

Internationalisation of the renminbi

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Introduction

Over the past three decades, China's fast economic growth and its increasing economic integration with the world have led to a significant increase in its influence in the world economy. During the Asian financial crisis of 1997–98, China was praised as a responsible country, because of its efforts in maintaining the stability of the renminbi while many other countries in the region had devaluated their currencies. It was the first time that China itself, as well its Asian neighbours, started realising China's emerging influence. Like it or not, China is no longer an outsider in global financial events. This is not only because China is now the world's third largest economy and second largest trading nation, but also because it holds the largest amount of foreign reserves in the world.

Since the Asian financial crisis, China has been faced with three major tasks with regard to its international financial policies. The first is the reform of the global financial architecture. The second is the promotion of regional financial cooperation, which consists of two components: the creation of a regional financial architecture and the coordination of regional exchange rate arrangements. The last is internationalisation of the renminbi. It is fair to say that, over the past 10 years or so, the most discussed issue in China has been regional financial cooperation. Although the result is still highly unsatisfactory, together with its East Asian neighbours China has achieved some tangible results, built on the basis of the Chiang Mai Initiative (CMI).

The current crisis has exposed the vulnerability of China's financial position under the existing international monetary system, which is characterised by the domination of the US dollar as the international reserve currency. Because a national currency is used as the international reserve currency, US policy aimed at crisis management has created strong externality to the rest of the world. Because China holds some USD 1 trillion in US dollar assets in its foreign exchange reserves, it has become an easy prey of American domestic policies. The value of China's foreign exchange reserves is in danger of being significantly eroded as a result of the debasing of the US dollar, which is, in turn, a result of the US government's crisis management.

Chinese economists are scrambling for solutions. The reform of the international financial architecture is certainly helpful. However, it is more easily said than done. While China will champion the cause of international monetary and financial architecture reform, it knows well that it is very difficult to make any fundamental difference to the global monetary and financial architecture. Even if it can make a difference, the change may come too late to help China reduce the possible losses caused by the debasing of the US dollar. Regional financial cooperation is also helpful. But, as we have all seen over the past 10 years, progress in that respect has been painfully slow. Each participating country in the CMI has its own agenda. It is perhaps a bit unfair, but certainly not far from the truth, that East Asian countries prefer to be drawn together by the financial tsunami rather than give an inch to other member countries. Who cares whether China makes huge capital losses on its foreign exchange reserves?

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The internationalisation of the renminbi was not previously an eye-catching issue. This is partially because it is closely related to the issue of renminbi convertibility, which in turn was assumed to be conditional on the full liberalisation of the capital account. Nobody in China seriously thinks that China should, and will, fully liberalise its capital account in the foreseeable future, and hence the discussion of renminbi liberalisation has taken a back seat in the policy debate.

However, interest in internationalisation of the renminbi has recently been increasing, partially due to the frustration over the slow progress of regional financial cooperation and the helplessness in achieving any meaningful progress in the reform of the international financial architecture. Could internationalisation of the renminbi be treated as part of the solution for the problems that China is currently facing? Compared with the creation of a regional financial architecture and the reform of the international financial architecture, internationalisation of the renminbi seems to be an easier solution to safeguard China's financial interests as well as its stability. Compared with the reform of the international financial architecture and the promotion of regional financial cooperation, there seems to be more room in internationalisation of the renminbi for China to act positively rather than passively. Of course, internationalisation of the renminbi is a multidimensional issue, which should be discussed in a broad perspective, and we will do so in this paper.

This paper is organised as follows. Section 1 provides a conceptual discussion of the meaning of internationalisation of the renminbi and a description of the degree to which the renminbi has been used internationally and/or regionally. Section 2 analyses the objectives and rationales for internationalising the renminbi. The conditions for internationalisation of the renminbi are investigated in Section 3 and, lastly, we present our conclusions.

1. What is meant by internationalisation of the renminbi?

There is a relatively well established framework to define what is meant by the internationalisation of a currency. According to Kenen (2009), an international currency is one that is used and held beyond the borders of the issuing country, not merely for transactions with that country's residents but also, and importantly, for transactions between non-residents. Theoretical discussions on currency internationalisation usually start with the functions that are performed by an international currency. Kenen (1983) gave early thoughts on the roles of international currencies. Chinn and Frankel (2005) developed a list of the international functions of an international currency, which is summarised in Table 1. According to them, an international currency has to be capable of playing the roles of a store of value, a medium of exchange and a unit of account for both residents and non-residents. More specifically, it can be used for private purposes as a currency substitution, for invoicing and denominating investments and for trade and financial transactions. It can also be used for public purposes as official reserves, a vehicle currency for foreign exchange intervention and an anchor currency for pegging. This analytical framework can be used as a theoretical guideline for understanding internationalisation of the renminbi.

Table 1

Roles of an international currency

Function of money	Governments	Private actors
Store of value	International reserves	Currency substitution (private dollarisation)
Medium of exchange	Vehicle currency for foreign exchange intervention	Investment
Unit of account	Anchor for pegging local currency	Invoicing trade and financial transactions
		Denominating trade and financial transactions

Source: Chinn and Frankel (2005), originally from Kenen (1983).

1.1 The extent to which the renminbi has been used internationally/regionally

Table 2 provides a brief summary of current international/regional use of the renminbi, in line with the general roles of an international currency indicated in Table 1. It shows that the renminbi is a currency playing neither the role of a store of value nor that of an anchor for public purposes. The renminbi has started to be used by non-residents as a vehicle, and an invoicing, currency in trade and financial settlement, but only in a very limited way.

Table 2

Summary of international/regional use of the renminbi

Function of CNY	Public purpose	Private purpose
Store of value	International reserves None	Currency substitution and investment CNY deposits in Hong Kong CNY loans in Hong Kong CNY bonds in Hong Kong by policy and commercial banks CNY government bonds under ABF2 CNY equities via QFII
Medium of exchange	Vehicle currency BSAs under the CMI Bilateral swap arrangements between central banks	Invoicing currency Trade settlement in CNY
Unit of account	Anchor for pegging None	Denominating currency

Source: Chinn and Frankel (2005) and authors' calculation.

Use of the renminbi for public purposes

China has been actively involved in the establishment of the regional financial architecture since the outbreak of the financial crisis in 1997–98. It has become an important fund supplier of the bilateral swap arrangements (BSAs) under the CMI framework and is engaged in multilateral policy dialogue and designing economic surveillance mechanisms in the region. As a result of China's involvement in the building-up of the regional financial architecture, the renminbi was allowed to be used as a vehicle currency via the BSAs and as a denominating currency in the issuance of Asian bonds. As Table 3 shows, by the end of July 2007, China had signed USD 23.5 billion worth of BSAs with Japan, Korea, Thailand, Malaysia, the Philippines and Indonesia, respectively. However, the major currency used in the arrangements is still the US dollar. It is obvious that for the success of ongoing multilateralisation of the CMI and the enlarged common reserve fund enacted in February 2009, the use of the dollar needs to be limited while encouraging the use of member countries' currencies.

Table 3

Bilateral swap arrangements: China and other ASEAN+3 countries (as of July 2007)

BSA	One/Two-way	Currency	Total size, USD bn	Status
China-Thailand	One	USD/THB	2	Concluded: Dec 2001 Expired: Dec 2004
China-Japan	Two	CNY/JPY JPY/CNY	6	Concluded: Mar 2002
China-Korea	Two	RMB/KRW KRW/CNY	8	Concluded: Jun 2002
China-Malaysia	One	USD/MYR	1.5	Concluded: Oct 2002
China-Philippines	One	CNY/PHP	2	Concluded: Aug 2003 Amended: Apr 2007
China-Indonesia	One	USD/IDR	4	Concluded: Dec 2003 Amended: Oct 2006

Source: Bank of Japan.

In December 2008, apart from BSAs within the CMI framework, China signed its first BSA with Korea. This was a serious move that China had made in response to the widespread financial crisis. By doing so, China was effectively sharing the burden with Japan and international financial organisations in order to help out the Asian countries in trouble. Two more contracts with Hong Kong and Malaysia were signed between central banks at the beginning of 2009. On 11 March 2009, the People's Bank of China (PBoC) concluded another bilateral contract with the central bank of Belarus. It is worth noting that, in all the new bilateral swap contracts, the renminbi, rather than the US dollar, is used in the swaps. It is commonly known that central banks use the foreign currency from swap agreements to prop up their domestic currency by providing the foreign currency to domestic financial institutions so that central banks can use the foreign currency to directly intervene in exchange markets and enable domestic financial institutions to stay away from the foreign exchange market so as to avoid driving down the exchange rate of the domestic currency. Therefore, the use of the renminbi in swap agreements means that it has been used as a vehicle currency by non-residents.

Use of the renminbi for private purposes

Renminbi-denominated bonds

Another regional financial arrangement is the development of the regional bond market. The second stage of the Asian Bond Fund (ABF2) was launched in June 2005, with seed money of up to USD 2 billion. While the bonds issued by sovereign and quasi-sovereign issuers under ABF1 were only dollar-denominated, ABF2 allows local currencies to denominate bond issuances in the eight markets, including China, Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand (EMEAP (2006)). The renminbi is correspondingly used in the China fund issuance.

Apart from the regional arrangement, China has taken several steps since 2007 to allow the renminbi to be used as a medium of exchange. For instance, in June 2007 the PBoC and the National Development and Reform Commission announced their decision to allow policy and commercial banks to issue renminbi-denominated bonds in Hong Kong. The first renminbi-denominated bond launch outside the Chinese mainland was the issuance of CNY 5 billion in such bonds in Hong Kong by China Development Bank. Since then, several mainland commercial banks have also issued renminbi bonds in Hong Kong, including the Export-Import Bank of China, which issued CNY 2 billion, the Bank of China, whose issue amounted to CNY 3 billion, and the Bank of Communications, which announced its decision to offer renminbi-denominated bonds, with an aggregate principal amount not exceeding CNY 5 billion, to institutional and retail investors in Hong Kong.

Given the limited size and immaturity of the Chinese domestic bond market, the Chinese mainland decided to take advantage of the well developed market in Hong Kong for two reasons. The first is that the issuance of renminbi bonds in Hong Kong helps to build up the infrastructure of the mainland bond market and creates progress in transaction rules. The second is that the issuance of renminbi bonds in Hong Kong is seen as the first step towards promoting the involvement of the renminbi in the bond market outside the Chinese mainland. It helps to quicken the pace of the opening of the Chinese mainland's capital market as well as capital account convertibility.

Renminbi in trade settlement and bank loans

One important role played by the renminbi is in trade settlement and bank loan business. With the rapid development of China's foreign trade, the magnitude of renminbi circulation in China's neighbouring countries has increased significantly. For instance, in Mongolia, 60% of the cash in local circulation is in renminbi. In some major foreign exchange markets in Ulan Bator, the capital of Mongolia, the renminbi and the US dollar are the two foreign currencies with the largest transaction amount. In Korea, the renminbi is accepted in shops and restaurants. In Vietnam, the renminbi can be exchanged via unofficial banking, whose legitimacy has recently been acknowledged by the Vietnamese government. In Hong Kong, the renminbi has become the second largest exchange currency after the Hong Kong dollar. In Taiwan, the renminbi will be legitimately exchanged after a new agreement signed by mainland and Taiwan banks. In Laos and Myanmar, the renminbi is popular in some provinces bordering China. Cambodia and Nepal have announced that the official circulation of the renminbi in their markets is welcome.

However, it is difficult to estimate precisely the magnitude of renminbi circulation in neighbouring economies because the renminbi is not fully convertible. The renminbi cannot be deposited in the banking systems of most neighbouring economies, which has resulted in the unavailability of data. There have been varying estimates regarding the extent of renminbi circulation overseas. For statistical reasons, a better way of estimating renminbi circulation is by focusing on the renminbi business in the banking system in Hong Kong.

The renminbi business in the Hong Kong banking system was launched jointly by mainland China and Hong Kong SAR on 25 February 2004, when 32 licensed banks started offering renminbi deposit-taking, currency exchange and remittance services. Figure 1 shows the

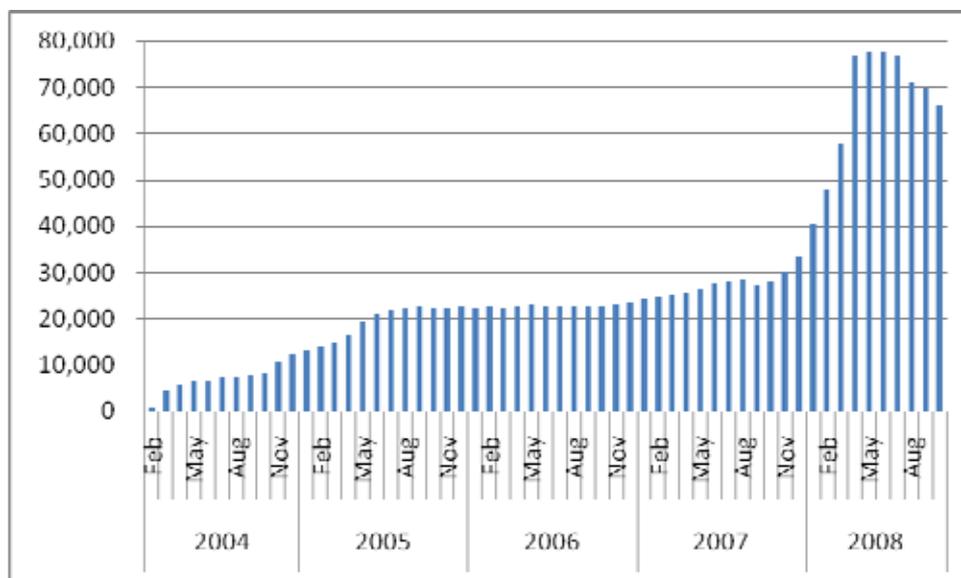
change in the size of renminbi business in Hong Kong between February 2004 and October 2008. The figure shows that renminbi deposits started at only CNY 895 million in February 2004, rising sharply to a peak of CNY 77,675 million in May 2008 due to strong expectations of renminbi appreciation. In particular, a rapid increase in demand for the renminbi in the first quarter of 2008 led to the growth of renminbi deposits in Hong Kong by a further 33% year on year, resulting in the May peak, which was three times higher than the year-earlier level. However, a new policy implemented by the China Foreign Exchange Trade System as from 5 May 2008 to levy a higher fee on the trading of renminbi by the Clearing Bank raised the transaction costs of converting Hong Kong dollars into renminbi. As a result, renminbi business started declining in June 2008.

There was concern over international currency speculators taking positions on the renminbi because of the free convertibility between other currencies and the Hong Kong dollar. However, statistics show that, at the end of February 2008, the CNY 47.8 billion in deposits represented only 0.8% of total deposits, equivalent to 1.7% of total Hong Kong dollar deposits in Hong Kong. Given such a small base, it is expected that currency speculation against the renminbi is unlikely to have a severe impact on Hong Kong's banking sectors.

Another problem is that using data available from the banking system is likely to underestimate the actual size of renminbi circulation. In fact, there is a significant gap between the flows through bank business and other means of exchange of the renminbi in Hong Kong. The difficulty in quantifying renminbi circulation outside China leads to the problem of estimating the potential impact on China's monetary policy. The major concern is the risk of sudden flows of renminbi funds between mainland China and Hong Kong SAR, which, to a large degree, is determined by the change in the renminbi appreciation premium and the change in the Chinese central bank's monetary policy.

Figure 1

Renminbi deposits (CNY millions, February 2004–October 2008)



Source: Hong Kong Monetary Authority.

Table 4 provides a detailed summary of international/regional use of the renminbi.

Table 4

International/regional use of the renminbi

Public purpose	Private purpose
<ul style="list-style-type: none"> • Payment currency in BSAs between central banks and: <ul style="list-style-type: none"> ➤ Korea: <u>USD 6 billion</u> (Mar 2002) ➤ Japan: <u>USD 8 billion</u> (Jun 2002) ➤ Philippines : <u>USD 2 billion</u> (Aug 2003 and Apr 2004) • Payment currency in bilateral swap arrangement between central banks, with <ul style="list-style-type: none"> ➤ Korea: <u>CNY 180 billion</u> (12 Dec, 2009) ➤ HKMA: <u>CNY 200 billion</u> (20 Jan, 2009) ➤ Malaysia: <u>CNY 80 billion</u> (8 Feb, 2009) ➤ Belarus: <u>CNY 20 billion</u> (11 Mar, 2009) 	<ul style="list-style-type: none"> • Trade settlement currency with neighbouring countries including Vietnam, Mongolia, Cambodia. Etc By the end of 2007, total related flows of CNY were equivalent to <u>USD 360 billion</u> Among them, USD 53 billion worth of CNY left the country • CNY deposits in HK: <ul style="list-style-type: none"> ➤ Launched on 25 Feb, 2004 ➤ Initial amount of CNY 895 million (Feb 2004) ➤ Peak of <u>CNY 78 billion</u> (May 2008) • CNY bond issuance in HK by policy and commercial banks <ul style="list-style-type: none"> ➤ China Development Bank: <u>CNY 5 billion</u> in renminbi-denominated bonds (Jun 2007). ➤ Export-Import Bank of China: <u>CNY 2 billion</u> in renminbi-denominated bonds (Jun-Jul, 2007) ➤ Bank of China: <u>CNY 3 billion</u> in renminbi-denominated bonds (Sep 2007) ➤ Bank of Communications: no more than <u>CNY 5 billion</u> in renminbi-denominated bonds (Mar 2008) • <u>CNY</u> government bond issuance under ABF2 <ul style="list-style-type: none"> ➤ Launched in Jun 2005 ➤ With seeds fund: <u>USD 2 billion</u>

Note: The authors are grateful to Dr Li Jian for her help in collecting the data.

A back-of-the-envelope calculation shows that the total amount of renminbi involved in international/regional use was about CNY 300 billion, accounting for only a small fraction of China's broad money of CNY 40 trillion by the end of 2007. In other words, internationalisation of the renminbi is very limited in scope and is just beginning.

2. The benefits and costs of internationalisation of the renminbi

As discussed above, the process of internationalisation of the renminbi is ad hoc to say the least. An important question is whether China really wishes to internationalise its currency: the answer is both yes and no.

2.1 The benefits of internationalisation of the renminbi

The potential benefits of internationalisation of the renminbi are obvious. First, it would reduce the exchange rate risk facing Chinese firms: (i) internationalisation of the renminbi means that more foreign trade and financial transactions would be invoiced and settled in the renminbi, hence the exchange rate risk for Chinese firms would be reduced accordingly, although demand risk would remain; (ii) the increase in the weight of renminbi-denominated assets in financial institutions would reduce the impact of foreign exchange risk in the computation of the BIS capital adequacy requirements; (iii) the risks associated with foreign currency denominated funds would also be reduced; and (iv) an internationalised renminbi

would make it possible to tackle the problem of “original sin” which many emerging economies have to live with.

Second, the internationalisation of the renminbi would improve the funding efficiency of Chinese financial institutions, thereby greatly increasing their international competitiveness, because they would enjoy the advantage of having easier access to the vast pool of renminbi assets. That competitiveness would, in turn, promote the expansion of China’s financial service sector. Although internationalisation of the renminbi is not a necessary condition for establishing a financial centre in China, it would greatly help the endeavour.

Third, internationalisation of the renminbi could boost cross-border transactions: (i) the cross-border flows of the renminbi brought about by real economic activities such as cross-border trade and travel could provide an effective settlement method in bilateral transactions; and (ii) it could also enlarge bilateral trade and economic cooperation and promote the economic development of frontier regions inhabited by minority nationalities.

Fourth, internationalisation of the renminbi means that the renminbi would be held by non-residents, which would allow the Chinese monetary authority to collect seigniorage from the rest of world. Seigniorage is the margin between the denomination of the notes and the cost of issuing the notes obtained by the note issuer. Issuing a world currency is equivalent to levying seigniorage on other countries.² Although China does not have the goal of collecting seigniorage at some point in the future, the internationalisation of the renminbi could at least offset, to some degree, the seigniorage that China has to pay to the United States.

Lastly, internationalisation of the renminbi could help China to preserve the value of its foreign exchange reserves. China is the biggest holder of foreign exchange reserves in the world. However, all its foreign exchange reserves are denominated in foreign reserve currencies, of which more than 70% in the US dollar. If China’s claims on the United States were denominated in the renminbi, China would not need to worry about the possibility of suffering huge capital losses on its foreign exchange reserves as a result of the US government’s debasing of the US dollar. Currently, because the United States owes China more than USD 1 trillion in US dollar-denominated debt, it can easily inflate away its debt burden. China is at the mercy of the United States.

2.2 The costs of internationalisation of the renminbi

However, the flip side of internationalisation of the renminbi for China is also obvious. Although the internationalisation of a currency is not tantamount to capital account liberalisation and full convertibility of the domestic currency, capital account liberalisation and convertibility are, to a very significant degree, prerequisites of internationalisation. It is fair to say that the reluctance of the Chinese government to give up capital control is the biggest impediment to a wholesale internationalisation of the renminbi in the foreseeable future. The need for maintenance controls over cross-border capital flows is attributable to the following reasons. First, China’s financial system is still fragile and, second, it is suffering from over-monetisation. An M2/GDP ratio of 180% in China means that capital outflows may be huge if capital controls are dismantled. Without capital controls, the foreign exchange requirement would be very large and costly. Third, China’s capital markets are still too shallow. Any significant changes in cross-border capital flows may easily lead to large fluctuations in China’s asset prices. Fourth, China’s economic structure is still inflexible. Enterprises are

² Seigniorage is frequently identified as one of the benefits derived from the internationalisation of a currency. However, in practice, seigniorage resulting from the use of one’s own currency as an international currency should be viewed as no more than a secondary benefit, and it would not be appropriate to identify seigniorage as one of the objectives of the internationalisation of the renminbi.

slow to adjust to exchange rate and interest rate changes, and they need capital controls to provide them with breathing space. Fifth, China's financial institutions lack competitiveness and some protection is still needed (infant industry argument). All the above-mentioned arguments for capital controls can be used to argue against renminbi liberalisation.

Even if the capital account were fully liberalised and the renminbi were made fully convertible, internationalisation of the renminbi could still be problematic. Experience from the Asian financial crisis has shown that if a currency is fully internationalised, which means that it can easily be obtained in international financial markets, the country with an internationalised currency will be very vulnerable to speculative attacks from international speculators. The experiences of Malaysia and Hong Kong are two contrasting cases in point. The Malaysian ringgit was internationalised, with the result that speculators were able to collect ringgit from financial markets outside Malaysia and launch an effective attack on it. In contrast, though fully convertible, the Hong Kong dollar was not internationalised. Consequently, before launching a decisive attack on the Hong Kong dollar, international speculators had to raise Hong Kong dollars from the interbank money market in Hong Kong. The unavailability of the Hong Kong dollar abroad gave the Hong Kong Monetary Authority the policy space to dramatically raise the interest rate in the money market and successfully beat back the attack.

2.3 Implications for monetary policy

Because internationalisation of the renminbi would have a major bearing on China's monetary policy, its pros and cons will be discussed in a separate subsection. The policy implications of internationalisation of the renminbi are difficult to address for three reasons. First, it is always difficult to distinguish the impact of currency internationalisation on monetary policy from that of other factors, such as the development of financial markets, the liberalisation of financial sectors and increasing trade and financial integration. Second, although it is assumed that currency internationalisation impacts on monetary policy mainly via its impact on the monetary policy transmission mechanism, a sound and well established analytical framework is still absent. Third, the renminbi is far from being an international currency, and its use internationally and regionally is still very limited. Hence, the absence of data makes it difficult to discuss the relationship between the not-yet internationalised renminbi and China's monetary policy. As it is difficult to carry out an empirical study and draw reasonable implications from statistical findings, the discussion on this subject is mainly conceptual.

Generally speaking, there are three major elements in monetary policy transmission mechanisms: interest rates, exchange rates and wealth effects (Cassola (2000)).

First, internationalisation of the renminbi would stimulate the development of direct finance by increasing its private usage in bond and other debt securities and equity markets, which would bring about a quicker adjustment of market interest rates to the changes in official interest rates. This is because a more liquid and sophisticated financial market would be created following the enlarged usage of renminbi financial instruments. For instance, when the Chinese monetary authority decides to tighten its monetary policy, it usually increases the official rate or reduces the supply of base money. In the case of interest rate hiking, given price stickiness, market interest rates would react to the policy change. Real short-term exchange rates and even longer-term exchange rates would rise in response to tight policy. As a result, investment or consumption demand would be likely to decline, as would aggregate demand and output. The international use of the renminbi would, to a large degree, impact on the effectiveness of this transmission mechanism. The more liquid the financial market, the more sensitive the market interest rates are to changes in the official rate. In other words, internationalisation of the renminbi would reinforce the effectiveness of monetary policy. However, one key feature of the interest rate channel in China is that interest rates are inflexible and not entirely determined by market forces. Therefore, before

taking full advantage of the quicker response of the interest rate resulting from a more international use of the renminbi, a more liberalised interest rate mechanism should be put in place.

Second, internationalisation of the renminbi would stimulate arbitrage activities in response to monetary policy changes. In the case of monetary tightening, an interest rate hike would cause currency appreciation, given the free flow of capital across the border. If the interest rate or spot exchange rate deviate from the anticipated interest rate and exchange rate, or the real exchange rate deviates from the nominal exchange rate – which, in the case of monetary tightening, is presumed to be favourable for the holding of renminbi assets – international investors would carry out interest arbitrage by buying more renminbi assets. The consequence of interest arbitrage, in theory, would narrow the interest differentials between countries and between currencies, which would have an offsetting effect on domestic monetary policy changes. The feedback effect also exists. Changes in monetary policy in other countries may also have an impact on interest rate and exchange rate arbitrage, because they also change interest rate differentials and exchange rate expectations. The adverse impact of this becomes evident, because arbitrage with large amounts of instant funds is very likely to stimulate short-term speculative capital flows. It may also create a “herd effect” and have a negative impact on China’s economic stability. This is one of the reasons why some countries, such as Japan and Germany, were hesitant to let their currencies be internationalised. Again, the intensity of the effects of interest arbitrage depends on the degree of flexibility of the interest rate and exchange rate, and on the extent of capital account liberalisation. It is fair to say that the basic conditions for large-scale arbitrage against the renminbi do not currently exist, given the limited flexibility of the interest rate and exchange rate and the absence of a fully liberalised capital account. The liberalisation of capital transactions is indeed on the policy agenda, but short-term flows are still basically controlled, which, to a large degree, limits the arbitrage activity against the renminbi.

Third, internationalisation of the renminbi could also have an impact on the effectiveness of monetary policy via wealth effects. A decline in the official interest rate aimed at stimulating investment spending would induce a hike in asset prices by increasing the earnings from the holding of renminbi assets. Correspondingly, the market value of firms would go up, which would give firms greater incentives for investment spending. International use of the renminbi would thereby allow extra funds to flow into the renminbi equity market, and hence enlarge the wealth effects of loose monetary policy.

Fourth, internationalisation of the renminbi would result in currency substitution and an increase in renminbi deposits in third countries. There are no clear-cut theoretical explanations to confirm whether currency substitution and an increase in renminbi deposits in third countries would have an impact on money demand. There might be different outcomes, depending on whether the increase in holdings is made by non-residents or by residents in third countries. For non-resident holdings, there might be a weak link to money demand, but for resident holdings outside China, the impact of changes in renminbi holdings on the stability of money demand could be significant.

Lastly, another factor that needs to be considered is the likelihood of the growth of the euro-renminbi market. The development of the eurodollar market was mainly due to the restrictions of the US regulations on international lending and investments in the 1960s. Similarly, when the German monetary authority restricted non-residents from issuing Deutsche mark bonds in the 1970s, the euro-DM market which had developed outside Germany grew rapidly. The most important reason for the development of the eurodollar market is the real or fundamental factors associated with the size of an economy and the growing influence of that economy in international trade, investment and financial transactions. Therefore, following the strengthening of the real factors, market forces would dominate and, sooner or later, the government would be forced to abandon the restrictions on international use of the home currency.

The German government used to be concerned about the arbitrage between domestic and euro-DM markets, because of the extra burden it might place on its monetary policy and, in particular, on intervention in the interbank markets. The Japanese government had the same experience, whereby it was apprehensive of the arbitrage between domestic and euroyen markets, which could disturb its monetary policy, complicating both its intervention in the bill and call markets and its “window guidance”. The Japanese monetary authority resisted internationalising the yen for decades. However, after recognising that the interest rates and volume of transactions in the euroyen market were determined by the domestic monetary policy and not vice versa, the Bank of Japan progressively changed its attitude and its “window guidance” was officially terminated in 1991.

Sections 2.2 and 2.3 illustrate the difficulty in quantifying the benefits and costs, and hence the net effect, of currency internationalisation. Furthermore, external factors are equivalently important when considering the rationales for internationalisation of the renminbi. In other words, for internationalisation of the renminbi, whether other countries are willing to accept the renminbi in international transactions for both private and public purposes is as important as whether China wishes to internationalise its currency.

3. The conditions and road map for internationalisation of the renminbi

Having discussed the ways in which the renminbi is currently used both internationally and regionally, and the possible benefits and costs of internationalisation of the renminbi, we first need to question whether China really wishes to internationalise its currency. If the answer is yes, then the second question is how. Here, we can assume that China wishes to internationalise the renminbi. With regard to the question of how internationalisation of the renminbi can be realised, one critical issue stands out: is there a model that China can follow? More specifically, in the long term, should China be like the United States, playing a global role individually, or like Germany, being fully integrated with Asia? This is a strategic question underlying China’s policy towards renminbi internationalisation or regionalisation. In other words, would the Chinese currency be an independent international currency parallel to the dollar and the euro, or merged with other Asian currencies to become a component of the new single Asian currency?

3.1 Internationalisation vs regionalisation

The US dollar and the euro are the two successful examples of currency internationalisation since the end of the Second World War. However, the two currencies have taken different routes in becoming international currencies, roughly classified as the American approach and the German approach.

The American approach is basically a monopoly one, meaning that the US dollar is playing a dominant global, independent role. The status of the US dollar as an international currency was determined both by economic and by political factors. Following the American approach would lead China to pursue the strategy of having the renminbi used as an independent international currency in parallel to the US dollar, the euro and, perhaps, the yen.

The German approach refers to currency regionalisation through a series of concrete steps, from a regional currency mechanism, the ERM, towards a single currency replacing all the individual members’ currencies. Given that this approach results in the eventual elimination of individual currencies, if China were to follow this approach, it should involve itself in a fully fledged monetary union in Asia, and, in the final stage, the renminbi would be diminished and replaced by a new Asian single currency.

It is premature to decide which approach is preferable for China. However, the current financial crisis means that China is in a position to seek a bigger financial role, both in Asia and globally, than ever before. Recently, China signed four bilateral currency swap agreements with its neighbours, which has reduced the need for the existing regional multilateral agreement. It seems that, at a certain stage of monetary cooperation, regional development conflicts with global strategy. Therefore, the tough issue for internationalisation of the renminbi is whether there is a feasible road map for China to encourage the use of the renminbi in Asia, based on both market need and political consideration, and then, gradually, to have the renminbi used internationally.

We do not think that there is any well thought-out plan for internationalisation of the renminbi in China. As mentioned above, the renminbi has made some headway in becoming both internationalised and regionalised in response to the Asian financial crisis and its follow-up. Since the US subprime crisis, the internationalisation of the renminbi seems to have been given new impetus.

So far, as summarised in Table 3 above, internationalisation of the renminbi has seen it take the form of an invoicing and settlement currency in trade with its neighbouring countries, a vehicle currency in swap agreements and a denominating currency for bonds issued in Hong Kong and in relation to ABF2. Measured against any criteria, the degree of internationalisation of the renminbi is extremely limited.

The current, more positive, attitudes demonstrated by the Chinese monetary authority towards internationalisation of the renminbi are a result of the concern over the potential losses in China's foreign assets and, to a lesser degree, are related to the desire to avoid exchange rate risk. The simple reality is that, so far, China has accumulated USD 2 trillion in foreign exchange reserves, more than 70% of which are held in the form of US reserve assets denominated in US dollars. Since the onset of the crisis, the US Federal Reserve has adopted an extremely expansionary monetary policy. "Helicopter Ben" has been dropping greenbacks in a big way. As a result, the Federal Reserve's balance sheet has almost doubled since July 2007. At the same time, the US government is going to raise more than USD 2 trillion by issuing government securities. The US budget deficit/GDP ratio may exceed 12% in 2009. The current strength of the US dollar is likely to be a temporary phenomenon. In the long run, the devaluation of the US dollar seems inevitable, as do the prices of US government securities. As pointed out by Paul Krugman recently: "China had driven itself into a dollar trap. China acquired its \$2 trillion stash – turning the People's Republic into the T-bills Republic – the same way Britain acquired its empire: in a fit of absence of mind. And just the other day, it seems, China's leaders woke up and realised that they had a problem [...] they are, apparently, worried about the fact that around 70 percent of those assets are dollar-denominated, so any future fall in the dollar would mean a big capital loss for China." What China can do at this late stage is limited. However, China has to exhaust all possible avenues to limit the possible damage, while avoiding mishandling the problem and making it worse. Against this backdrop, internationalisation of the renminbi, together with reform of the international monetary and financial system and regional financial cooperation, is moving up on policy agenda.

The current international monetary system is characterised by the dominance of the US dollar as an international reserve currency and the prevalence of the de facto dollar standard. The system enables the United States to continuously register a massive current account deficit and become the world's largest debtor. Because US debts are dollar-denominated, there is no discipline that can be imposed by foreign countries on the US monetary authority. If the authority wishes to inflate away America's debt obligations, it can easily do so, which, in turn, means capital losses for dollar asset holders worldwide. Against this backdrop, China raised the issue of international monetary and financial system reform, leading Governor Zhou of the People's Bank of China to call for the creation of "an international reserve currency that is disconnected from individual nations and is able to remain stable in the long run, thus removing the inherent deficiencies caused by using credit-

based national currencies". According to our understanding, the thrust of Zhou's call is the suggestion to gradually replace the US dollar with SDR. If national currencies were converted into SDR, which is a basket of currencies, the threat of dollar devaluation to the value of foreign exchange reserves held by the rest of world, China in particular, would be reduced. However, reform of the international monetary system is more easily said than done. The United States will never give up the dollar's privilege as an unchallenged reserve currency.

Of course, China could be more actively engaged in currency swaps, contribute more to the regional funding pool, and also do more to encourage the use of the renminbi in the settlement of trade and financial transactions. Although these measures would be of some help in slowing down China's accumulation of US dollar-denominated assets, their role in safeguarding the value of those assets is very limited.

While recognising the limitations of internationalisation of the renminbi in containing the possible losses of China's US dollar-denominated financial assets, it is very clear that, if the renminbi were internationalised, and if a large portion of China's claims on the United States were renminbi-denominated, China would fare much better. The Chinese leadership would be less worried about the value of China's foreign assets. Furthermore, China's current experience shows that, regardless of whether China's ultimate objective is to create a regional currency, such as an Asian currency, or to make the renminbi an international currency side by side with the US dollar, the euro and the yen, the internationalisation of the renminbi, which is just in its initial stages, would be beneficial for both objectives and do no harm to either. Therefore, in the long run, China should establish a programme, and create the conditions, for the internationalisation of the renminbi. .

3.2 Conditions for the internationalisation of the renminbi

The general conditions for internationalising a currency highlighted by the literature include: the provider's political and military power, economic size, financial strength, the degree of financial market development, and history (Frankel (1999), Michalopoulos (2006)). Aside from that, the stability and predictability of a currency's intrinsic value and the availability of broad transactional networks will define the functional domains of individual currencies. More especially, the internationalisation of a currency requires the support of low-inflation credibility, a reasonable interest rate and exchange rate, and full convertibility of the currency to ensure easy availability of the international currency.

China's increasing importance in the world economy

After 30 years of reform and opening-up, China has become one of the most dynamic economies in the world. Furthermore, according to an analysis based on a GTAP simulation: by 2025, China's share in global GDP will increase from 5% to 11.6% (assuming 20% growth in total factor productivity (TFP)), overtaking Japan's share and enabling China to become the third largest economy in the world. The other two scenarios show that even a lower growth rate of TFP does not significantly change the results. For instance, under the assumption of zero TFP growth, China's GDP share would be slightly below that of Japan by 2025, which would allow China to remain the fourth largest economy in the world (Table 5). The growing size of the Chinese economy will be strongly supportive of the renminbi playing an ever bigger global role.

Table 5

Projection of the size of major economies

Share of world GDP		US	EU 25	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: We assume that the growth rate of population, capital formation and labour market conditions are unchanged in all three scenarios. The “low”, “middle”, and “high” scenarios mean that the TFP of China’s industries as a whole grows at the rate of zero, 10% and 20%, respectively.

Source: Calculation by Li Zhongmin of the Institute of World Economics and Politics, CASS.

Full convertibility of the renminbi

Before 1930, the concept of convertibility was generally defined as the right to convert a currency freely into gold at a fixed rate. Today, a currency can be regarded as “fully convertible” when any holder is free to convert it at a market rate into one of the major international reserve currencies (Greene (1991)). Therefore, the degree of convertibility is the key to the internationalisation of a currency.

As far as currency convertibility is concerned, the renminbi is far from a “convenient” currency for foreign holders. Although it is convertible under the current account, the capital account is still controlled in many aspects, mainly with regard to securities and assets, and short-term flows. The increasing private use of the renminbi in Asia for, among other things, consumption, as a tourist currency, in border trade payments and, to a certain degree, in official use is mainly a reflection of the importance of the Chinese economy in Asia. The limitation in the use of the renminbi comes mainly from the current capital controls on China’s capital account transactions. As indicated in the previous section, apart from free flows of foreign direct investment (FDI), other capital transactions, especially short-term capital flows, are controlled. Without full convertibility, the renminbi would not easily be accepted for a wider range of purposes by both residents and non-residents.

The development of the domestic financial market and financial liberalisation

Historical experience shows that a developed financial market is the key element for the use of a currency as an international vehicle currency. The collapse of the Bretton Woods system did not bring an end to the dollar’s status as an international currency. One reason for this is that the United States, compared with its two competitors, Europe and Japan, has the deepest and widest financial market in the world. Currently, China’s financial system is characterised by overbanking and a lack of a mature capital market. A wide and deep financial market has not yet been developed to the level required for internationalisation of the renminbi.

More specifically, due to the inadequacy of the Chinese money market, a benchmark interest rate equivalent to the Federal Reserve funds rate in the United States, the bank rate in the United Kingdom and the official discount rate and overnight call rate in Japan does not exist. Interest rates are partially liberalised, with a few key short-term interbank interest rates determined by markets. The interest rate policy of the PBoC has limited influence on the economy’s interest rate structure as a whole, thereby limiting the ability of China’s monetary authority to take full advantage of the quick response of the interest rate resulting from a

more international use of the renminbi. Therefore, a more liberalised interest rate mechanism should be put in place prior to internationalisation of the renminbi.

The renminbi offshore market

The development of the offshore market and currency internationalisation go hand in hand. Currency convertibility and the increasing use of a currency in international pricing, settlement, purchase and payment are prerequisites for the development of the offshore market. Meanwhile, the offshore market, with its own purpose for financial transactions conducted outside the territory of the currency-issuing country, and which is not subject to the country's jurisdiction, is an inseparable part of the international use of a currency. Currently, although a few transaction types exist, such as the renminbi non-deliverable forwards traded in Hong Kong and some other Asian cities, the renminbi has not been a standard offshore currency. Before the renminbi becomes fully convertible, it will be difficult to establish the offshore renminbi market, and without a well developed offshore market, internationalisation of the renminbi would also be difficult.

The flexibility of the renminbi exchange rate

In practical terms, the function of an international currency does not depend on the type of exchange rate regime. Taking the US dollar as an example, since the establishment of the Bretton Woods system, the dollar has experienced different types of exchange rate regime, from an adjustable one to a floating one. However, the changing exchange rate regimes did not change the dollar's status as an international currency. The relationship between the demand for the dollar and its exchange rate regime is unclear. Therefore, the question of whether a free-floating exchange rate regime should be a precondition for the internationalisation of the renminbi cannot be answered with certainty.

3.3 Capital controls vis-à-vis internationalisation of the renminbi

Internationalisation of the renminbi is not necessarily a one-off process, and full internationalisation can be achieved in a gradual way. Among the conditions discussed above, some are long-term factors which are not achievable in the short run and in a segmented way. However, convertibility of the renminbi, which is equivalent to the liberalisation of the capital account, can be achieved step by step, in parallel with the process of renminbi internationalisation. A well sequenced process of capital account liberalisation will contribute greatly to a smooth realisation of the internationalisation of the renminbi.

China's capital controls have prohibited non-residents from obtaining renminbi assets. The structure of the capital controls determines, to a large degree, through what channels and in what amounts the renminbi can be obtained and used by non-residents domestically and by residents externally.

China's policy on opening up financially has always been cautious. In the past few decades, a gradual approach to capital account convertibility has allowed the relaxation of China's capital controls to be carried out in a well designed sequence – namely, by liberalising long-term flows before short-term flows, liberalising direct flows before indirect flows, and protecting the country's weak domestic sectors from external competition and unwanted shocks. According to the IMF definition of categories of capital controls, by the end of 2007, of 43 items, 12 were completely convertible or subject to minimum restrictions (upon registration with or approval from administrative bodies), 16 were partially liberalised and 15 were non-convertible. This indicates that, in China, half of the types of capital account transaction are currently subject to controls, and half of the types of cross-border capital transaction are open to both non-residents and residents. Table 6 provides an outline of the framework of capital controls in China as of the end of 2007.

Table 6

Controls on capital and money markets in China (as of end-December 2007)

		Inflows¹	Outflows²
Stock market	Non-residents	Purchase of B shares and QFIIs ³ subject to a set of limitations	Sale of B shares, repatriation by QFIIs
	Residents	Sale of B, H, N and S shares abroad	QDIIs ⁴
Bonds and other debt securities	Non-residents	QFIIs	International development agencies are permitted to issue CNY-denominated bonds locally, with the approval of the Ministry of Finance, the PBoC and the National Development and Reform Commission
	Residents	Prior approval by the State Council for Examination and the SAFE ⁵ Earnings should be repatriated	Domestic insurance companies, securities firms and qualified domestic banks may purchase foreign bonds that meet rating requirements, subject to the approval of the CIRC ⁶ and the SAFE
Money market	Non-residents	QFIIs	No permission
	Residents	Bonds with less than one year duration and commercial instruments, approval by the SAFE	Authorised entities (insurance companies, securities firms and qualified domestic banks)
Collective investment securities	Non-residents	QFIIs invest in domestic closed-end and open-end funds	No permission
	Residents	Prior approval by the State Council for Examination and the SAFE Earnings should be repatriated	No permission for residents, except authorised entities
Direct investment		Free. Inward remittances converted into renminbi	Subject to the SAFE reviewing sources of foreign exchange asset investments abroad

¹ Purchased locally by non-residents; sold or issued abroad by residents. ² Sold or issued locally by non-residents; purchased abroad by residents. ³ Qualified Foreign Institutional Investors. ⁴ Qualified Domestic Institutional investors. ⁵ State Administration of Foreign Exchange. ⁶ China Insurance Regulatory Commission.

Sources: IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions*, 2007; SAFE; authors' calculations.

The liberalisation of inbound FDI flows

The liberalisation of inbound FDI flows in China was actually the first step in China's capital account liberalisation. It started at the very beginning of China's opening-up in the late 1970s. Currently, controls over FDI are more liberalised than the controls over any other international financial transaction. As long as non-residents meet the requirements under Sino-foreign joint venture laws and other relevant regulations, and are approved by the Ministry of Commerce of China, non-residents are free to invest in China. There is no restriction on the inward remittance of funds. For outward direct investment, foreign exchange is provided for the investment after the State Administration of Foreign Exchange (SAFE) has reviewed the sources of the foreign exchange assets and assessed the investment risks involved. This legal framework, combined with many policy-related incentives for inward direct investment, reflects the fact that China places an emphasis in its financial opening-up policy on attracting a high level of FDI. As a result, FDI inflows have exceeded all other forms of cross-border investment, thereby dominating China's cross-border capital movements in the past two decades.

Despite the debate on the optimal level of FDI inflows, the rapid growth of FDI has become the most prominent factor in China's integration with global financial markets. Moreover, because FDI is particularly relevant with regard to production networks, where China acts as a hub for other countries in Asia, Asia has been the major source of China's FDI inflows. Asia's FDI flows have accounted for over 50% of China's total FDI inflows since 2001, whilst the ratios of the United States and the euro area have been less than 10%, respectively, except for the US in 2002. Such geographical distribution reflects the fact that non-residents with free permission for remittance of FDI converted into the renminbi are mainly from the Asia region.

Limited portfolio flows

China's securities flows are still relatively tightly restricted. Portfolio flows started in 1991 when the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE) began to offer B shares, providing foreign investors with a legal channel to invest in China's equity markets. Other channels, such as H shares for foreign capital investing in China's overseas issues in Hong Kong, American depository receipts (ADRs), global depository receipts (GDRs), convertible bonds and dual-listed shares, followed in subsequent years. Those measures were part of the agenda for reforming China's state-owned enterprises (SOEs) in the early period of opening up. The most significant step in opening up China's domestic capital market was the introduction of the Qualified Foreign Institutional Investor (QFII) scheme in 2002. The aim of the QFII scheme was to utilise the international experience of QFIIs in order to standardise various rules and regulations in the A-share market, introduce financial innovations into the domestic market, and allow domestic financial institutions to learn from their foreign counterparts the leading theories and practices in the international financial markets and the "value investment" philosophy advocated by the QFIIs. In 2007, China implemented the Qualified Domestic Institutional Investor (QDII) scheme, allowing domestic institutional investors to invest in overseas markets. The QDII system enabled domestic investors to allocate their assets throughout the world. One of the driving forces behind the introduction of the QDII was the huge amount of foreign reserves and the resulting inflationary pressure on the domestic economy. The government wished to channel the outflow of capital in an orderly manner through the QDII scheme and to reduce the pressure on reserve accumulation. Currently, all qualified domestic commercial banks, insurance companies, fund companies and securities companies can conduct QDII business. In short, so far, the B-share and H-share markets and the QFII and QDII schemes are the main channels for opening securities transactions under China's capital account.

Unlike stock markets, China's fixed income securities markets remain tightly closed to foreign investors. Non-resident investors are not allowed to perform any transactions locally in China's bond and other renminbi-denominated debt instruments in the medium term.

Renminbi-denominated overseas bond issuances, mainly in Hong Kong, were first launched in June 2007, for the very limited amount of USD 10 million by three Chinese banks.

Controls over the banking sector

China's control over the entry of foreign banks has been gradually liberalised since the first branch of a foreign bank, the Nan Yang Commercial Bank's Shenzhen branch, was established in 1981. However, most of the regulations and laws on foreign financial institutions were established later, beginning in 1994. A landmark year in the opening-up of China's banking sector was 1996, when foreign banks in China were allowed to engage in the business of selling and purchasing foreign exchange for Foreign Fund Entrepreneurs (FFE) and to become authorised banks dealing with foreign exchange. This was the first step towards opening renminbi-based business to foreigners.

China's commitment to joining the World Trade Organization has played an important role in the opening-up of its banking sector. In 2001, China agreed to lift all geographical and business restrictions for foreign banks in the following five years. The relaxation of banking business has brought about a sharp increase in China's foreign bank claims since 2003. At the end of March 2008, China's top three foreign claims were by banks in the United Kingdom, the United States and Japan. By the end of 2007, 193 banks from 47 countries and regions had set up 242 representative offices in China. In addition, foreign banks in China included 24 wholly foreign-owned banks (with 119 branches), two joint venture banks (with five branches and one subsidiary), three wholly foreign-owned finance companies, and 117 branches set up by 71 foreign banks from 23 countries and regions. The assets of foreign banking institutions amounted to CNY 1.25 trillion, accounting for 2.4% of the total banking assets in China. By the end of 2007, 25 locally incorporated foreign banks and 57 foreign bank branches were licensed to provide renminbi business, and 50 foreign banking institutions were granted permission to engage in derivatives transactions (CBRC (2007)).

Because China has dismantled most of its capital controls, internationalisation of the renminbi can be conducted accordingly. For example, China may still need to control foreign borrowing by residents, but it should encourage non-residents to borrow from China with their liabilities denominated in the renminbi. The issuance of "Panda" bonds by non-residents is a case in point. It seems that the breakthrough can be achieved by encouraging non-residents to raise funds through the issue of renminbi-denominated bonds, regardless of the final currency the borrowers wish to hold. If the borrowers need US dollars, they can first borrow in renminbi by issuing Panda bonds and then use the proceeds to buy the US dollars held by Chinese residents. Similarly, backed up by cross-currency swaps, consortia can be organised among Chinese commercial banks and renminbi loans can be provided to foreign banks in need of US dollars. In short, there are plenty of ways of promoting the international use of the renminbi without totally dismantling capital controls. In other words, a balance can be struck between internationalisation of the renminbi, which implies a more efficient use of financial resources and less exchange risk for domestic firms, and financial stability.

Conclusion

To correct the long-lasting global imbalance under the shadow of the global financial crisis, the world needs to reform the current international financial architecture where the US dollar dominates. In doing so, currency diversification is inevitable. While the euro has already become a competitor to the dollar, the Chinese renminbi is hoping to become another, given the fact that China is now the world's number four economy in terms of nominal GDP, number three in terms of trade, and number one in terms of growth. A greater use of the renminbi internationally will be a balancing factor in global financial stability. Moreover,

renminbi internationalisation is also desirable for China, although experiences of other currencies indicate that currency internationalisation is never cost-free.

The success of renminbi internationalisation is dependent on market forces, well designed routes and strategic thinking. The process of internationalising the renminbi can start by boosting cross-border usage of the currency in terms of denominating trade and financial transactions. Region-wide use of the renminbi will be the natural outcome of its coverage of more areas of China's neighbouring countries. Regionalisation of the renminbi could also be the result of policy-driven processes by various means, such as: issuing renminbi bonds (government and corporate bonds); encouraging the use of the renminbi as an invoicing currency in China's free trade agreements (FTAs); signing up currency swap (bilateral and multilateral) agreements using the renminbi as the means of payment; and increasing the use of the renminbi in the regional monitoring system. In the medium and long term, regionalisation of the renminbi will be an inevitable step towards its internationalisation.

Domestic parallel developments are also inseparable from the success of renminbi internationalisation. Among many aspects, the following are crucial: realising full convertibility of the renminbi; liberalising the domestic financial system; achieving greater flexibility of the renminbi exchange rate; strengthening China's financial system; developing domestic money, bond and equity markets; setting up an advanced settlement system; and making the necessary adjustments to the legal system.

Apart from economic aspects, political factors are equally important for the internationalisation of the renminbi, which, to a large degree, depend on China's peaceful rise, Japan's reaction to China's increased influence in Asia, and the United States' reaction to China's global ascent.

References

Cassola, N (2000): "Monetary policy Implications of the international role of the euro", in "International financial markets and the implications for monetary and financial stability", *BIS Conference Papers*, no 8, Basel, pp 75–91 (www.bis.org/publ/confer08d.pdf).

China Banking Regulatory Commission (2007): *2007 Annual Report*.

Chinn, M and J Frankel (2005): "Will the euro eventually surpass the dollar as leading international reserve currency?", *NBER Working Papers*, no 11510.

Duisenberg, W (2000): "The international role of the euro", keynote address at the *European Banking Congress*, Frankfurt, 17 November 2000.

Executives' Meeting of East Asia Pacific Central Banks (2006): "Working group on financial markets: review of the Asian Bond Fund 2 initiative", June 2006 (www.emeap.org/ABF/ABF2ReviewReport.pdf).

Frankel, J (1999): "No single currency regime is right for all countries or at all times", *NBER Working Papers*, no 7338, September.

Greene, J (1991): "Currency convertibility and the transformation of centrally planned economies", *IMF Occasional Papers*, no 81, 1991.

Iwami, T and K Sato (1996): "The internationalization of the yen: with an emphasis on East Asia", *International Journal of Social Economics*, vol 23, issue 10/11, pp 192–208.

Kenen, P (1983): "The role of the dollar as an international currency", *Group of Thirty Occasional Papers*, no 13, New York.

——— (2009): “Currency internationalization – an overview”, paper presented at the BoK/BIS seminar on *Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific*, Seoul, 19–20 March.

McKinnon, R and G Schnabl (2004): “The return to soft dollar pegging in East Asia. Mitigating conflicted virtue”, *International Finance*, no 0406007.

Michalopoulos, G (2006): “The internationalization of the euro: trend, challenges and risks”, in V Alexander and H-H Kotz (eds), *Global divergence in trade, money and policy*, Edward Elgar Publishing.