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The Internationalization of the RMB[1]

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1 Introduction

RMB internationalization has been one of the hottest issues in China's policy debate since early 2010, though it was not on China's agenda until after the Global Financial Crisis struck in 2008-09.

The obtaining of prominence by RMB internationalization is due to the frustration regarding regional financial cooperation and the rapidly receding of the global interests in reforming the international monetary system, while China is under strong pressure to appreciate its currency and its foreign exchange reserves are under the threat of suffering increasing serious capital losses. The Chinese government decided that the internationalization of the RMB should be a feasible solution in responding to the policy challenges facing China. Unlike the reform of the international financial architecture and the promotion of regional financial cooperation, RMB internationalization is an issue for which China can set the agenda on its own and is less constrained by external conditions that are beyond its controls on pushing the agenda.

RMB internationalization is a daunting task, and the road to RMB internationalization will be bumpy. There are three questions regarding the process that should be addressed at this time. First, what does China wish to achieve by internationalizing the RMB? Secondly, how is China going to achieve the RMB internationalization? Thirdly, what are the problems China has encountered and will encounter in its pursuance of RMB internationalization?

This paper is organized as follows. The section is a brief survey of the literature on definition and characteristics of an international currency and the objectives China wishes to achieve in promoting RMB internationalization. The third section introduces the progress China has made in internationalization of the RMB. The fourth section discusses the fundamental problems facing China in its effort in achieving RMB internationalization. The final section is concluding remarks.

2. The objectives of RMB internationalization

2.1 Basic concepts on the internationalization of a currency

There is a vast body of literature on means of currency internationalization. According to Kenen (2009), an international currency is used and held beyond the borders of the issuing country. An international currency is not merely used for transactions with residents but is also used for transactions between residents and nonresidents. Theoretical discussions of currency internationalization usually begin with the functions of an international currency. Kenen (1983) presents some early thoughts on the roles of international currencies. Chinn and Frankel (2005) provide a list of international functions of an international currency that is summarized in Table 1.

Table 1: The Role of International Currency

Function of money	Governments	Private actors

Store of value	International reserves	Currency substitution (private dollarization) and investment (portfolio allocation)
Medium of exchange	Foreign exchange market intervention	Vehicle currency, Invoicing trade and financial transactions
Unit of account	Anchor for pegging local currency	Denominating trade and financial transactions

Source: Chinn and Frankel (2005).

An international currency should store value, provide a medium of exchange and be a unit of account for both residents and non-residents. The functions of an international currency can also be divided into two categories: private use functions and public use functions. When an international currency is used for private purposes, it is used for currency substitution, bridging currency trading in foreign exchange markets, and invoicing and denominating trade and financial transactions. When it is used for public purposes, it is used as a reserve currency, an intervention currency and an anchor currency.

The above-mentioned functions of an international currency will be used as a point of reference as we assess the progress of RMB internationalization and explore possible routes for internationalization. Of all the functions associated with an international currency, the most important one is the role of an international reserve currency. If it cannot play the role of a reserve currency, even if it has been used as a medium of exchange and a unit of account in international transactions, a currency can hardly be regarded as truly international. The Japanese yen's weak position as an international currency is a case in point.

The second criteria seems whether a currency is used as a vehicle currency.

There are some different understanding of the classification of the functions of an international reserve currency. For example, according to Ito (2011), the role of an interantinal currency can be dipicted as follows (Table 2).

Table 2. Dimensions of an international currency

	Private sector	**Official sector**
Unit of account	Trade invoicing Denomination of financial products	Being pegged by other countries Use in currency baskets of foreign central banks SDR composition currency Denomination of government bonds
Medium of Exchange (Settlement)	Trade and financial transactions	Currency circulation abroad; Government financial transactions (such as ODA); central bank swaps;

		currency intervention
Store of value	Cross-border deposits; cross-border securities	Foreign reserves (of other countries)

Source: Ito, based on the matrix first proposed by Kenen (2011).

It is worth noting that, in Ito's table, "trade invoicing" is put under the category of "Unite of account" rather than "medium of exchange". It seem that both roles of invoicing trade and denominating financial trasctions indeed should fall to the category of unite of account. Another important point is that distinction between the role of invoicing and that of settlment must be made clear. It is very common that while a currency is used as an invoicing currency in certain transaction, the settlement is made in another currency for the same transaction. To emphasize the difference between these two roles is very important. The SDR is a unit of account but not a settlement currency.

As an international currency, the role of unit of account is more fundamental than that of settlement currency. If exporters' most important consideration is to avoide exchange rate risk, they would prefer to use their own national currency to invoicing trade. As long as the exporters can convert settlment currency into their own national currency, what currency is used for trade settlment does not matter that much. In contrast, If trade is invoiced in a foreign currency, then the use of the national currency as settlement currency will not help exporters to avoide exchange rate risk. The same is true of importers, when the consideration for avoiding exchange rate risks are dominant, though importers and exporters are in opposite position in terms of benefiting or suffering as a result of changes in exchange rates.

If invoicing currency has been decided, is the choice of settlment currency irrelavent? The answer should be no. When a trade transaction has completed and before the settlment currency is used for another transaction, the currency will be held by the exporters for a short while. During this short period of time, the value of the settlement currency may change both in nominal and real terms. Hence, temporarily, before going to settle another transaction, the currency which serveds as settlement currency plays the role of store of value. Generally speaking, when exporters are in favor of one currency as invoicing currency, they should be in favor the same currency as settlement currency. Eventually, what currency will become the invoicing currency and sttlement currency depends on the bargaining powere of exporters and foreign importers. Only when foreign importers accept the currency favored by exporter due to the fact that importers can be fully compensated by the advantages risen from use the currency chosen by the exporters, can the currency be regarded as international.

The similar argument applies to the use of a currency as invoicing and settlment currency by importers. There are five cases.

Case 1. If a national currency is used as invoicing currency as well as settlment currency for imports, the national currency can be regarded as an international currency. Generally speaking, invoicing currency and settlement currency should be the same currency. However, it is not necessary the case.

Case 2. If a national currency is used as a invoing currency but the settlement currency is foreign currency for imports, the national currency cannot be regarded as international currency. The reason why he national currency is used as invoicing currency in this case perhapas is that foreign exporters are taking advantage of the fact that the national currency is expected to appreciate. In this case the national currency is hardly an international currency.

Case 3. While a foreign currency is used as invoicing currency, the local currency is used as settlment currency and accept directily by foreign exporters as settlment currency. In this case, the national currency has a certain nature of international currency.

Case 4. While trade transaction is invoiced by foreign currency, foreign exporters refulse to accept the importers' national currency as settlment currency, and importers must foeign currency by selling their national currency in foreign exchange markets in exchange for foreign currency (who will be the buyer the national currency?). The importers can buy foreign currency either in the onshore FX market or in the offshore FX market. As long as importers have to buy foreign currency to settle trade transaction, where the importers have to buy foreign exchanges makes not significant difference. Under both circumstanses, the National currency is not an international currency.

In summary, to make a currency an international currency in trade transaction, the currency must play the role of both invoicing and settlment currency. When residents have to buy foreign currency through the FX markets (onshore or offshoure) to settle imports while foreign currency is used as invoicing currency, the national currency in no sense can be treated as international currency.

Of course, it can be argued that in the early stage, whether a currency at least to certain extent is an international currency can be measured in its role in trade as invoicing currency and settlement currency and its role in financial transactions as denominating currency and settlement currency. General speaking, it is true, the internationalization of a currency may have started from playing the roles in international trade and finance as invoicing currency and settlement currency. But there are many complications, which need more detailed analysis.

2.2 The possible benefits of RMB internationalization for China

What are specific results the Chinese government wishes to achieve by pushing RMB internationalization? There are many potential benefits of RMB internationalization for China.

First, the internationalization of the RMB will reduce the exchange rate risk to which Chinese firms are exposed. The internationalization of the RMB means that more foreign trade and financial transactions will be invoiced and settled (paid) in RMB and hence that the exchange rate risk for Chinese firms will be reduced accordingly. The benefit for China's exporters is assumed especially significant.

Second, the internationalization of the RMB will improve the funding efficiency of Chinese financial institutions and hence increase their international competitiveness and hence boost the expansion of China's financial service sector. It is also helpful for China to build Shanghai as an international financial center.

Third, the internationalization of the RMB will increase cross-border trade. The rapid increase in the use of the RMB as a settlement currency (payment currency) has enhanced China's trade with its neighbors.

Fourth, the internationalization of the RMB means that the need for China to hold the US dollar as a medium of exchanges and a store of value will be reduced accordingly, which in turn means that China will be able to reduce seigniorage paid to the US.[2] Taking into consideration the high probability that in a longer run the dollar will devalue further and the US government will inflate away its debt burden by monetizing its budget deficit, to reduce the holding of the dollar denominated financial assets as store of value for China is very urgent task indeed.

3 The practice of RMB internationalization

[2] Seigniorage amounts to the return on the extra assets (real and financial) that a country is able to acquire because of the external holdings of its currency, less the interest paid on the assets in which the foreigners invest their holdings and less any extra administrative costs arising from the international role of its money. See David W. Pearce. "The Macmillan Dictionary of Modern Economics". Macmillan Press Limited, London. 1981. P389

3.1 The road map of RMB internationalization

Because RMB internationalization is a policy- driven process, there must be a roadmap. According to Chinese authorities' design, the road map for RMB internationalization include roughly the following steps

The starting point of RMB internationalization is to encourage the use of the RMB as a trade settlement currency. However, in the initial stage, due to unavailability of the RMBs for foreign importers, it is much easier to use the RMB for imports settlement by Chinese importers. Because the RMB is an appreciating currency, it should be not that difficult to persuade foreign exporters to accept the RMB to settle their trade with Chinese importers. However, it is worth mentioning that in China's road map for RMB internationalization, there are two questions need to be answered. First, why the Chinese government promotes the use of the RMB as settlement currency rather than use of the RMB as invoicing currency as some countries did when they were promoting their currencies' internationalization. Second, why Chinese importers will be willing to use an appreciating currency to pay for their imports, while they can use the dollar-a devaluating currency to pay.

It is assumed that, following the increase in using the RMB for settling imports, the stock of the RBM held by non-residents will increase, which mainly refers to the possibility that Hong Kong residents will hold more RMB deposits. In fact, before the formal launch of the internationalization of the RMB, the Chinese government and Hong Kong SAR had agreed to promote "RMB businesses" in Hong Kong on 25 February 2004, when 32 licensed Hong Kong banks started to accept RMB deposits and provide currency exchange and remittance services. In other words, a non-negligible amount of RMB deposits has already existed in Hong Kong. In fact, in 1993 Chinese tourists had been allowed to bring up to 6000 Yuan RMB across borders. In 2005 the limit was raised to 2000 Yuan. Now the aim is to increase the holding of RMB deposits by Hong Kong residents significantly.

In order to encourage Hong Kong residents and other nonresidents to hold more RMBs and RMB denominated assets, conditions and incentive have to be created to facilitate and encourage the recycling of the RMBs held by non-residents back to China's domestic financial markets in the form of RMB denominated assets, which, generally speaking, will be able to provide higher returns than just holding RMB deposits in Hong Kong. It should pointed out that those deposits that are deposits with Hong Kong banks, eventually are deposited with the Shenzheng branch of the PBOC and earned a low interest rate offered by the PBOC. In this sense, the so-called recycling is not a real issue. The real issue is how much the Chinese government is willing to pay for encouraging non-residents to hold RMB and RMB denominated assets.

It is hoped that, as a result of the accumulation of RMB stock by nonresidents (mainly in Hong Kong), somehow, incentive will increase for the non-residents to use the RMB to pay China's exports with the RMBs they obtained by selling goods and service to Mainland China, which means that the RMB is used not only for settling imports but also exports, and this is an important progress toward the objective of using the RMB rather the US dollar as medium of exchange. However, it is worth noting that even when a large proportion of China's imports is settled in the RMB, very small proportion of both China's imports and exports is invoiced in the RMB. The implication of the separation of RMB's function as invoicing currency and settlement currency in such way is a problem deserving more attention.

Furthermore, because, besides allowing holding RMB deposits with banks, residents in Hong Kong will be given opportunities to invest their RMB proceeds in RMB denominated assets, especially RMB denominated bonds to obtain higher returns. It is assumed that, by providing more profitable investment opportunities, Hong Kong residents will have even more incentives to hold RMBs as well as RMB denominated assets.

Finally, because more and more RMBs will flow out of China and either held by nonresidents in the form of cash or in the form of RMB denominated assets, such as RMB deposits, RMB bonds and, in a later stage, RMB FDI. The holding of the RMB denominated assets by Hong Kong residents means that the RMB is not only used in trade settlement as medium of exchanges but also play the function of unit of account in financial transactions as denominating currency and the function of store of value as investment currency.

In summary, it is expected by China's decision makers that the increase in

RMB import settlements combined with policies aimed at facilitating RMBs' recycling, the cross-border RMB flows will increase gradually and so will the stock of RMBs held by nonresidents. The continuation of such a virtual circle of RMB cross-border flows somehow will eventually make the RMB an international currency, especially an international reserve currency. But it is obvious that there are still many missing links in the internationalization of the RMB. At lease there are three questions that need to be answered. First, what will be firms' behaves, not only domestic but also foreign, in responding to policy measures adopted by the government aimed at promoting RMB internationalization. Second, policy is centered in Hong Kong. It is fine in the initial stage. However, how the internationalization of the RMB can proceed in the rest of world, especially with regard to its main trading partners and its major creditors and borrowers, is left unanswered. Third, many policy measures are formulated based on an environment of RMB appreciation. If the RMB appreciation expectations have disappeared, what will happen? All these should be answered in the designing and revising China's road map for RMB internationalization. Finally, we have no idea whatsoever, how the Chinese government will be able to promote the use of the RMB as denominating currency for financial transactions (Park 2010), and how the RMB can be used as vehicle currency and store of value.

3.2 The progress in RMB internationalization so far has made[3]

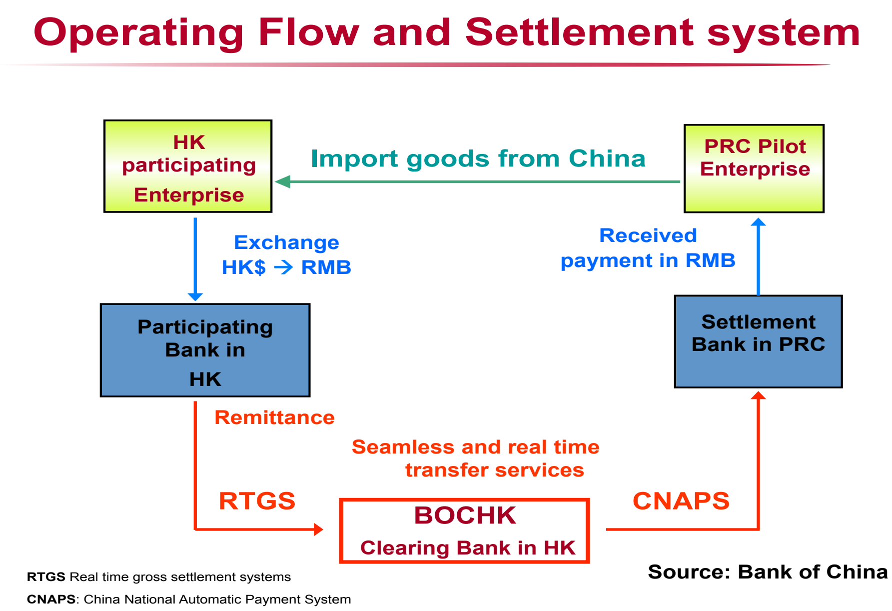
Great efforts have been made by the Chinese government to promote the

[3] This sub-section draws heavily on a previous paper and needs updating.

internationalization of the RMB since 2009.

First, China announced a pilot RMB Trade Settlement Scheme (PRTSS) to encourage the use of the RMB as settlement currency. According to PRTSS, eligible enterprises in Guangdong Province and Shanghai will be allowed to settle in RMB in trade with their corresponding enterprises in Hong Kong and other selected locations outside the Chinese mainland. Furthermore, eligible enterprises in Hong Kong will be allowed to open "corporate RMB accounts" with selected Hong Kong banks for settling trade with eligible enterprises on the Chinese mainland. They will be allowed to deposit RMB into their own corporate banking accounts. An extension of the PRTSS was announced on 22 July 2010 and the clearing agreement was amended accordingly. The expended scheme now covers 18 more provinces and cities. At the same time the location of the cross-border trade counterparts in no longer limited to Hong Kong, Macau and ASEAN. The scope of trade and type of trade by any enterprise in the 20 provinces and the cities covered by the Scheme is expanded significantly. The scope of trades eligible for settlement in RMB is expanded beyond physical goods to include services trade and other current account transactions. According the PRTSS, currency conversion between RMB and other currencies can be conducted for corporate customers, though Participating AIs can only square any resulting open position with the Clearing Bank – Bank of China (Hong Kong) Limited— if it arises from: cross-border trade settlement in RMB up to the amount of the relevant transactions; RMB trade finance loans where the customer does not have sufficient RMB for repayment; settling expenses relating to

RMB bond issuance in Hong Kong; or transactions allowed by Mainland authorities to be ultimately squared by the RMB Clearing Bank in the China Foreign Exchange Trading Centre. Cross-border transfers of RMB funds all sorts of current account transfers, including dividend payments from onshore projects are allowed. This means that companies are now able to use profits from their mainland operations to repay RMB raised from offshore investors. However, if a company wanted to transfer a large amount of RMB from Hong Kong to the mainland, say to finance a project, it would need approval from Chinese regulators. It is worth noting that to maintain control over the net cross-border flows of RMBs, the settlement system (figure 1)



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Has played a pivotal role. All cross-border RMB flows must be settled via Bank of China (Hong Kong). Quotas for the monthly settlements have been set. Initially, the quarterly amount of net buying from or selling to Bank of China was limited to 4 billion RMB. Recently it has been raised to

8 billion RMB. It is noted that the quotas are about net amount of settlement but not gross amount of settlement. This settlement system allows the Chinese monetary authorities to supervise and maintain a certain control of the cross-border flows of RMBs.

More than 800bn ($125bn) RMB has passed though Hong Kong in the first half of 2011. The most direct and immediate result of the increase in RMB settlement for imports is the dramatic increase in RMB deposits held by Hong Kong residents. As of July 2011, total amount of RMB deposits in Hong Kong was 899 billion Yuan, account for 9.5 per cent of the total $947bn of deposits in Hong Kong – up from less than 2 per cent just a year ago. It was widely expected that total amount of RMB deposits will reach 1 trillion Yuan in 2011.

Second, efforts are made to liberalize the use of RMB deposits in HK so as to give more incentive to Hong Kong residents to hold more RMB deposits. Previously, only companies involved in trade with the mainland could open RMB accounts in Hong Kong. Now financial institutions can open RMB accounts in Hong Kong (Supplementary Memorandum of Co-operation July 19 2010). Up till August 2010, around 11,000 corporate accounts had been opened in Hong Kong. HK financial institutions that participate in PRTSS virtually can do whatever they want with their RMB deposits in HK. Banks or other deposit-taking companies through either entering into a settlement agreement with the Clearing Bank or engaging correspondent banks in the Mainland, or both to become Authorized Institutions (AIs). Now

- Investors are allowed to use their RMB deposits to buy RMB-denominated financial products
- There is no restriction on the offer of RMB denominated investment products
- HK banks are allowed to grand whatever types of RMB loans to whatever types of corporations, but RMB loans to personal costumers are not allowed

In other words, virtually, AI Investors are allowed to use their RMB deposits for whatever purposes in Hong Kong. Hong Kong financial institutions have created various RMB denominate financial instruments to facilitate RMB deposit holders' demand for investing in financial instruments other than deposits so as to obtain higher returns. Furthermore, HK financial institutions that participate in PRTSS can invest their RMB proceeds in China's inter-bank bond market, though actual investment is not materialized yet (need to check the most recent development). There have been some channels for Hong Kong investors to tackle mainland financial market before the government started to push for RMB internationalization, for example, via qualified foreign financial institutions (QFFI), Hong Kong residents can invest in Mainland stock exchanges. RMB internationalization means that new vehicles will be created to enable Hong Kong residents to use their RMB proceeds to invest in RMB denominated assets in Mainland, rather than simply hold the RMB deposits with low returns.

<u>Third, efforts have been made to encourage Chinese residents to borrow from non-residents in RMBs.</u> On Sept 28, 2009, the ministry of finance of

PRC (MOF) sold 6 billion Yuan (879 million USD) worth of RMB-denominated bonds in Hong Kong. In fact Bank of China (BoC) and Export and Import Bank of China have already been issuing RMB-denominated bonds in Hong Kong for a couple of years. When a country can sell bonds denominated in the local currency, it will not fear of devaluation—its debts burden will not increase because of devaluation of local currency. This is the so-called "original sin" problem. In fact, in the 1990s, when the Japanese Yen appreciated, Chinese borrowers' RMB value of Yen debts increased dramatically, these borrowers ran into serious difficulties.

Fourth, efforts have been made to encouraging foreign borrowers to issue RMB denominated bonds so as to borrow from China, while Chinese entities issue RMB denominated bonds to borrow from non-residents in Hong Kong. The RMB denominated bonds sold by non-Chinese issuers in the PRC are called "Panda Bonds " The first two panda bonds were issued in October 2005 on the same day by the international Finance Corporation (IFC) and Asian Development Bank (ADB). The terms were 1.13 billion Yuan of 10-year bonds at a 3.4% yield and 1 billion Yuan of 10 year bonds at 3.34% yield, respectively. When foreign funded enterprises in China are in need of RMBs, they can issue Panda bonds to borrow RMBs to finance their economic activities in China. The RMBs thus raised can only be used in China.

RMB denominated bonds issued by nonresidents in Hong Kong to Hong Kong residents are called "dim sum" ("small cake") bonds in Hong Kong.

The major issuances include:

- **Hopewell Highway Infrastructure** sole 1.38 billion Yuan ($147 million) two-year RMB- denominated bonds in July 2010. This was the first RMB bonds sold offshore by a non-financial Hong Kong based company in Hong Kong
- **McDonald's** sold 2000 million Yuan ($29 million) of 3% notes due in Sept. 2013, in a private placement, to institutional and professional investors in Hong Kong on 20 August 2010. This was the first RMB bond issuance by a non-financial foreign company in Hong Kong
- **Bank of East Asia and HSBS holdings** were two first non-Chinese banks to sell Yuan bonds in 2009 in Hong Kong. They raised 2 billion and 4 billion Yuan, respectively
- **Bank of Tokyo Mitsubishi UFJ** sold 1 billion Yuan of notes in China in May 2009
- **Deutsche Bank** sold 200 million RMB bonds with two-year maturity and a 2 percent fixed semi-annual coupon rate to private bank investors in sep. 2010.
- A procession of companies, from Tesco, the UK supermarket group, to Caterpillar, the US engineering group, have r**aised more than Rmb54bn selling renminbi bonds** by August of the year, up from Rmb34bn for the whole of 2010

Another important category of RMB denominated bonds is RMB bonds issued by Chinese entities in Hong Kong. The important issuances include:

- Ministry of Finance (MoF) issued 6 billion Yuan (879 million USD) worth of government bonds on Sept 28, 2009 in Hong Kong
- BoC and Ex-Im Bank of China have issued RMB-denominated bonds in Hong Kong for a couple of years
- 57 companies (most of them are Chinese firms) have raised dim sum bonds since the end of 2007
- Ping An of China Asset Management completed the issuance of RMB 2 billion worth of offshore renminbi-denominated bonds on June 2 to support premium growth and capital adequacy
- MoF issued 20 billion Yuan RMB denominated bonds in Hong Kong on 23rd of August, 2011, which was regarded as a major boost to RMB internationalization and a "big gift" to Hong Kong people.

Fifth, efforts have been made to promote currency swap arrangements. Central bank liquidity swap arrangements allow the Chinese mainland to provide short-term liquidity support to its counterparts. Foreign bank sells a specified amount of its currency to the PBOC for RMB, at the market exchange rate. The RMB funds thus obtained are deposited in the account that foreign central bank held at the PBOC are PBOC liabilities. The foreign currency that the PBOC acquires is an asset on the PBOC's balance sheet. Foreign central bank can then loan RMB to its commercial banks for transaction. But swap must unwind according to agreement.

- The HKMA has entered into a three-year currency swap arrangement totaling RMB 200 billion with People's Bank of China (PBOC). (recent increase).
- Many countries have currency swap arrangements with China

- South Korea, Malaysia, Belarus, Indonesia, Argentina, Iceland, and Singapore, New Zealand and Uzbekistan Brazil, Kazakhstan

Different from the currency swap arrangements after the Asian Financial Crisis, during the Global Financial Crisis. Currency swaps agreed recently are aimed at not only providing short-term liquidity support to its counterparts but also promoting RMB internationalization. The Hong Kong Monetary Authority (HKMA) has entered into a three-year currency swap arrangement totaling RMB 200 billion with People's Bank of China (PBOC). More and more countries have signed currency swap arrangements with China. The PBOC's swaps with foreign counterparts will create necessary conditions for the RMB to become a reserve currency.

4. The problems surfacing in the process of RMB internationalization

4.1 The asymmetry of RMB internationalization and resulting welfare losses to China

Thus far, China has made significant progress in the use of the RMB as a settlement currency, in the issuance of RMB-denominated bonds, and in signing currency swap agreements with foreign central banks. RMB deposits in Hong Kong are growing exponentially.

Despite these achievements, however, all is not well in RMB internationalization. For example, various incentives have been provided to encourage enterprises to use the RMB to settle transactions. But, with an undervalued exchange rate and strong expectations for the RMB to appreciate in the future, foreign importers of Chinese exports refuse to use the RMB to settle transactions, while foreign exporters are happy to accept RMB. As a result, even with the same trade balance, China ends up with more foreign-exchange reserves, though using the RMB as a settlement currency is supposed to reduce their accumulation.

Indeed, so far, RMB internationalization has shown a clear pattern of asymmetry – and not only as a settlement currency for China's imports, but not for exports. RMB-denominated bonds meet strong demand, yet non-residents have no great incentive to issue them. And, while foreign lenders are happy to extend RMB loans, they are not welcome by foreign borrowers. Given strong expectations of RMB appreciation, internationalization will inevitably lead to a serious currency mismatch, with possibly detrimental consequences for China's welfare.

More generally, the asymmetry is reflection of broader issue of shift of currency structure under current global financial and economic situation. Whether for self-insurance or to maintain a competitive exchange rate, since 1998-1999 Asian Financial Crisis, East Asia has since then accumulated huge amounts of dollar-denominated assets—mainly US government securities. This time around, thanks to the deterioration of the US fiscal position and the Federal Reserve's expansionary monetary policy, "the long-term risk [for] emerging markets' external balance sheets is shifting," as Eswar Prasad of the Brookings Institution has pointed out, "to the asset side."

While China's government should make greater efforts to rebalance the economy by conventional measures, it also should pay adequate attention to adjusting the currency structure of the country's gross assets and gross liabilities. In particular, China should try to replace a good portion of its dollar-denominated assets with renminbi-denominated assets, and its renminbi-denominated liabilities with dollar-denominated liabilities. Actually, the most important result of the internationalization of the RMB so far has achieve, to certain extent, is the realization of the shift of the currency structure of non-residents' assets and liabilities at the expense of residents. With strong RMB appreciation expectations and increased fear of the dollar devaluation and inflation as a result of America's attempt to inflate away debt burden, investors, especially Hong Kong residents would wish to reduce their dollar denominated assets and RMB denominated liabilities, and increase their RMB denominated assets and dollar denominated liabilities. Under such a circumstances, it is not difficult for China to exchange dollar denominated assets for RMB denominated assets and RMB denominated liabilities for dollar denominated liabilities. In other words, as result of RMB internationalization, China increased its holding of US government securities and RMB denominated liabilities such as RMB deposits held by Hong Kong residents, RMB bonds. In coming months China will owe a new form of liability— RMB FDI provided by Hong Kong residents. The unfavorable shift of currency structure at the expense of China means that RMB internationalization under current asymmetrical fashion has led to the welfare losses to China.

4.3 The sequencing of RMB internationalization and capital account liberalization

The success of RMB internationalization is dependent on market forces and well-designed routes based on strategic thinking. With regard to sequencing, there are three key elements: interest rate liberalization, free floating of the exchange rate and RMB convertibility. It is a consensus view that liberalization of interest rate liberalization, free floating of exchange rate and RMB convertibility are three key preconditions for the realization of RMB internationalization. However, it is also true that the internationalization of RMB is not a one-off process. Hence if the objective is the internationalization of the RMB, then the question is what should be the sequencing among the interest rate liberalization, exchange rate liberalization, capital account liberalization and RMB internationalization, in each step of the long process of internationalization. However, if to regard RMB internationalization is a natural result of capital account liberalization, then the question become what should be the sequencing of the capital account liberalization in China. Of course, this is question too old to be discussed as a central question in the paper.

As already pointed out the starting point of RMB internationalization is supposed to be the use of RMB as settlement currency for imports. In practice, Chinese importers have not really used the RMB to pay for their import. Instead, they utilize the opportunity provided by the pilot RMB

Trade Settlement Scheme (PRTSS), which allows exporters and importer to use RMB to pay for imports and accept RMB for export payments. However, most observers have ignored two important facts. First, no matter what currencies are used in settlement, most trade transactions are still invoiced by the US dollar rather than by the RMB. Second, more surprisingly, most Chinese importers have even not used the RMB to pay for their imports. In practice, Chinese importers first buy the dollars offshore in CNH market and use thus obtained dollars to pay for their imports. What has changed as a result of RMB internationalization actually is merely a shift of the location of foreign exchange markets—foreign exchange trading moved from Shanghai to Hong Kong. The reason why Chinese importer use CNH market rather Shanghai CNY market to trade foreign exchanges is simply that in the offshore CNH market the dollar is cheaper than in the onshore CHY market. Hence, the reason why Chinese importers are willing to use an appreciating currency to pay for imports has become easy to understand—the profits obtained by importers via exchange rate arbitrage are large than the profits they may obtain if the RMB appreciate. The existence of the persistent exchange rate differences between CNY and CNH markets is a result of the fact that CHY market is subjected to consistent intervention by the PBOC aimed at suppressing CHY exchange rate and the fact that, in contrast, the CNH market is a free market where CNH sport is influenced by RMB appreciation expectations. On the other hand, foreign importers have enough bargaining power to refuse to use the RMB as invoicing currency and settlement currency, because the RMB is an appreciating currency. It is clear that as long as there are RMB appreciation expectations and a positive exchange rate spread exists between CNH and CNY exchange rates, the asymmetry between RMB import settlement and RMB export settlement is inevitable. With regard to the above-mentioned situation, I have three comments. First, there is no real RMB internationalization. Instead, what we have is partial capital account liberalization, namely liberalization of trade finance. Second, the persistent existence of opportunity for exchange rate arbitrage is a reflection of low market efficiency, which in turn implies that China is suffering welfare losses continuously. Third, the relative wide use of RMB as settlement currency is based on RMB appreciation expectations and hence is not sustainable. As soon as there is a change in expectations and hence the exchange rate differences between CNH and CNY markets disappear, the incentives for Chinese importers to use the RMB as settlement currency will disappear quickly.

According to interest parity hypothesis, because there is a positive interest rate spread between CNY and CNH markets, there should be RMB devaluation expectations or the CNY forward should be lower than CNH forward. However, contrary to the prediction by theory, as it is well know, there have been appreciation expectations in CNY market, while Mainland China’s interest rate is higher than the interest rate in Hong Kong. The reason is simple—the PBOC intervention in foreign exchange market. Without the invention, the RMB exchange rate would have already shot up so that the RMB devaluation expectations would have appeared (or the CNY forward rate would have risen). As a result of the PBOC intervention, the opportunity for both exchange rate arbitrage and interest rate arbitrage become permanently, which means that China's welfare losses become permanent.

Under China's current circumstances, the process of RMB internationalization is equivalent to that of capital account liberalization. Hence the discussion of RMB internationalization is equivalent to the discussion of capital account liberalization. To put it more bluntly, RMB internationalization is capital account liberalization in disguise. To a large extent, the discussion of the sequencing of RMB internationalization is equivalent to the discussion of the sequencing of capital account liberalization.

To promote RMB internationalization or to pursue capital account liberalization smoothly, China should first speed up interest rates liberalization so as to eliminate the enormous chances for arbitrage and rent seeking. At the same time, RMB exchange rate should be liberalized in the sense that it is decided by market demand and supply. The POBC should stop intervention, so that the change in the exchange rate is able to eliminate the chance for interest rate and exchange rate arbitrage. To say exchange rate reform needs longer time than RMB internationalization is difficult to understand. In my view, due to the Euro sovereign debt crisis, and the sudden surface of bearish sentiment about China RMB appreciation expectations reduced significantly. In the past month or so, RMB devaluation expectations appeared in CNH forward and NDF. These changes in sentiment and the new trend of capital out flows from emerging economies have provided China with rear opportunity to allow the RMB to float. Certainly, because capital account control in China has not been fully dismantled, the government always can use the prudential rule and other rules and regulations to manage cross-border capital flows to prevent overshooting in the exchange rate. When the exchange rate can adjust constantly around its equilibrium level and domestic interest rates are flexible enough in response to the fluctuations of cross-border capital flows, the opportunity for exchange rate arbitrage and interest rate arbitrage can be minimized. Then the internationalization of the RMB can be preceded in line with market guidance and with minimum welfare losses.

5. Conclusions

RMB internationalization is one of the major challenges facing the Chinese government. However, what should be the final goal of RMB internationalization is still a question to which China has yet to give a firm answer. Fortunately, RMB internationalization does not currently conflict with other possible options, such as the creation of a super-sovereign currency or a regional currency. While China can benefit from the internationalization of the RMB, its possible negative effects on China's financial stability may also be serious.

The internationalization of the RMB requires convertibility and the liberalization of the capital account. Due to the fragility of the financial system and its lack of attractive financial instruments, China's liberalization of the capital account and hence the internationalization of the RMB must proceed in a gradual fashion.

RMB internationalization should be a natural course of economic development and capital account liberalization. To push RMB internationalization in an artificial way is counter productive. Policies aimed at promoting RMB internationalization should not be based on RMB appreciation. Otherwise, the internationalization will not be sustainable.

China's growing economy and trade volume are favorable conditions for internationalization. However, other conditions, such as the existence of deep and liquid financial markets, have not been met. To create conditions for the internationalization of the RMB, the Chinese government should encourage financial markets to play an increasingly important role.

Sequencing is important. Without first realization of the marketization of interest rates and exchange rate, RMB internationalization will easily go astry. The process of RMB internationalization essential is a process of capita account liberalization. Due to the unprecedented complex global financial crises, and China's huge imbalances, the capital account liberalization should be pursued in a cautious way. China should first put its own house in order. Before the internationalization of RMB can achieve real headway, China must speed up the reform of financial markets. Interest rates should be liberalized. At the same time, RMB exchange rate should be allowed to float freely. Only China's financial reform has made important break though and China has achieved a more balanced current account and capital account, can the internationalization be able to make important and meaningful progress. While continuing to push RMB internationalization, more contributions should be made to regional financial cooperation and the reform of the international monetary system. RMB internationalization is a supplement rather than a replacement to the global efforts for finding a more stable and reliable international store of value.

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Table 2: Bilateral Swaps Agreements (BSAs) between China and ASEAN+3 countries under the CMI (as of July 2007)

BSAs	Currency	Size (USD bn)	Status
China-Thailand	USD/Baht	2	Concluded: Dec. 2001 Expired: Dec. 2004
China-Japan	RMB/Yen	6	Concluded: Mar. 2002
China-Korea	RMB/Won	8	Concluded Jun. 2002
China-Malaysia	USD/Ringgit	1.5	Concluded: Oct. 2002
China-Philippines	RMB/ Peso	2	Concluded: Aug. 2003 Amended: Apr. 2007
China-Indonesia	USD/Rupiah	4	Concluded: Dec. 2003 Amended: Oct. 2006

Source: Bank of Japan.

Table 3: Projection of the size of major economies (in percent)

Share of world's GDP		U.S.	EU25	Japan	China
2005		28.1	30.3	10.3	5.0
2025	low	31.5	23.7	8.1	7.0
	middle	31.4	23.7	8.1	8.9

	high	31.4	23.7	8.1	11.6

Note: Assumed that the growth rate of population, capital formation and labor market condition are unchanged in all the three scenarios. The “low”, “middle”, and “high” scenarios assume that the total factor productivity (TFP) of China’s industries grow at the rate of zero, 10% and 20%, respectively.
Source: Calculation by Li Zhongmin of Institute of World Economics and Politics, CASS.