective the development of bilateral settlement in national currencies. The first such pledge was made in Brazil in May 2009, and has been repeated in a number other countries, such as Turkey in December 2010, which also pledged to increase bilateral trade with China and settle in local currency.

Such agreements should not be underestimated given that the scope for expansion is quite large and will probably only be stopped by shortages of RMB assets once the international demand for those rises, commensurate with the increasing holdings of RMB offshore. This will then put the focus on the financial account restrictions. In the meantime, the breadth and scope of the development of trade finance related to this trade settlement initiative could be an essential contributor to the rise of the RMB as a vehicle for international trade. The literature on currency internationalisation generally focuses on its use as a reserve asset but often fails to give justice to the central role of international trade in setting an internationalisation process in motion. Flandreau and Eichengreen (2009), or Eichengreen (2011), have shown, that the rise of the dollar after 1914 was intimately linked to its rise as a trading currency through the rise of *trade acceptances*, the then-standard form of trade finance. The first world war also played its part by shifting the centre of world finance from London to New York, but effectively it is by taking over trade finance that the US established the dollar as a world currency which displaced sterling in little more than a decade. One should therefore not underestimate the importance of recent Chinese initiatives. In addition, these could be substantially broadened if the current difficulties affecting banks in advanced economies were to challenge their dominance in international trade finance, thereby opening up an avenue for China to establish its banks and its currency as leaders in international trade finance.

2.2 Increasing international assets in RMB

The RMB's international advance will undoubtedly raise the question of its use in financial markets. As we have shown above, the appetite for keeping RMB holdings in time deposits (see Figure 4 chart 1) has grown as fast as offshore deposits themselves, suggesting a clear need for the RMB to be used as a store of value. The demand for RMB assets already outpaces the supply, despite recent efforts to accelerate the rise of Hong Kong as a key issuer of offshore RMB assets.

iii. Securities issuance in Hong Kong

Since 2007, mainland financial institutions, after obtaining relevant approval from the authorities, can issue RMB bonds in Hong Kong. In late 2009, sovereign bonds issued by the Ministry of Finance were sold for the first time outside of mainland China, helping to establish a proper benchmark interest rate curve. This helped to provide the foundation for the creation of a more liquid market. The scope of authorised issuers was extended in 2010 to the mainland subsidiaries of Hong Kong banks and was subsequently more broadly opened to international companies in the later part of 2010, with the establishment of the offshore market.

This attracted an encouraging response with a large number of issues in a short period, and was met by a strong investor demand for RMB bonds offshore. Yet, net issuance lags far behind the net increase in RMB deposits, which contributes to a fundamental imbalance in the offshore market that

depresses RMB offshore interest rates.

a) Scope

Table 2 shows the differences between the onshore and the offshore RMB markets. Note that not all investors are allowed on the onshore market. This means Chinese authorities can exert control over the domestic money supply, and allows the limiting of arbitrage opportunities between the onshore and the offshore markets. It also explains divergences between the domestic and offshore interest and exchange rates.

Table 2: Onshore/offshore RMB securities markets

	Offshore	Onshore
Size (RMB)	>240bn	>18,000bn
Issuers	Supranational (ADB, World Bank) Chinese Quasi-Sovereigns (China Development Bank) Mainland Chinese Banks International Corporates	All onshore entities
Investors	All Foreign Investors	Central Banks and RMB offshore settling and clearing banks
Liquidity	Poor	Good
Instruments	Treasury Notes Financial Bonds International Corporate Bonds Supranational Bonds Corporate Bonds Certificate of Deposit	Treasury Notes PBoC liquidity bills Financial Mainland Corporate MTNs Commercial Paper
Clearing	CMU/Euroclear/Clearstream	China Govt Depository, Trust and Clearing
Tax	Tax free except income tax of 16.5% on corporate bond	5% tax on capital gains on Govt Bonds if sold before maturity 25% on income tax and capital gains subject to 30% tax (25% income + 5% business tax)
Law	Hong Kong Law	PRC Law

Source: HKMA, PBoC, Bloomberg

There are not yet any regulations regarding CNH bond issuance by mainland corporations but this is unsurprising considering this would contribute to leakage between the onshore and offshore markets and would make controls more difficult. Hence we could expect authorities to wait before allowing this, and to limit this to state-owned enterprises, over which effective control is strong.

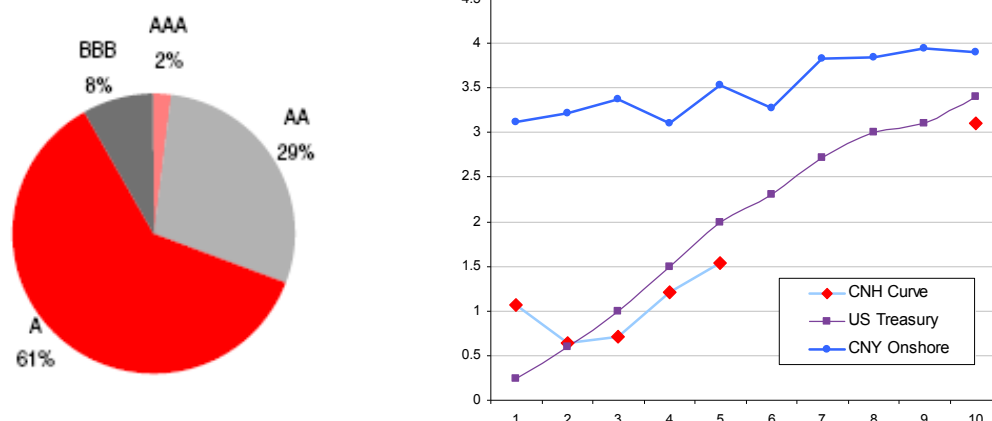
b) Outlook

Although the offshore RMB market has made considerable progress in a very short period of time, there is scope for improvement on a number of fronts to help it grow and deepen in order to provide a significant supply of high quality and liquid RMB assets, which is necessary for the RMB to gain credibility not only as means of exchange but also as a store of value and unit of account.

As it stands, the ratings of the RMB offshore securities are such that the offshore market does not offer enough AAA securities. This could be strengthened once foreign sovereign issuers decide to issue in RMB, possibly swapping the proceeds in another currency. Note that the rise of 'Samurai

bonds' in the early 1990s contributed to a large degree to the deepening and broadening of the asset base in yen. This is a path that could easily be followed by issuers seeking advantageous rates and demand for their bonds. Along those lines, the first supranational issue by the World Bank was a good step in this direction, and a sovereign issuer of a developed country could be an important source of credibility and depth for this market.

Figure 5: Rating breakdown and interest rate curve of the offshore RMB market



Source: HSBC, S&P Ratings, Bloomberg, as at March 2011

There are other key changes that could help to broaden the RMB offshore market. In particular:

- First, the RMB market is for now mostly designed to cater to fixed-income investors while one could envision a scheme allowing the RMB market to serve also as an equity market platform or as an avenue to control the access of international investors to the onshore equity market in replacement or in conjunction with the existing Qualified Foreign Institutional Investor framework. Some steps were taken in this direction in December 2011.
- The Hong Kong stock exchange could open a dual listing or different stock exchange with stock listed in RMB as well as in HKD, or a more simple move of the entire HKD listing towards RMB, which has been discussed in some Chinese policy circles.
- The other essential hurdle in the way of an expansion of the offshore RMB is the current incapacity of onshore non-financial corporates to issue offshore. They represent a large majority of the current onshore market and could alone be the single largest source of growth of this market, although they would not help to improve the overall rating quality of the asset base.
- Last, nothing sets Hong Kong as the only centre of RMB offshore. It has become the *de facto* centre but is not *de jure* the only one. One could envisage that an international financial centre such as London or New York could start to issue and trade offshore RMB securities. Regionally, Singapore sees the challenge coming from Hong Kong and is starting to market itself as a potential RMB offshore centre and commercial banks in Taiwan are contemplating issuing such securities.

All and all, and despite these challenges, most analysts⁶ expect RMB offshore issuance to continue to grow rapidly and to reach RMB 400 billion at the end of 2012 and between RMB 600 billion and RMB 850 billion at the end of 2013.

6 Becky Liu, RMB Offshore bonds: Moving towards a buyers' market, HSBC Fixed Income Research, November 2011

iv. Expansion of the Qualified Foreign Institutional Investor Scheme

China created the Qualified Foreign Institutional Investor (QFII) scheme in 2002 and it was one of the first signs of increased financial account openness following China's entry into the WTO in 2001. Effectively, it allows a select group of international investors to access the Chinese stock exchange denominated in RMB. Each investor is given a fixed non-transferable quota. Chinese authorities therefore control the number of participants, their maximum individual exposures and the aggregated foreign exposure. The approval process is long and cumbersome and managed largely by the China Securities Regulatory Commission. The selection criteria are not only based on the quality of the institution but also on the regulatory framework of the home country, provided the country in question has also signed a specific memorandum of understanding with China.

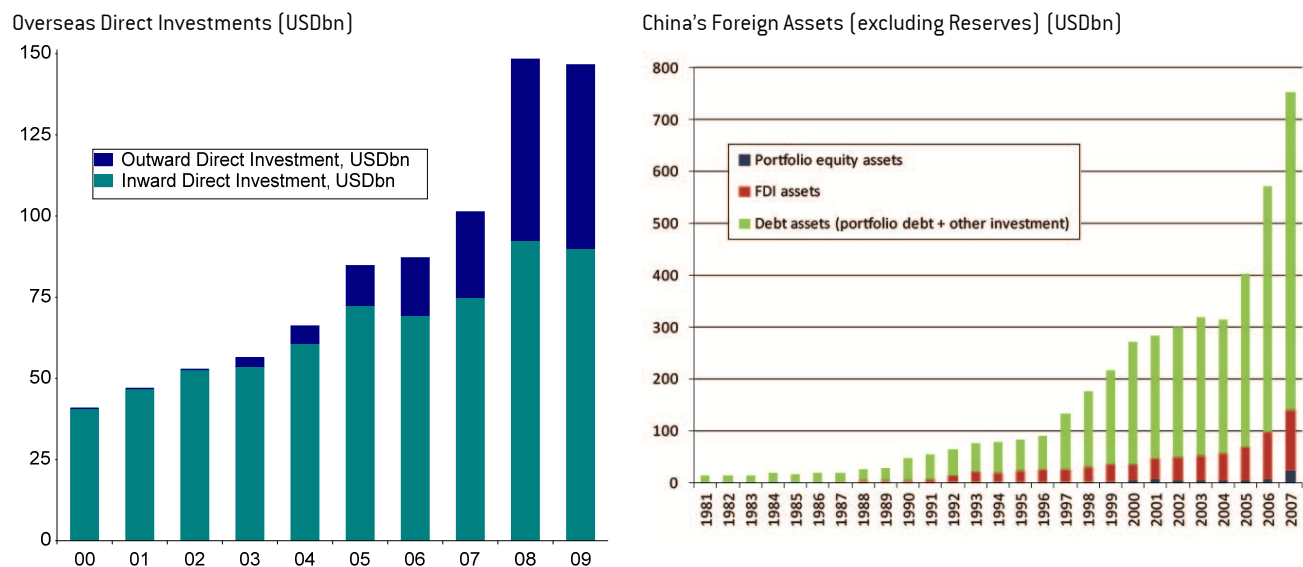
The expansion of the QFII scheme has been discussed by the US Treasury and was a pressing demand of Treasury Secretary Paulson under the US-China Dialogue, to no avail. This signals a willingness to keep the doors to the domestic market largely shut but may not necessarily be an unsurpassable obstacle to RMB internationalisation, especially if other routes to loosen financial account restrictions are taken.

In August 2011, Premier Li Qiang visited Hong Kong and announced a new RMB Qualified Foreign Investor (RQFII), which can be seen as a way to expand the existing scheme while encouraging the use of the RMB. This was formalised in December 2011 by the Regulatory Committee (CSRC), the People's Bank of China (PBoC), and the State Administration of Foreign Exchange (SAFE). This led to the third change of rules pertaining to remittance through the capital account following a partial opening of the onshore market and the creation of the Foreign Direct Investment pilot scheme (see next section). The initiative is symbolically important but relatively small (only 20 billion RMB). It is targeted primarily at Hong Kong securities firms and investment companies and 80 percent of investment has to go into fixed income securities. The sums invested through this scheme in addition to the returns earned can be repatriated in RMB or in foreign currency. This RQFII therefore represents an additional opening in the financial account.

v. Settlement of overseas direct investments in RMB

Although maybe less significant in size, another initiative was introduced by the PBoC on 13 January 2010, which is another step towards some form of financial account liberalisation. The PBoC's initiative allows all firms and countries eligible under the Trade Settlement Pilot Scheme to settle their overseas direct investments in RMB. Although the amounts are likely to be only a fraction of what the trade settlement is, this is a clear step in the direction of opening the financial account under the auspices and controlling framework of a pilot scheme. Under this pilot scheme, mainland companies (after approval by the relevant mainland authorities) can settle direct investments overseas using RMB. Moreover, foreign branches and correspondent banks of mainland banks can obtain RMB funds from the mainland and extend RMB lending to the companies conducting the investments. In 2009, direct investments in and out of China represented some USD 150 billion (see Figure 6). If this was accompanied by an ambitious drive for Chinese firms to invest overseas, it would not only help to spread the RMB but would also allow mitigation of some of the natural constraints to internationalisation that are associated with the fact that China is a net creditor to the rest of the world. There are reasons to believe that, barring regulatory and protectionist hurdles, there will be a growing appetite for Chinese firms to deploy their capital abroad (see Deng, Hafsi and Tian, 2007). In fact, Rosen and Hanemann (2009) argue that China's foreign direct investment will necessarily grow rapidly as China continues to rebalance its economy and deploy more private capital overseas.

Figure 6: Chinese overseas investment



Source: National Bureau of Statistics, China (left panel); Lane and Milesi-Ferretti (2009) (right panel).

Although the scheme remains fairly constraining, effective convertibility has now gone beyond simple current-account transactions. This is a small step in nominal terms but symbolically a very meaningful one regarding potential future openness of the financial account. The fact that it happens so early in the life of the internationalisation process continues to suggest that the internationalisation of the RMB is following a rapid course, although significant obstacles remain.

2.3 A potential official reserve asset

Establishing a currency internationally is one thing. Establishing it as a reserve currency is generally seen as the culminating point of the internationalisation process. Creating such conditions of credibility and ubiquity that make the holding of one's currency by central banks desirable and necessary is in fact the ultimate litmus test. So far, the RMB hasn't succeeded but there are significant developments suggesting this could happen more rapidly than generally expected. But this is not a purely exogenous process. China's place in world reserves and its place in the monetary system are going to be directly linked to its ability and willingness to act as, or be perceived as, a credible lender of last resort.

vi. Chiang Mai Initiative and multi-lateralisation

The Asian crisis of 1997 was such a traumatic event that it led Asian countries to try and shield themselves against the vagaries of capital flows and harsh adjustment programmes designed by the IMF. The idea of a regional IMF that was initially floated turned out to be relatively complicated to set up, and Asian economies instead started establishing a complex web of financial safety nets relying on currency swap arrangements between central banks. It was the first time that Asian countries agreed in principle to exchange their hard currency reserves in case of hardship, but also the first time they established avenues to exchange their own currencies among themselves, effectively creating the basis of a diversification into Asian currencies of their assets and raising the question of currency convertibility.

The Chiang Mai Initiative was never drawn upon and evolved progressively from a complex web of bilateral arrangements to a more institutionalised multilateral regional arrangement. This last stage known as the multilateralisation (as opposed to its original bilateral nature) is fairly recent and was accelerated and concluded after the 2008 financial crisis.

Table 4: Chiang Mai Initiative multilateralisation

	Financial contribution		Purchasing multiple	Voting weight
	USD (billion)	(%)		
China	38.4	32.00	3	28.3
Japan	38.4	32	0.5	28.4
Korea	19.2	16	1	14.77
Plus 3	96	80	-	74.47
Indonesia	4.77	3.97	2.5	4.36
Thailand	4.77	3.97	2.5	4.36
Malaysia	4.77	3.97	2.5	4.36
Singapore	4.77	3.97	2.5	4.36
Philippines	3.68	3.07	2.5	4.36
Vietnam	1.00	0.83	5	1.84
Cambodia	0.12	0.1	5	1.22
Myanmar	0.06	0.05	5	1.17
Brunei	0.03	0.02	5	1.15
Lao PDR	0.03	0.02	5	1.15
ASEAN	24	20	-	28.33
Total	120.00	100.00	-	

Source: ADBI Institute .

The Chiang Mai Initiative in its current incarnation, which some argue is not its final one (Kawai, 2010), allows participating countries to draw on an agreed-upon line for very short period of time (90 days renewable a maximum of seven times). Beyond this point, the country needs to make a formal IMF programme request, which typically would come with far more conditionality than the gentle one offered under the CMIM. What is interesting is that China is the largest creditor economy of the participating countries. It would therefore play an important financing role in the initiative akin to that of a regional lender of last resort.

vii. Bilateral swap arrangement

Most Asian central banks came into the crisis with very large amounts of precautionary reserves, which helped them withstand the financial blow although the violence of the shock was such that it showed the degree to which financial safety nets could indeed prove useful and how much they needed to be strengthened. The progress of the Chiang Mai multi-lateralisation had somewhat stalled in recent years, as memories of the 1997 Asian crisis faded. But beyond Chiang Mai, the crisis also pushed most countries to take emergency measures to ensure that their stock of reserves and liquidity would shelter them from the worse consequences of the crisis.

The PBoC in particular, with its large stock of reserves played an important role in this respect and very quickly offered currency swap arrangements to a number of emerging economies in Asia and across the world. This had a significant confidence boosting effect as it showed that the largest holder of FX reserves in the world was ready to play the role of an ultimate liquidity backstop for those central banks. Although in fact, the terms of the exchange were not to swap hard currency held

at the PBoC against local currencies of those countries.

Although no firm data has been released on the matter by the beneficiary central banks or the PBoC, it seems that they were not used (apart from HKMA⁷) and therefore remained largely symbolic.

Table 5: PBoC bilateral FX swap lines

Counterparty	Date	Size (RMB billions)
Bank of Korea	12-Dec-08	180
Hong Kong Monetary Authority	20-Jan-09	200
Bank Negara Malaysia	08-Feb-09	80
National Bank of the Republic of Belarus	11-Mar-09	20
Bank of Indonesia	23-Mar-09	100
Central Bank of Argentina	02-Apr-09	70
Central Bank of Iceland	09-Jun-10	3.5
Monetary Authority of Singapore	23-Jul-10	150
Reserve Bank of New Zealand	18-Apr-11	25
Central Bank of Uzbekistan	19-Apr-11	0.7
Central Bank of Mongolia	19-Apr-11	5
National Bank of Kazakhstan	13-Jun-11	7
Central Bank of Thailand	22-Dec-11	70
State Bank of Pakistan	23-Dec-11	10
Central Bank of the UAE	17-Jan-12	35
Central Central Bank Turkey	21-Feb-12	10

Source: PBoC. *Note:* all swaps have a three-year maturity and are extendable upon the agreement of both parties.

But more than dealing with the immediacy of the crisis, and beyond the confidence effects, one should also look at these swaps as a way to open the door to the dissemination of RMB across the world as and when needed. Indeed, the pilot programme discussed above will make it necessary for China's trading partners to access RMB liquidity for settlement purposes. This can be done through the interbank market but banks could also use their domestic central banks to obtain RMB liquidity if these were supplied by the PBoC through the currency swap lines. Those swap lines should therefore be seen as facilities both to disseminate RMB liquidity in fair weather and to provide a large liquidity backstop in stormy weather. They respond to two crucial features of an international currency: the acceptance to play the role of lender of last resort in crisis situations and the willingness to facilitate trade invoicing and international transactions.

This nonetheless leaves the question of whether the RMB could become an intervention currency the way the yen has, for instance. This is highly dependent on the flexibility of the RMB but also on the role that China will want to play on the monetary scene. For the RMB to become an intervention currency, China will need to be far more engaged (and also far more welcomed in international monetary policy forums). Global FX interventions remain so far largely a G10 prerogative, in fact rather a G3 (Federal Reserve, Bank of Japan and European Central Bank). Given current convertibility restrictions, at the moment, the PBoC, could only intervene using its own currency in the Non-Deliverable Forward market. However, the FX swap lines embedded in Chiang Mai or the bilateral ones signed since 2009 do envisage delivery of RMB, and they could be seen as the embryonic form of a currency convertibility between a select number of central banks.

⁷ This line was not drawn by the Hong Kong Monetary Authority in response to the crisis but rather in the context of the trade finance pilot scheme described above

viii. Bilateral Asset Exchanges (Japan-China)

China has been a heavy buyer of international securities, but has made distinct diversification efforts, buying substantial amounts of Korean or Japanese bonds and trying to reduce its relative holdings of dollar assets. It is unclear if the rationale is purely one of diversification or if there are also mercantilist attempts to push the exchange rate of China's direct competitors higher. But regardless of the exact motives, these purchases have raised a lot of questions. The Chinese purchases have not been met with reciprocal purchases, although a number of Asian central banks have expressed an interest in diversifying some of their assets into RMB. The Bank Negara Malaysia claims that it is purchasing Chinese government bonds (size is not disclosed) but it is not clear how this could effectively be done directly, given that the bank has no formal access to the RMB onshore market. It could probably make the purchases through an onshore-authorized custodian. Since August 2010, international central banks have been allowed in theory to enter the domestic onshore markets, but none has so far been granted an authorisation by the PBoC, constraining substantially the ability of any central bank to accumulate domestic onshore securities.

On the initiative of its Deputy Minister of Finance Shin during the Korean presidency of the G20, the Korean government tried to address this unbalanced relationship by offering China and Japan (and possibly more countries in the future) exchanges of government securities of their respective countries. The idea was to allow diversification of their reserves simultaneously and reciprocally, and thereby avoid distortions of making those purchases in the open market. Japan and China signed a bilateral agreement to this effect in December 2011. The bilateral agreement has several elements including the exchange of assets by both central banks but also the deepening of trade links and the broadening of the use of the RMB to settle bilateral trade transactions. This is an important move because the agreement by Japan to use the RMB in trade settlement is an acknowledgement that the internationalisation of the RMB is moving ahead, and that the yen has no longer a real regional or international ambition. Such bilateral agreements are likely to change profoundly the use of the RMB and they will also facilitate a gradual accumulation of RMB assets by foreign central banks. It is also interesting to note how China continues to prefer bilateral negotiations as opposed to multilateral ones. It is likely that the RMB will become a regional Asian currency through a multiplication of such bilateral agreements rather than through a real multilateral regional framework.

3. The roadmap towards internationalisation

3.1 Financial account openness⁸

The academic literature on capital controls and financial liberalisation is particularly prolific but is also remarkably politicised. The struggle for financial openness and financial liberalisation raged in the 1990s and framed a large part of the policy debate about the relevance and effectiveness of capital controls. Throughout the 1990s, the international financial community and in particular the IMF forged a consensus on the merits of financial globalisation. Yet outside of academic circles, the reality is that a large part of the world embraced this idea while another part of the world built another paradigm revolving around limited capital flows combined with fixed or managed exchange rates.

i. Measuring financial openness

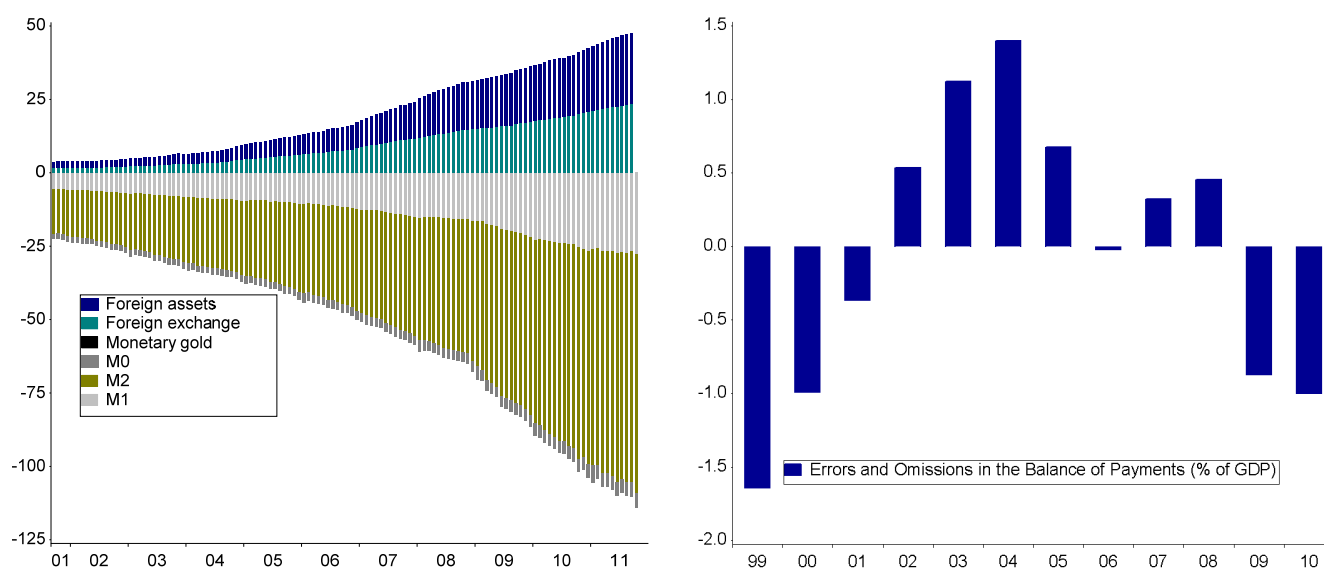
The question of China's financial account openness has been an important one for decades. It was an essential demand made during the WTO accession negotiations and continues to remain the subject of acute policy and academic debates.

From the Chinese perspective, risks to financial account openness are fairly symmetric. Financial inflows, if uncontrolled, can destabilise domestic monetary policy and risk creating bubbles and misallocations of capital. They are also ultimately subject to extremely destabilising sudden stops, which have significant effects on output and financial stability. But this is not the only source of concern. As Alan Greenspan noted in 2003, "*many in China fear that the removal of capital controls [...] could cause an outflow of deposits destabilising the entire financial system*". This is indeed a recurrent concern for Chinese policymakers rooted in a strong preference for political stability, which Chinese authorities see as inextricably linked to financial stability. The very high stock of fiduciary money relative to GDP or relative to foreign assets (see Figure 7, chart 1) is an important risk factor to consider. If Chinese households and corporates decided to change their RMB into hard currency, say on the back of an acute political or economic crisis, they could easily wipe out most, if not all, of China's FX reserves. This is certainly a tail risk but clearly one that the Chinese leadership has very much in mind and which at least partially explains a relative resistance to openness.

On the other hand, financial inflow controls exist but have not prevented substantial foreign financing. Chinese authorities have tried to orient these flows rather than block them altogether, and have in fact succeeded in reducing the share of portfolio flows in financial inflows to the benefit of direct investments.

⁸ We use here the new nomenclature of the IMF and refer to *Financial Account* for all financial transactions in the balance of payments including FDI, portfolio flows and other investments. Most of the literature continues to use the word *Capital Account* to refer to the same components in the balance of payments. We keep this reference to *capital account* when referring to authors that have used this terminology but prefer to use financial account wherever possible.

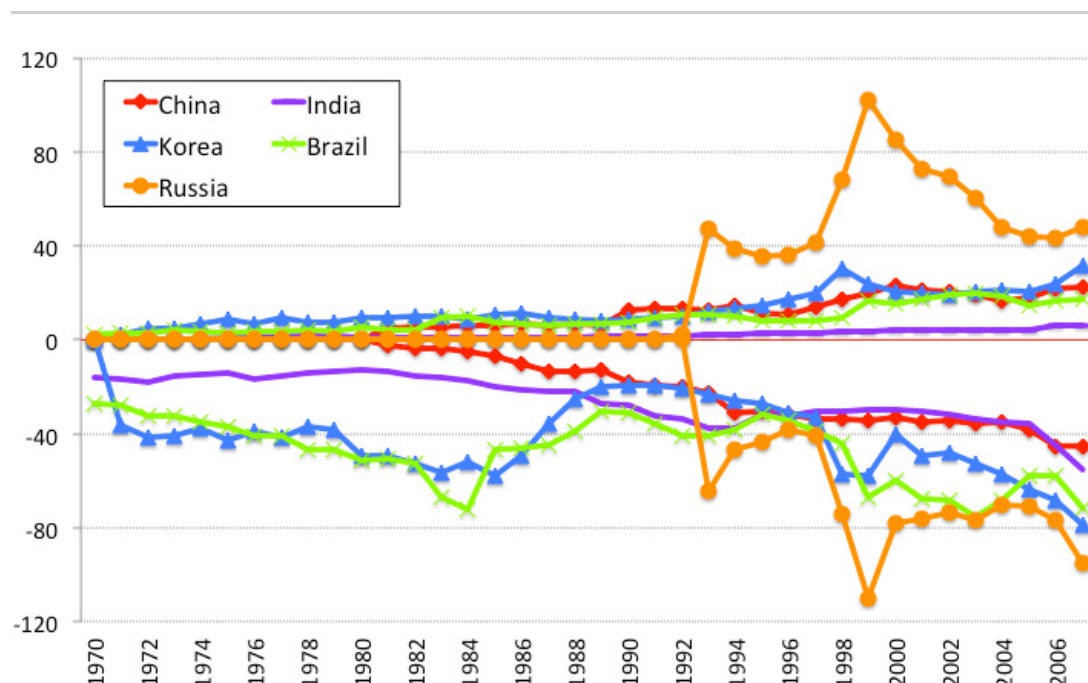
Figure 7: Money stock and foreign assets and leakage from unrecorded transactions



Source: Reuters.

The bottom line is that despite all the characteristics of a closed financial account, China's investment position suggests a slow but impressive growth in foreign inflows. The relatively large errors and omissions balance (sometimes as much as 1 percent of GDP annually) is certainly a sign of hidden or unrecorded financial inflows between 2002 and 2008.

Figure 8: Comparative and aggregated view on China's openness. Cumulative assets (minus reserves) and liabilities as a percentage of GDP



Source: Lane and Milesi-Ferretti (2009) and author's calculations.

As illustrated by Figure 8, China is far from being completely financially closed. However, China clearly lags behind its peers in financial openness if we exclude its large official reserves. Hence, if

China is more open than its regulations suggest, it is still on the whole far more closed than its emerging-market peers. Its closest equivalent is India, although recent data from Lane and Milesi-Ferreti (2009) suggest that China could be even more financially closed than India. The breakdown of the international investment position in assets and liabilities in Figure , shows that the asset size is far more open but this is simply the flipside of China's substantial creditor position, which forces its central bank to accumulate large amounts of FX reserves to keep the exchange rate stable.

ii. Path towards increased financial account openness

This relative closeness is generally seen as an essential challenge for the establishment of the RMB as a leading international currency. But this conclusion needs to be nuanced. The process would certainly be easier and more rapid with a fully open financial account but this does not mean that a relatively closed financial account forbids completely all internationalisation prospects.

China has followed a very conservative path towards financial account openness and has recently relaxed some controls as its international ambition became more assertive. This approach is also followed by India, which engaged in a process of gradual but very slow openness. Yet China has never really disclosed its intentions while India's policy discussions on the matter have been made public, in particular through the Tarapore Committee set up by the Reserve Bank of India back in the late 1990s.

The Tarapore committee's analysis (1997) highlighted two sets of imperative preconditions necessary to launch the opening of the financial account for India but more generally for all emerging economies engaged in a process of liberalisation. First, they highlighted the fact that cases where capital account liberalisation preceded banking sector reform appeared to have precipitated financial crises or at least created acute risks of crisis. Mexico, Indonesia, Thailand and the Philippines stood out as cases in this respect.

The second Tarapore Committee Report (2007) worked more specifically on the sequencing of openness in more details and considered that *"the preferred approach across countries has been to relax restrictions on inflows by non-residents and related outflows before removing restrictions on capital outflows by residents"*. This approach is reasonable in the context of most emerging economies but might not be relevant for China.

Indeed, for a large current account surplus country and a net creditor, what appears more urgent is to allow more financial outflows. This could compel Chinese authorities to sequence the liberalisation of the financial account differently from most emerging economies. Indeed, as Rodrik and Subramaniam (2008) reminded us insightfully, a large number of emerging countries are not credit constrained. In this context, one could reasonably argue that the most logical path of financial account openness for China, should it be pursued, would actually consist of gradually relaxing constraints on outflows rather than inflows. This would allow Chinese firms and individuals to invest overseas more freely and could contribute to a rebalancing that would enhance capital allocation both domestically and internationally, as China's net foreign investment position would gradually move from being invested in low yielding advanced economies government securities to higher return international investments. In addition, such a sequence of liberalisation would bring about macroeconomic benefits, such as rebalancing by reducing China's need for foreign exchange intervention, and would also certainly present a number of benefits for financial stability (see the following section). Hence, it is not so much China's full financial openness that is really necessary for the advancement of the RMB as an international currency, but rather the more limited and specific restrictions on financial outflows which are in fact already being slowly relaxed, in particular for direct investments (See Rosen and Hanemann, 2009). In the meantime, even if the relaxation of the restrictions on the financial account are slow, the existence of the offshore market can play an important transitional role by allowing firms to issue securities in RMB and thereby boost the asset base available in RMB. The growth of RMB assets in the last two years with limited capital account

openness, suggests that organic growth in the issuance of assets in RMB offshore and limited financial account are compatible.

In this respect, the Japanese experience of internationalisation in the early 1990s is particularly interesting. The growth in the euro-yen and the Samurai bond markets greatly helped to boost the use of the yen in international financial markets. Financial deregulation and the reduction in financial account restrictions allowed Japanese savings to be mobilised internationally through the issuance by international sovereigns and corporates of debt securities in yen, in the euro-yen market (yen denominated securities issued in international jurisdictions) and then Samurai bonds (yen denominated bonds issued by non-Japanese entities in Japan under Japanese Law).

Table 6: The rise and fall of yen debt securities issuance (bonds and notes)

	Overall	US issuers	European issuers	Japanese issuers
1993 Q3 - 1998 Q4				
Dollar	44.3%	77.2%	25.6%	29.9%
Yen	14.0%	4.6%	11.1%	52.6%
Deutsche Mark	9.9%	4.1%	18.3%	3.5%
British Pound	7.3%	4.3%	3.8%	2.3%
Swiss Franc	3.6%	2.1%	4.6%	8.1%
Canadian Dollar	1.1%	0.6%	1.0%	0.4%
Australian Dollar	1.3%	0.6%	0.6%	0.5%
1999 Q1- 2004 Q4				
Dollar	42.8%	82.2%	14.7%	25.3%
Yen	4.6%	2.5%	3.3%	60.5%
Euro	41.0%	10.6%	73.7%	9.6%
British Pound	6.7%	3.0%	3.9%	1.2%
Swiss Franc	1.4%	0.7%	1.9%	1.1%
Canadian Dollar	0.7%	0.1%	0.2%	0.4%
Australian Dollar	0.8%	0.4%	0.6%	0.3%

Sources: Cohen (2005), Dealogic; Euroclear; ISMA; Thomson Financial Securities Data; BIS calculations.

But although financial sector reform and a clear internationalisation agenda helped, the rapid yen internationalisation was not long lasting and, despite much effort and a clear momentum, the yen rapidly lost its traction. It is difficult to pin down exactly what led to this fairly abrupt change of course but it is clear that the darkening economic prospects of Japan following the implosion of the bubble in the early 1990s reduced the appetite for the yen internationally. In addition and maybe more importantly, the collapse of the Japanese banking system prevented Japan from playing the role of 'banker of the world', which is the defining feature of the issuer of a global currency according to Kindleberger (1965). Indeed, Japanese banks rose to regional prominence and had started to establish a global outreach in the 1980s. This experience and their clout was abruptly ended by the Japanese crisis, which sapped the foundation of the Japanese financial sector and eventually that of the yen as a leading reserve currency.

There are however some very recent signs that a plan around gradual openness is taking shape. The PBoC released in February 2012 a report that sets out a three-phase plan to that effect. Nicholas Borst (2012) provided a quick outline of this report written by the Head of Statistics Department of the PBoC.

The strategy outlined is broadly consistent with the steps taken to date. The first stage is to continue to encourage Chinese corporations to invest abroad and therefore relax some of the controls on outgoing capital. This has already started but remains tepid while it could indeed have major effects

on China's Net International Investment position and therefore on the potential for the RMB to extend its reach internationally.

The second stage, which ought to take place within 3 to 5 years aims to relax trade-related finance in order to bolster the use of the RMB as a trading currency. This is also largely consistent with action taken so far, in particular with both the trade settlement pilot scheme and with the web of bilateral swap arrangements taken with a number of central banks. The denomination of key commodities in RMB would exponentially accelerate the process then.

Finally, after 5 or 10 years, the financial sector would need to be strengthened substantially with deeper disintermediation and a gradual move to a market based interest rate mechanism to allocate credit.

iii. Considerations for the financial sector and offshore buffer

The discussion about capital flows is generally associated to its apparent corollary, the liberalisation of the financial system. The usual approach has been to encourage China to reform, privatise, regulate and modernise its financial system starting with its banks. In fact, this was already embedded in China's WTO accession negotiations and led to China's commitment to liberalise its financial system by the end 2006. Progress on the regulation and reform front started only in the middle of 2005, with major restructuring of the weakest banks involving substantial capital injections. But the financial system remained largely closed to foreign participation to the great frustration of WTO members, in particular the United States, which engaged in an intense lobbying battle for China's financial system liberalisation very similar to the one successfully brokered with Japan in the 1980s. What is striking though is the extent to which foreign participation and prudential policies, which are fundamentally different things, came to be merged under the vague concept of '*liberalisation*'.

This push for *liberalisation* of China's financial sector echoed a somewhat transparent business and US policy driven agenda⁹ with limited considerations for financial stability. However, it came to shape the policy recommendations made by the international community to Chinese authorities for most of the first decade of the 2000s. These lobbying efforts were very much based on the hypothesis – or belief – that international financial institutions by their very nature carried with them macroeconomic and financial stability, that they improved capital allocation and could kick start a virtuous cycle of competition and self regulation capable of delivering positive productivity shocks¹⁰. The recent international experience of financial globalisation proves that this idea is at minimum an overstatement and that there are important caveats for emerging (and advanced) economies to be able to reap those benefits.

The specific case of Japan in the 1980s is very analogous and provides an acute challenge to the idea that the simultaneous combination of financial sector and financial account accelerated openness can be disastrous. The US administration then, concerned by the exchange rate misalignment of the yen, pushed the Japanese authorities into a number of reforms affecting the openness of the balance of payments and the reforms of the financial sector which eventually led to the 'dollar-yen agreement' in 1984. As Frankel (1984) showed, this was intended to open the

9 Subramaniam (1998) has referred to such advocacy in which both US and business interests converge as the 'Wall Street-Treasury complex'.

10 Treasury Secretary Paulson declared during the opening speech of the US-China dialogue: "*I am a very strong advocate of [China] opening up its capital markets to foreign investment. I believe that when they open up and let foreign competition in, the biggest beneficiary will be China, and it will mean more jobs in the financial services industry for the Chinese people. It will mean better training. It will mean more competitive capital markets that will have all sorts of other benefits for the economy. I can't think of a single example anywhere of a situation where a country has a strong capital market system and they haven't opened themselves up to competition.*"

Japanese capital markets and internationalise the yen with the objective of fostering FX appreciation and trade rebalancing. This policy didn't bring the desired results over the expected time window and led the US to press for coordinated FX interventions in order to appreciate the yen through the Plaza Accord in 1985 and then through the Louvre Accord in 1987. There is a vivid debate about the extent to which this policy actually is responsible for the large monetary expansion that fuelled an asset bubble, the collapse of which in 1990 resulted in more than a decade of economic stagnation. Some argue that monetary expansion actually started earlier and that the Bank of Japan regardless of its yen policy was running inadequate monetary policy. Others, such as Shirakawa (2011), seem to argue that the Bank of Japan's monetary stance was in large part the result of its assigned role in the one of the first (failed) episodes of international macro economic coordination.

The narrative about Japan in the 1980s is strikingly similar to the one about China today. And China has studied very well the Japanese experience and does not want to repeat some of its mistakes. Hence, it is very likely that China will continue to be slow and reluctant to pursue a number of the reforms that were successfully pushed through by Japan. Despite intense US lobbying, China's financial sector hasn't moved very much in the direction indicated. The current financial system remains centred on large state-owned or controlled banks. The Chinese financial system (McKinsey Global Institute, 2004) can be characterised by:

- Bank loan dominance versus equity and debt markets (more than 80 percent of total assets)
- Depth of financial system (as measured by credit/GDP) is relatively high given China's level of economic development (high level of credit/GDP per capita)
- Overwhelming dominance of public-sector banks
- High concentration of lending to State-Owned Enterprises
- Low participation of formal private sector financial intermediaries

The structure of the financial sector excludes a number of agents from access to credit. In response to this, informal players play a large part in financing Chinese corporates outside of the formal banking sector. Ayyagari, Demircuc-Kunt and Maksimovic (2007) have showed that in many Chinese firms, informal credit is a key source of financial intermediation, either because it allows better management of the information asymmetry, or simply because it caters to a market segment (smaller companies) that is poorly served by the large state-owned banks. But this large, informal and therefore unregulated sector is also a source of potentially significant risks that can eventually feed back to the formal banking sector.

But although the fragility of the banking system and the financial system as a whole is a well-known Achilles' heel, it has improved a lot since the mid 1990s. China's financial policy, or lack thereof, remains a cumbersome liability that will need to be managed over time. This may involve recapitalisation, restructuring and possible increased participation of private actors in financial intermediation, but the outlook for enhanced foreign participation is unclear and the need for it remains questionable. Indeed, foreign experience and best practices can come through gradual openness but they can also more simply come through enhanced domestic reforms, China's acquisition of financial institutions in the US or in Europe, or via the hiring of talented financial services professionals that are in surplus in the advanced world.

As discussed extensively in Mishkin (2007), one essential element of a successful transition to a more open financial account and one precondition to being able to reap the benefits of financial globalisation lies very much with the ability of the financial system to intermediate new inflows and manage potential outflows. In the case of China, the opening of the capital account should start with a relaxation of outflows, in particular for corporates. But this could also lead households to diversify their portfolios and seek safety and diversification by exporting their deposits abroad, which could be disruptive for the profitability of Chinese banks, and for the stability of the financial system. As Lardy and Douglas (2012) explain: "*Chinese banks are highly dependent on their business with*

households for two reasons. First, the net interest spreads on this business are much higher than the net spreads that banks achieve on their other activities. And second, households are the dominant source of bank funding. If China liberalized the capital account under these conditions, the banks might be compelled to raise deposit rates to prevent large outflows of deposits, particularly from the household sector. This could have a highly adverse effect on bank earnings. According to our calculations, an increase in the average deposit rate of only 110 basis points in 2009 would have eliminated all bank profits.”

But Chinese policymakers seem to have internalised this risk and the weakness of their banking system and the resulting challenge. In fact, one could even argue that the path of internationalisation chosen (ie the reliance on an offshore centre such as Hong Kong) acknowledges those risks and recognises the weaknesses and inherent unsuitability of the domestic banking system to assume this responsibility at this stage.

The creation of the offshore market presents two important benefits in this respect. It allows the maintaining of a large degree of control over financial transactions and insulates, at least partially, the weaker domestic financial system. But it is also a defensive strategy, a first line of defence to guard mainland China against the financial instability that could erupt at the intersection of a more porous financial account with such frail domestic financial institutions. In the meantime, Hong Kong and the other offshore centres that could be promoted (for example, Singapore or even London) should be seen as both a way of taming and managing inflows in a context of quasi-closed financial account and as a shadow financial system better managed and regulated than the one currently in place in mainland China.

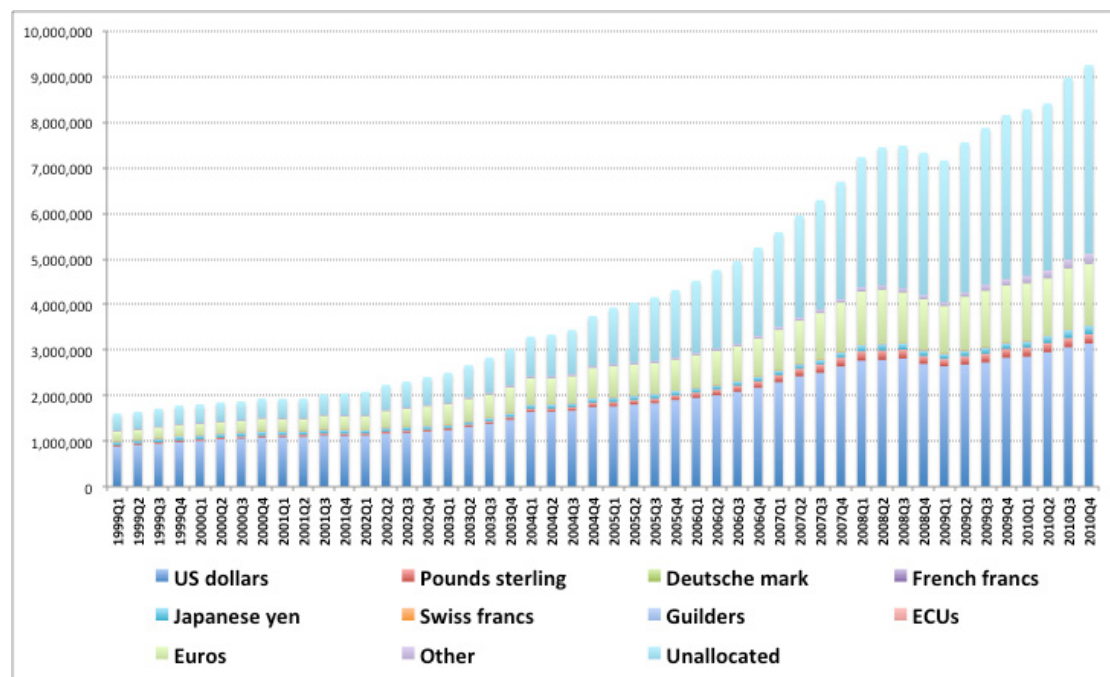
All in all, the gradual relaxation of the financial account restrictions and the avoidance strategy developed to leverage the offshore RMB market and its underlying financial infrastructure appear to be credible foundations on which the RMB can rely. But there are more challenges ahead, in particular, even in a context in which it would expand through organic and market forces, it is unclear if the RMB can move from being a widely international currency used for commercial and financial transaction to becoming a *bona fide* reserve currency that central banks chose as a reliable store of value.

3.2 The place of the RMB in international reserves

The RMB can extend its role quite substantially in a number of areas. But there are supply and demand constraints in the short term. First, the scope to supply a large amount of high rated liquid securities without abusing financial engineering techniques and rating agencies' complacency appears limited. At the moment, only 2 percent of the already low stock of RMB offshore assets is AAA rated and there is no obvious prospect for this to change. We could imagine that global central banks might accept to tweak their credit standards in order to deliberately increase their diversification and exposure to China but they would certainly require access to the onshore market in order to reduce their convertibility risk, which is undeniably higher than for the offshore market. The recent bilateral agreement with China goes in this direction.

But there are other possible ways in which more RMB assets can be lodged in international reserves, thereby changing the role of the SDR in the international monetary system. A reformed SDR could be such an avenue. There seems to be some appetite on the part of global central banks to move in that direction as demand for reserves grows (see Figure 9), and demand for diversification away from the USD increases even faster (see Figure 10).

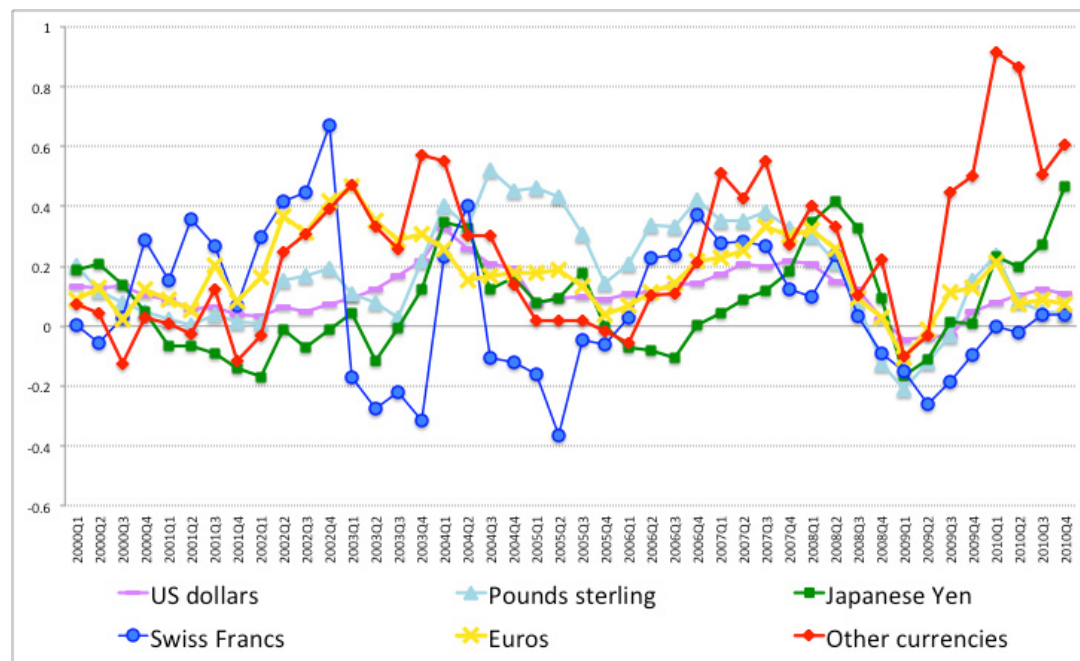
Figure 9: Global reserve assets (USD thousands)



Source: IMF (COFER).

This process is likely to gain traction but to remain relatively slow in comparison to the diversification interests and demands of the official sector. Indeed, the recent data on diversification of central bank reserves suggests a very strong appetite for 'other currencies' which are in fact mostly concentrated today on the Canadian and Australian dollars.

Figure 10 : Growth in reserves by currency type (y/y, %)



Source: IMF (COFER).

One argument often raised in opposition to the rise of the RMB as a reserve asset is the impossibility for a net creditor country to issue a sufficiently large amount of high rated assets to serve as a unit of

account for the world. The notion that there is a critical mass needed is very widespread and is probably very true. In addition, the savings glut hypothesis (see an augmented version of this argument in Bernanke (2011)) and the idea of global shortage of safe assets (Caballero, 2010) suggest that this is not only an important feature of an international currency but also an essential stabilising feature of the international monetary system itself.

China in the short to medium term will probably be incapable of supplanting or challenging the dollar or the euro in terms of issuance of high-rated securities. But being a net creditor is not a fundamental impediment to development as an international currency. The experience of the US, which ascertained its role as the leading currency while it generated large current account surpluses, is a prime example.

iv. SDR inclusion and convertibility

The SDR could be an ideal vehicle to promote this transition. There have been a number of discussions on the matter effectively started by Governor Zhou (2009) when he advocated a global financial architecture based on the SDR as opposed to a unipolar one based on the dollar.

Yet, despite the debate that Zhou's speech sparked, it is not evident that Chinese authorities consider the question of the inclusion of the RMB in the SDR as a pressing priority otherwise they could have lobbied more intensely for the inclusion of the RMB in the SDR during the last SDR reweighting in 2010. It seems to rather regard this as an important development in the medium term (probably 2015 for the next SDR reweighting). But this debate is probably unduly blurred by two distinct developments: (i) on one hand the inclusion of the RMB in the SDR in its current format (ie a passive reserve asset), (ii) on the other hand the potential enhanced role that the SDR could play in a reformed international monetary system through a change in its use (new role in trade settlement, issuance of SDR denominated asset, unit of account in commodity markets). Although clearly related, these two questions should be approached separately.

One frequent objection against the inclusion of the RMB in the SDR basket is the argument that a currency that is not fully convertible is not technically able to take part in the SDR. This argument, although relatively popular, is inaccurate. The IMF does not state anything with regard to full convertibility for currencies taking part in the SDR and there have been unconvertible currencies in the SDR basket in the past. Instead, the IMF requires currencies to be '*freely usable*' which is in fact a very *ad hoc* judgement made by the Executive Board. As it stands, there would only be four currencies considered 'freely usable' (ie the currencies taking part in the SDR). In fact, this qualification is very subjective and could change quite rapidly as a Board review of the SDR valuation noted in 2010. In addition, as Matteos y Lago *et al* (2011) highlighted: "*since the concept of freely usable currency was established in 1982, the SDR basket included a number of currencies that not only were not on the list of freely usable currencies, but also had restrictions on both current and capital account transactions*". One could even argue that including those currencies that are not fully convertible would actually increase the demand for SDR as it would offer a way of accessing currencies that are not freely accessible. Hence, this cannot be credibly cited as an obstacle to the inclusion of the RMB in the SDR basket.

Table 7: Historical composition of the SDR basket

	1969-1974	1974 - 1978	1978 - 1980	1981 - 1985	1986 - 1990	1991 - 1995	1996 - 1998	1999 - 2000	2001 - 2005	2006 - 2010	2011-
Gold (grams)	0.889										
U.S. dollars		0.330	0.335	0.42	0.42	0.4	0.39	0.39	0.44	0.44	0.419
Euros								0.32	0.31	0.32	0.374
Deutsche marks		0.125	0.125	0.19	0.19	0.21	0.21				
Japanese yen		0.075	0.075	0.13	0.15	0.17	0.18	0.18	0.14	0.11	0.094
French francs		0.075	0.075	0.13	0.12	0.11	0.11				
Pounds sterling		0.090	0.075	0.13	0.12	0.11	0.11	0.11	0.11	0.11	0.113
Canadian dollars		0.060	0.050								
Italian lire		0.060	0.050								
Netherlands guilders		0.045	0.050								
Belgian francs		0.035	0.040								
Swedish krona		0.025	0.020								
Australian dollars		0.015	0.015								
Danish krone		0.015									
Norwegian krone		0.015	0.015								
Spanish pesetas		0.015	0.015								
Austrian shillings		0.010	0.015								
South African rand		0.010									
Saudi Arabian riyals		0.030									
Iranian rials		0.020									

Source: IMF. Note: Currencies' weight in the SDR basket

As a result, we argue that there is no strong basis for arguing that currencies should be fully convertible before entering the SDR basket. The IMF Board itself appears ready to consider the addition of non-fully convertible currencies and the RMB in particular. As Mateos y Lago *et al* (2011) noted, such an inclusion could be complemented by additional convertibility requirements between China and the other countries in the basket in order to ensure a smooth cross-delivery of currencies and effective market making operations in the SDR. However, assuming this obstacle was lifted by making the 'freely usable' criteria more transparent or by simply relaxing it, we would still have to contend with the fact that the RMB remains largely pegged to the USD and this would therefore give a disproportionate place to the USD in the new SDR basket. But although this is a major obstacle, it is also something that the IMF has dealt with in the past. Indeed, currencies such as the Saudi riyal or the Iranian rials were once part of the SDR basket and were largely pegged to the dollar. These points will need to be clarified before the next SDR valuation review in 2015, but could lead to the inclusion of the RMB in the basket at that point.

What appears more likely however is that the RMB slowly takes on a bigger role on the world stage, possibly through its inclusion in the SDR basket. If this were to happen, it would be an important breakthrough with potentially deep ramifications, in particular:

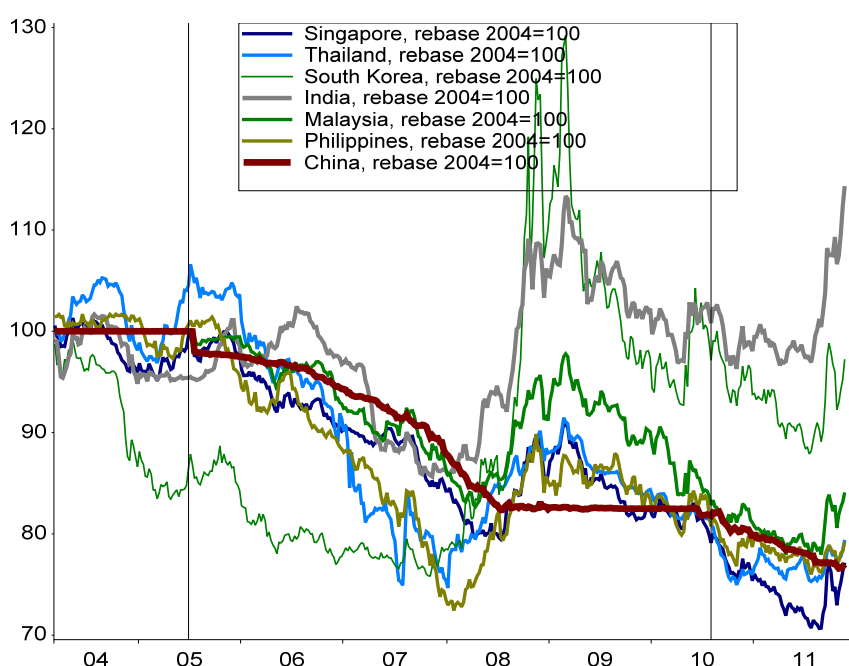
- It would open an important crack in China's financial account by forcing China to deliver RMB to any central bank in the world that wishes to exchange its SDR. Indeed, countries taking part in the basket have fiduciary duties towards other central banks and agree to be market makers in the SDR basket.
- In addition, should this be insufficient, the IMF still has the power to force countries taking part in the basket to sell their hard currency reserves against SDR through the designation mechanism. This could be an avenue to lead China to reduce its reserves holdings by

organising a sell of those hard currency reserves against SDR. This would in turn probably help China to reduce its exposure to the USD and smoothly diversity its currency reserves.

v. Regional reach and internationalisation prospect

At first sight, the RMB has a limited role as a regional anchor. Empirical evidence shows that this is generally an important feature of any international currency and somewhat of a necessary step. Since the demise of the yen, there is no clear regional currency in Asia. However, the RMB seems to gradually serve as a tacit anchor. Indeed, recent discussions at the Asian Development Bank about a joint appreciation for all Asian currencies suggest that there is *de facto* a notion of interdependence and mutual anchor. Episodes during which the Chinese authorities let the RMB appreciate against the dollar are good moments to check the anchoring role that the RMB plays in Asia. These episodes tend to be accompanied by proportional appreciation of the currencies in the Asian block. Hence the formal anchor role of the RMB in the region is not clear but it appears conceivable that in the event that the RMB were to float or be managed less firmly against the USD, the rest of Asia would follow, thereby establishing the RMB as a regional anchor (see Park and Song, 2010). Indeed, even without a regional policy, it is clear that China's central role in the regional supply chain acts as a centre of gravity and the competitive place of each country in the regional web of exchange is somewhat conditioned by its relative exchange rate vis-à-vis the RMB (see Figure 11).

Figure 11: RMB vs. currencies of the Asia bloc, an anchor?



Source: Reuters.

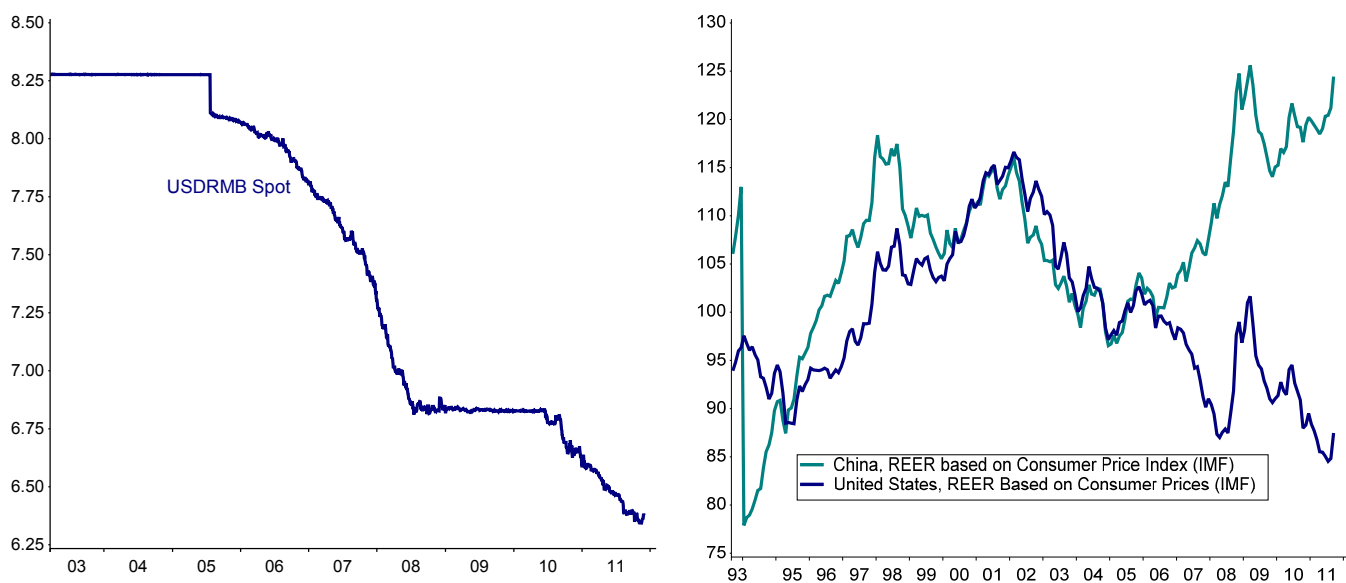
However, the question of regionalism will certainly need to be spelled out explicitly rather than indirectly. There is limited evidence so far that China would actively pursue a strategy of regional integration as a stepping stone to establish an international stature for its currency. On the contrary, outside of the Chiang Mai Multilateralisation initiative, most if not all the important financial and monetary steps taken by China seem to have taken place in the context of purely bilateral agreements. In this sense, the European model or even the sterling model, which was used across the Commonwealth before achieving global reach, doesn't seem to apply, and China gives the impression that it wants to leapfrog the regional step in its internationalisation process.

3.3 Openness and currency flexibility: the horse and the cart

We hope to have laid out clearly the extent to which the RMB could internationalise itself without substantial financial account openness. The remaining question is if all of this can happen with limited currency flexibility. Contrary to established literature [Prasad, Rumbaugh and Wang, 2005], we take the view that the flexibility of the exchange rate is in no way a first order prerequisite for the internationalisation of the RMB. A considerable part of the literature on China revolves around the question of the nominal exchange rate, which has hijacked the debate about the internationalisation of the RMB.

The ongoing rebalancing achieved through real developments suggests that even without a nominal exchange rate adjustment, which would arguably accelerate or facilitate the rebalancing process, there is in fact, quite a bit of rebalancing taking place already. Hence, setting as a starting point that currency flexibility is an essential if not first order condition to the expansion of the use of RMB internationally seems to be ignoring ongoing real developments and be grounded in a political assessment of the situation rather than in an economic one. Nominal appreciation has arguably been very slow although it has resumed since the middle of 2010, but real appreciation is happening rather fast (see Figure 12, right chart) and certainly even faster if we consider unit labour costs instead of consumer prices.

Figure 12 : Nominal and real effective appreciation of the RMB



Source: Reuters, IMF

Hence, although we disagree with the sequencing proposed by the majority of the literature which argues that the horse (currency flexibility) needs to stand before the cart (financial account openness), we do share the view that currency flexibility is both desirable once a degree of financial account openness has been achieved and in fact that it is almost inevitable. Specific Chinese features (RMB offshore/onshore) could possibly make this process last longer than in other cases. But ultimately, the more porous the financial account becomes, the more rapidly it will precipitate an increase in domestic money supply, shifts in relative prices forcing the monetary authority to either sterilise unrecorded inflows and/or let the currency rise to mitigate their effects and their size. The key for China is to keep a firm grip on the valves that allow the onshore and offshore markets to exchange liquidity. Pegging to the USD doesn't appear to be necessarily an unsurpassable obstacle, although it may certainly not be the path of least resistance or the solution that maximises global economic performance or even China's own economic output for that matter. This could well be a

suboptimal strategy both for the world and for China but one that remains largely possible nonetheless.

In the long term (beyond 10 to 15 years from now) assuming the RMB has reached a more established global presence, the question will be framed differently. In particular, by then the benefit of flexibility for China will certainly be clearer, its economy will have partially rebalanced, undermining the current domestic vested interests that drive the need for the subsidy of exporting industries, and stability might be less of an obsessive priority. Over that period of time, the Chinese authorities are likely to gradually shift from a monolithic peg to the USD to a form of effective exchange rate, which in its simplest form could be a peg against a basket or a broader effective exchange rate. All in all if we dispute strongly the need for currency flexibility as prerequisite to the process of internationalisation, in fact, we conclude that it could well be an outcome of the RMB's globalisation.

4. Conclusion

Over the last two years, China has made a distinct push for the internationalisation of its currency. Conventional wisdom would suggest that any ambitious internationalisation ambition would quickly stumble because of the relative closed nature of the financial account, the inflexibility of the exchange rate and the lack of openness of the domestic financial system. We argue on the contrary that those challenges can be overcome or circumvented.

It is unclear if the current internationalisation process is part of an elaborate and cohesive strategy or if it will unfold organically. The policy environment in China is far less homogeneous and predictable than it seems and there are certainly still important divergences of opinion between the PBoC, the State Council and the Party's leadership on the matter. In addition, the current political transition ahead of the 2012 leadership change is probably unsuited to far-reaching policy initiatives on this matter.

However, even in the absence of a strong policy impulse, the RMB seems to have already been put a path such that it could internationalise organically to a far greater extent than is generally envisaged. We argue that with only minor modifications to the current policy framework, China would be able to raise the status of the RMB over and above that of the yen or even possibly the British pound or Swiss franc within the next 7 to 10 years.

However, China will face deeper-rooted challenges and important policy trade-offs on the road to the internationalisation of its currency. Those sequential challenges and the indicative timeline to resolve them are the following:

2 years	China will need to decide how comfortable it is with accommodating more (although controlled) participation in its domestic market, especially of central banks.
4 years	China will have to decide on the monetary role it intends to play regionally as a stepping-stone towards a more important international role. Establishing the RMB as a regional anchor with the responsibilities that it entails (such as lender of last resort and beacon of economic stability) will be necessary. One could see the multilateralisation of the Chiang Mai initiative and the central role that China intends to play in it as an important but insufficient step in this direction.
6 years	China will have to engage in a deep and wide reform of its financial system that may not necessarily involve enhanced foreign participation but which will require profound redesign of the current financial sector. This will have to include an end to financial repression and fiscal dominance, a deep regulatory overhaul, enhanced private sector involvement in the distribution and allocation of credit and modernisation and development of market infrastructures, which are currently substandard. The plan to establish Shanghai as a leading financial centre by 2020 potentially building on the lessons learned from the Hong Kong and Singapore experiences is important in this regard, and will help to turn Chinese banks into global banks, which ought to be an important step in the internationalisation of the RMB.
10 years	If one subscribes to the savings glut hypothesis (Bernanke, 2005; Caballero, 2009), for the sake of global financial stability and balanced growth, an issuer of an important reserve currency needs to issue a large amount of high quality assets (the precondition for being a store of value). In this context, China will need to either succeed in its ongoing internal rebalancing (pension reform, education, healthcare) in order to decrease its savings ratio such that its net external position gradually provides more space for substantial issuance of high graded securities. Or it will need to allow for capital account openness such that corporates and households invest more overseas, creating large gross debt despite being in a net creditor position.
15 years	China will need to establish an internationally trusted rule of law and a legal system that ensures predictability and enforceability of all legal claims. Some countries (for

example the United Arab Emirates) have decided to maintain their financial/business law separated from their standard legal systems in order to avoid the liberal principles of a free and fair trial that is necessary in business law from becoming a feature of the domestic national law. China could pursue this course eventually.

20 years China will have to embrace the idea of a bigger role and commensurate responsibilities in global financial and monetary affairs, which will have to translate into a policy of international engagement either with the intention of establishing the RMB as the new unipolar anchor or with a conciliatory approach through a multipolar or multilateral system. This will mean a new form of international financial diplomacy with a more active leadership role in international financial institutions and in global policy forums (for example the G20, WTO and IMF)

If all these policy choices are taken in a way that is consistent with turning the RMB into a key international currency, it could become a very serious challenger to the euro in 15 to 20 years in the context of a multipolar international monetary system, or it could overtake both the euro and the dollar as the hegemon within 25 to 30 years. However, each of those challenges represents an important political trade-off, which Chinese authorities may not be able or willing to make at the right moment. If that were the case, the RMB would fail to raise itself to the standards of the dollar or the euro and realise its full potential, thereby impeding the scope for a truly multipolar international monetary system. Nevertheless we continue to believe that the RMB will nonetheless establish itself as a leading second tier international currency with a growing *de facto* regional importance, but not quite the regional gravity attached to the euro because it would still lack the inclusiveness and political aspirations that the European Union was designed to have.

References

- Abdelal, Rawi, "Freedom and Its Risks: The IMF and the Capital Account," Working Paper Series No. 05-056, 2005
- Alesina, A, Grilli, V, Milesi-Ferretti, GM, The political Economy of Capital Controls, NBER Working Paper N 4353, May 1993
- Aizenman, J. (2006), "On the hidden links between financial and trade opening", NBER Working Paper 9906, August 2003
- Ayyagari, M, Demirgüç-Kunt, A, Maksimovic, V, *Formal versus Informal Finance: Evidence from China*, presentation at the World Bank *Access to Finance Conference*, March 2007
- Bergsten, F, The dollar and the deficits, *Foreign Affairs* 88, November/December 2009
- Bernanke, B, Speech at the ECB annual Central Banking Conference, November 2010
http://www.ecb.int/events/conferences/html/cbc6/Global_Rebalancing.pdf
- Bernanke, B., "The Global Saving Glut and the U.S. Current Account," remarks at the Sandridge Lecture, Virginia Association of Economics, Richmond, VA, 10 March, 2005.
- Caballero, R. "The 'Other' Imbalance and the Financial Crisis," Paolo Baffi Lecture, Bank of Italy, Rome, December 2009.
- Bhagwati, J, The capital myth: The difference between trade in widgets and dollars
Foreign Affairs, May/Jun 1998
- Borst, N, Capital Account Liberalization and the Corporate Bond Market, Peterson institute for International Economics, February 2012
<http://www.piie.com/blogs/china/?p=1093>
- Brune, N and Guisinger, A, *Myth or reality? The diffusion of financial liberalisation in developing countries*, Unpublished PhD Dissertation, November 2006
- Cheung, Y-W, M D Chinn and E Fujii (2009a). "The illusion of precision and the role of the RMB in regional integration," in Koichi Hamada, Beate Reszat, and Ulrich Volz (eds), *Towards Monetary And Financial Integration In East Asia* (Cheltenham: Edward Elgar), Chapter 13, pp 325-356.
- Cohen, Benjamin, Currency Choice in International Bond Issuance, *BIS Quarterly Review*, June 2005
- Dobson, W and P Masson (2009), "Will the RMB become a world currency?" *China Economic Review* 20, pp 124-135.
- Dobson, W, Kashyap, A, *The contradiction in China's Gradualist Banking Reforms*, Brookings Paper on Economic Activity, 2006
- Dooley, M. P. and C. Walsh (2000), "Capital Controls and Crises: Theory and Experience", paper presented at AEA Meetings, 8 January 2000.
- Eichengreen, B, *The Renminbi as an International Currency*, January 2010

Eichengreen, B and Frankel, J, 1996, "The SDR, Reserve Currencies, and the Future of International monetary System" in *The Future of the SDR in Light of Changes in the International Financial System*, edited by Michael Mussa, James Boughton and Peter Isard, International monetary Fund, 1996.

Eichengreen, B & Flandreau, M, 2009. "[The rise and fall of the dollar \[or when did the dollar replace sterling as the leading reserve currency?\]](#)," *European Review of Economic History*, Cambridge University Press, vol. 13(03), pages 377-411, December

Eichengreen, B, *Exorbitant Privilege*, Oxford University Press, 2011

Fischer, S, Capital Account Liberalisation and the role of the IMF, Speech pronounced at the Conference on Development of Securities Markets in Emerging Markets, Inter American Development Bank, Washington DC, October 1997

<http://www.piie.com/fischer/pdf/Fischer141.pdf>

Gao, H and Yu, Y (2009). "Internationalisation of the RMB," paper presented to the BIS Bank of Korea conference, "Currency internationalisation: Lessons from the international Financial crisis and prospects for the future in Asia and the Pacific," 19-20 March 2009, Seoul.

Greenspan, A, Remarks by Chairman Alan Greenspan before the World Affairs Council, Dallas, Texas, December 2003

<http://www.federalreserve.gov/boarddocs/speeches/2003/20031211/default.htm>

Gourinchas, P-O. and Jeanne, O, "The Elusive Gains from International Financial Integration", *Review of Economic Studies*, vol. 73(3), 2006

Grilli, V and Milesi Ferretti, G, Economic Effects and Structural Determinants of Capital Controls, IMF Working Paper, WP/95/31, March 1995

Deng, X, Hafsi, T, Tian Z, *Internationalization of the largest 500 Chinese Firms: An explanatory Research*, Cahier de Recherche, HEC Montreal, January 2007

Jianzhong, G, Dagong Global Credit Rating, "The Strategic Choice of Chinese Credit Rating System" <http://www.dagongcredit.com/dagongweb/english/rs/index.php>

Jonhston, B, Tamirisa, N, Why do countries use capital controls?, IMF Working Paper, 1998 <http://www.imf.org/external/pubs/ft/wp/wp98181.pdf>

Kose, M, Prasad, E, Rogoff, K, Wei, S-J, Financial Globalisation: A reappraisal, IMF Staff papers 56, 2009

Li, David Daokui and Linlin Liu, 2007, "RMB Internationalization: An Empirical Analysis," Presentation at Hong Kong Institute of Monetary Research Conference: *Currency Internationalization: International Experiences and Implications for the RMB*, 15-16 October, 2007, Hong Kong.

Lane, P, Milesi-Ferretti, GM, *The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities*, IMF Working Paper WP06/09, 2009 <http://www.imf.org/external/pubs/ft/wp/2006/wp0669.pdf>

Lane, P R and J C Shambaugh [Forthcoming]. "Financial exchange rates and international Currency exposures," *American Economic Review*.

Mateos y Lago, I, Enhancing International Monetary Stability—A Role for the SDR?, January 2011
The paper was prepared by a team led by I. Mateos y Lago and comprising S. Maziad, A. Piris, and I. Asmundson [all SPR], under the guidance of Ranjit Teja.

<http://www.imf.org/external/np/pp/eng/2011/010711.pdf>

Mody, A., Murshid, A. P. "Growing up with capital flows," *Journal of International Economics*, 2005.

Miniane, J, A new set of measures on capital account restrictions, IMF Staff Papers Vol 51 No 2, 2004

Ostry, J, Ghosh, A, Habermeier, K, Chamon, M, Qureshi, S and Reinhardt, D, Capital Inflows: What tools to use?, IMF Staff Position Note SDN 1106, April 2011

<http://www.imf.org/external/pubs/ft/sdn/2011/sdn1106.pdf>

Ostry, J, Ghosh, A, Habermeier, K, Chamon, M, Qureshi, S and Reinhardt, D, Capital Inflows: The Role of Controls, IMF Staff Position Note SDN 1004, February 2010

<http://www.imf.org/external/pubs/ft/spn/2010/spn1004.pdf>

People's Bank of China and International Monetary Fund (2009). *Note purchase agreement between the People's Bank of China and the International Monetary Fund*.

Prasad, Eswar, Rajan, Raghuram G, and Arvind Subramanian, "Foreign Capital and Economic Growth," *Brookings Papers on Economic Activity*, 2007, 1, 153-209.

Quinn, Dennis, "The Correlates of Change in International Financial Regulation," *American Political Science Review*, 1997

Quinn, Dennis, "Capital Account Liberalization and Financial Globalization, 1890 – 1999: A Synoptic View," *International Journal of Finance and Economics*, Vol. 8, No. 3, p. 189-204. 2003

Yu, Y (2008). "Panda bonds could help China avoid the risks of US Treasury bonds," *East Asia Forum*, <http://www.eastasiaforum.org/2008/12/19/panda-bonds-could-help-china-avoid-the-risks-of-us-treasury-bonds/>.

Hai, Wen, 2007, "Pros and Cons of International Use of RMB for China," Presentation at Hong Kong Institute of Monetary Research Conference: Currency Internationalization: International Experiences and Implications for the RMB, 15-16 October, 2007, Hong Kong.

Hausmann, Ricardo, Dani Rodrik, Andres Velasco, "Growth Diagnostics," in D. Rodrik, *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*, Princeton University Press, 2007

Chen, Hongyi ; Peng, Wensheng, Shu, Chang, (2009), *The Potential of the RMB as an International Currency*, Hong Kong Institute for Monetary Research, Hong Kong Monetary Authority, February 2009

Genberg, Hans, (2009) *Currency Internationalisation: Analytical and Policy Issues*, HKIMR Working Paper No.31/2009, October 2009

Gourinchas, Pierre Olivier, and Olivier Jeanne, "Capital Flows to Developing Countries: The Allocation Puzzle," November, 2007

Kaway, M and Takagi, S, *The RMB as a key international currency?: Lessons from the Japanese*

experience, Notes prepared for the Asia Europe Economic Forum, 10-11 January 2011,

Kaway, M, *From Chiang Mai Initiative to Asian Monetary Fund*, ADBI Institute, Paper prepared for the “Future of the Global Reserve System” Conference held in Tokyo on March 2010

Kose, Prasad and Taylor, Threshold in the process of international financial integration, Brookings Paper On Economic Activity, 2009
http://www.brookings.edu/ff/media/Files/rc/papers/2009/05_international_finance_prasad/05_international_finance_prasad.pdf

Lardy, N and Douglass, P, *Capital Account Liberalization and the Role of the Renminbi*, Peterson Institute Working Paper 11-6, February 2011

Li, Jing, (2004), *Regionalization of the RMB and China's Capital Account Liberalization*, China & World Economy / 86-100, Vol. 12, No. 2, 2004

Li, Jing (2008), *RMB as a Regional International Currency: Cost benefit Analysis and Roadmap*, (to be published)

Ma, G and McCauley, R, Do China's capital controls still bind? Implications for monetary autonomy and capital liberalisation, BIS Working Papers No 233, August 2007
<http://www.bis.org/publ/work233.pdf>

McKinsey Global Institute, Putting China's Capital to work: The value of financial system reform, May 2006
http://www.mckinsey.com/mgi/reports/pdfs/china_capital/MGI_chinacapital_fullreport.pdf

Mishkin, F, *The Next Great Globalization: How Disadvantaged Nations can Harness their Financial Systems to Get Rich*, Princeton, NJ, Princeton University Press, 2006

Ostry, J, Ghosh, A, Habermeier, K, Chamon, M, Qureshi, M and Reinhardt, D, “Capital Inflows: The Role of Controls”, IMF Staff Position Note, SPN/10/04, February 19, 2010

Park, Y and Song, C, “RMB Internationalization: Prospects and Implications for Economic Integration in East Asia”, *Asian Economic Papers*, October 2010

Prasad, E, Rumbaugh, T and Wang, Q, *Putting the Cart Before the Horse? Capital Account Liberalisation and Exchange Rate Flexibility in China*, IMF Policy Discussion Paper, PDP05/1, 2005
<http://www.imf.org/external/pubs/ft/pdp/2005/pdp01.pdf>

Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi, “Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development,” *Journal of Economic Growth*, 9{2}, June 2004

Rosen, Daniel and Hanemann, Thilo, China's Changing Outbound Foreign Direct Investment Profile: Drivers and Policy Implications, Peterson Institute Policy Brief N09 14, June 2009
<http://www.iie.com/publications/pb/pb09-14.pdf>

Schindler, M, Measuring Financial Integration: A New Data Set, IMF Staff papers 56, April 2009

Subramaniam, A, Eclipse: Living in the shadow of China's economic dominance, Peterson Institute of international Economics, 2011

Tarapore Committee, Report of the Committee on Capital Account Convertibility, Reserve Bank of India, 1997

<http://www.rbi.org.in/scripts/PublicationReportDetails.aspx?FromDate=06/26/00&SECID=4&SUBSECID=27>

Tarapore Committee, Report of the Committee on Fuller Capital Account convertibility, Reserve Bank of India, 2006

<http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/72250.pdf>

Tavlas and Ozeki, *The internationalisation of currencies: An appraisal of the yen*, Occasional IMF paper 90, 1992

Truman, Ted, Comment on Will the Euro euro surpass the dollar as international reserve currency? By Menzie Chinn and Jeffrey Frankel in *G7 Current Account Imbalances: Sustainability and Adjustment*, Chicago University Press, 2007

US-China Business Council, China's Financial Sector Reform and Market Openings: An Overview and Assessment, August 2006

<http://www.uschina.org/public/documents/2006/08/financial-sector-reforms.pdf>

Xiaochuan, Z, *Reform of the International Monetary System*, People's Bank of China, March 2009

<http://www.pbc.gov.cn/publish/english/956/2009/20091229104425550619706/20091229104425550619706.html>

Wangl, JY, *What Drives China's Growing Role in Africa?*, IMF Working Paper, October 2007

Rodrik, D, Subramaniam, A, *Why did financial globalisation disappoint?*, Peterson Institute for International Economics, March 2008

<http://www.iie.com/publications/papers/subramanian0308.pdf>

Yongding, Yu, *The internationalisation of the RMB*, Remarks and Notes at the Asia Europe Economic Forum conference in Seoul, November 2011