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Internationalization of Renminbi: What does the Evidence Suggest?

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We investigate the possibility of the Chinese currency, Renminbi (RMB), becoming a dominant international currency. Using a qualitative analysis of the volume of trade and financial transactions, especially cross-border exchanges conducted in RMB from 1980 to 2011 as well as Beijing's recent move to globalise its currency we found that RMB fares well as a candidate to become a dominant international currency. While China's 'sub-optimal' approach in this regard has had marked success in the neighborhood but the RMB's global success as a reserve currency will depend on how Beijing reforms its financial system. Nevertheless, given the rapid changes in the global economy, market forces might prompt RMB's arrival much earlier than the schedule. Further, the paper indicates that the world is perhaps heading towards an era of multiple currency reserve system whereby the RMB could play greater role in the global economy along with the USD, the euro and the Japanese yen.

Keywords: Internationalization of currency, Renminbi, USD, global financial hub.

Field of Study: International finance; Open economy macroeconomics

JEL Code: F31, F36, F41

1. Introduction

China's spectacular economic growth has been the hallmark of global economy for the past few decades.[1] While there is a debate if China can maintain its current high growth rates in years to come, the dragon magic is not ending anytime soon.[2] The rise of China's currency, the Renminbi (RMB), seems to be the single most important phenomenon in the global finance in this decade. The RMB is a relatively young currency compared to today's dominant coinage, the United States dollar (USD).[3] The USD, also known as greenback, that gained momentum as an international currency after the collapse of the Bretton Woods System in 1973, celebrated its 150th birthday in July last year.[4] The RMB was first introduced in 1949 shortly before the communist takeover of the Mainland to fight the hyperinflation that plagued the Middle Kingdom under the Kuomintang government (Financial Times 2008). Ever since the opening up of the Chinese economy in the late 1970s the RMB has mostly been kept undervalued as part of Beijing's mercantilist policies supporting the country's over three decades of export boom.[5] Several studies show that the RMB is significantly undervalued, however, in recent years the currency has appreciated vis-à-vis the USD and other key currencies.[6]

Presently, owing to a number of factors - both internal and external - China has taken several steps to internationalize its currency. While most East Asian economies kept their currencies undervalued during their early stages of development, Beijing's persuasion of similar policy that 'suppresses the consumers and rewards the producers'

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is believed to be a cause of strain in the global economy (known as global imbalances).[7] This is largely due to the sheer size of its exports volume. The burgeoning financial imbalances have created some political tensions between Beijing and Washington and the former has been under pressure to revalue of its currency upward, particularly against the USD.[8] Nevertheless, China itself now recognizes that the country's current growth model that relies excessively on exports and investment has to be rebalanced placing a greater emphasis on consumption growth.[9]

Further, with its growing share of GDP, trade and financial resources in the global economy China needs to develop its financial system as well as internationalize its currency to diversify financial risk that it currently exposed to owing to excessive reliance on other reserve currencies.[10] The long term decline of USD (Figure 1) is a worry for the Chinese savers as a significant part of their savings are being kept in USD denominated assets (Figure 2). This also has a historical precedence that internationalization of the pound sterling and the USD followed by the economic rise of Great Britain and the United States- although the Japanese yen is an exception to some extent.

That said, this paper examines the status and prospect of internationalization of the RMB. After introductory remarks in Section 1, we discuss theory and literature on international currency in Section 2. Section 3 touches upon the methodology. Section 4 enumerates the findings. The underlying factors that have prompted China to internationalize its currency are analyzed in this section. It also focuses on various measures Beijing has undertaken to make RMB a regional as well as global currency. Finally, the last section offers some concluding remarks and outlines limitations of our study.

2. Review of Theory and Literature on International Currency

Before we discuss the underlying factors behind Beijing's motive to make the RMB a global currency, it is imperative to know what makes an international currency and what benefits internationalization of a currency can yield for the issuing country.

2.1 What Makes an International Currency?

To internationalize a currency it has to accord three key functions beyond its territory. The currency in consideration, the RMB, has to be used outside of China as a unit of account, a medium of exchange and a store of value. Table 1 briefly depicts the role of an international currency as well as where the RMB stands as far as an international currency is concerned.

A set of variables will determine if the RMB can eventually emerge as a truly global currency like the USD performing these core functions. These are: the size of China's GDP, its volume of trade, macroeconomic stability, convertibility of the RMB, a well developed and liquid financial system and a stable political system in Mainland. Let us examine how China fares on these benchmarks.

With over US$5 trillion GDP in real exchange rates (US$10 trillion in purchasing power parity terms) China is the world's second largest economy after US. Moreover, China's growth story is far from over. Indeed many economists, notably Nobel Laureate Robert Fogel, have argued that China's economy could expand to a few folds larger than its current size in the next few decades overtaking the US economy (Fogel, 2010). Numerous projections also depict a similar picture (Pricewaterhousecoopers (2011), Lee (2010), and Pew Research Center (2011).

Table 1: Functions of an International Currency and the Stride of the RMB

	Private Use	**Official Use**
Medium of exchange	vehicle currency: invoicing trade and financial transactions, settlement currency	vehicle currency: intervention currency in the foreign exchange market
Unit of Account	quote currency (denominating trade and financial transactions)	anchor of the other currency's exchange rate
Store of Value	investment currency (portfolio allocation) or currency substitution (private dollarization)	reserve currency (international reserves)
Status of RMB as an International Currency		
	Private Use	**Official Use**
Medium of exchange	*Some*	*None*
	The RMB is being used to settle some cross border trade and financial transaction outside the Mainland.	No Central Bank used the RMB for foreign exchange intervention
Unit of Account	*Some*	*None*
	The RMB is being used to denominate some cross border trade and financial transaction outside the Mainland.	No country has pegged their currencies to the RMB
Store of Value	*Some*	*Starting*
	RMB Deposits, Bonds and Derivatives are avaialble in Hong Kong	Central banks can start to accumulate RMB reserves

Source: Based on Hartmann (1998) and Yongding(2011).

China also ranks second after America in terms of trade volume. China accounts for 10 percent of world exports and 8 percent of imports. China's total trade in goods and services amounted to US$2.98 trillion in 2010.[11] The Mainland's trade surged following its accession to the WTO in 2001.

While China's current focus is to stimulate internal demand, this is not necessarily at the cost of its external demand. So, the Mainland's trade volume is likely to augment in tandem with its economic expansion. Firm exchange rate and low inflation tend to increase confidence in the currency as a store of value. As noted in a research paper by investment bank UBS AG (UBS, 2009) a reserve currency must be perceived as sound and must provide a stable purchasing power. China's macroeconomic indicators have been fairly stable in emerging markets' benchmarks. However, how Beijing moves towards a free and a market-determined exchange rate mechanism remains to be seen.

Finally, as Robert Mundell observed in 1998, 'when a state collapses, the currency goes up in smoke' (Mundell, 1998). It is difficult to predict the future political structure and associated uncertainty (or stability) in China but the Mainland has to maintain its internal political stability in order to make the RMB an international currency.

Notwithstanding all this, to internationalize the RMB, two economic and financial deficits need to be looked into. First, China's financial systems are not developed and liquid enough to facilitate efficient and low cost financial intermediation through a wide range of financial instruments. According to the International Monetary Fund (IMF), this is critical for two reasons. Firstly, deep foreign exchange markets facilitate in conducting foreign exchange policies, managing foreign exchange reserves, and hedging currency risks effectively. Secondly, what is also important is the depth and liquidity of themarket for underlying financial assets (especially government securities), which would furthersupport financial asset transactions denominated in the reserve currency (International Monetary Fund, 2010). In this context the financial assetsshould be liquid (narrow bid offer spreads in normal and stress times), establish a full yield curve (to be able tomanage duration and curve positioning), and offer a range across different credit qualities (to achieve thedesired level of credit risk) (International Monetary Fund, 2010). One of the reasons why the USD is the most globalised currency is due to its deep and liquid financial system.

While China is lagging behind in this regard,[12] its aim to make Shanghai a global financial center by 2020 could change its existing financial system catering to the need for its currency internationalization (HengSeng Bank, 2009). Second and more importantly the Chinese currency is not fully convertible due to a plethora of restrictions as far as its capital account is concerned. We discuss this issue in some length in the last section.

2.2 Benefits and Costs of Currency Internationalization

Theoretical argument concerning internationalization of a currency is largely based on a trade-off between the benefits arising from network externalities and the associated diversification losses (Matsuyama *et al.,* 1993). Cohen (2011) identifies five broad gains as far as internationalization of a currency is concerned. They are: reduction in transaction cost, international *seigniorage* income, macroeconomic flexibility, leverage and reputation.

Internationalization of a currency can benefit the residents and businesses of the issuing country as they can do business abroad in home currency (such as trade invoicing, issuance of bonds and other securities) lowering the exposure of exchange rate risk. The benefits of a vehicle currency as a solution to a problem of transactions costs are discussed in Krugman (1980) and Black (1991).

Seigniorage is the difference between the value of money and the cost to produce it. The benefit of running an international currency is international seigniorage.[13]Rogoff (1998) estimates that the foreign holdings of the US dollar were roughly 50 percent of the total stock of US currency outstanding and the flow of this international seigniorage to the US is estimated to be approximately 0.1- 0.2 percent of GDP. Similar seigniorage benefits under different scenarios for the USD and the Euro are estimated in Papaioannou and Porte (2008).

There are other benefits that a country can derive by internationalizing its currency. Research suggests that the ‘liquidity premium’ deriving from currency internationalization is in the range of 20-90 basis points (Papaioannou and Porte, 2008).[14] While a universal feature of international currency is the predominance of one currency in settling international trade and managing global finance, the US Dollar has had enjoyed a unique advantage of being a dominant global currency in financing its balance of payments deficits- what Valéry Giscard d'Estaing, the former French Minister of Finance, called “exorbitant privilege” (Mckinsey Global Institute, 2009). The US has had a long history of running large current account deficits without facing a major balance of payments crisis - largely financed by the debt securities (liabilities) held by foreign central banks.

The currency internationalization, however, does not come without cost. The major cost is the issuance country's monetary policy independence can be significantly restricted. As Robert Mundell observed that it is incompatible with the simultaneous pursuit of a fixed exchange rate combined with unfettered capital mobility and a domestically oriented monetary policy (also known as "impossible trinity"). [15]

Another major cost is that the issuance currency is subject to depreciation risk. As Kenen (2009) noted that "a country whose currency and domestic currency instruments are widely held abroad may suffer a large depreciation of its currency if foreign holders come to believe that the country's asset prices may fall sharply."

There have been a few studies focusing on RMB's internationalization status. They include Allen and Overy (2011), Chen and Cheung (2011), Cohen (2011), Deutsche Börse Group (2011), HengSeng Bank (2009), Hong Kong Monetary Authority (2011), Lardy and Douglass (2011), Lee (2010), Li (2007), Park (2010), Park and Song (2011), Subacchi (2010) and Yam (2011). We discuss them as we go along in Section 4.

3. Methodology

We adopt a qualitative approach in order to determine the status of RMB as a potential global currency. We conduct trend analysis of some important financial market indicators, such as USD-RMB exchange rates, nominal major currencies dollar index, China's holding of short-term and long-term US securities, currency composition of official foreign exchange (allocative) reserves,and RMB deposits. We use secondary data ranged from 1980-2011.

Our analysis comprises of two parts:

First, we investigate whether there are any underlying factors behind internationalization of the RMB; if yes, what are those factors?

Second, we investigate at Beijing's response to the global demand of an international currency.

We approach the first issue (underlying factors behind internationalization of the RMB) from a few angles-

i) Historical data for Chinese foreign exchange reserves against US dollar;
ii) China's position in external financial assets, direct investment and portfolio investments abroad;
iii) China's holding of short-term and long-term securities;
iv) Potential long-term economic decline of other currencies, especially the US dollar;
v) Potential for other currencies (such as Euro and Japanese yen) to rise as an international currency; and
vi) Role of technology and financial liberalization facilitating room for multiple international currencies.

As discussed in section 4.1 below, the above-mentioned factors are a driving force for China to offer a new international currency.

On the second issue (Beijing's response), first we investigate Beijing's initiatives to regionalize the RMB. We look at settlement of trade through RMB, development of offshore RMB bond markets and currency swap agreements. We also analyze data from bilateral trade settlement in RMB and role of the Bank of China in implementing these bilateral agreements. Second, we investigate the possibility of Hong Kong becoming a global financial hub; we analyze data for Hong Kong's RMB trade settlement, RMB bond market, RMB-denominated debt and RMB deposits. Third, we analyze the sub-optimal strategy of the Bank of China, including capital control of the RMB. Finally, we analyze China's "gradual approach" towards capital account convertibility and discuss the drawbacks of China's underdeveloped capital markets and unbalanced growth in financial structures.

Section 4.2 below covers Beijing's response to global demand for a new international currency.

Based on our findings in sections 4.1 and 4.2, we then draw a conclusion on RMB's potential for becoming an international currency, which is discussed in section 5.

4. Results/Analysis

4.1 Underlying Factors behind Internationalization of the RMB

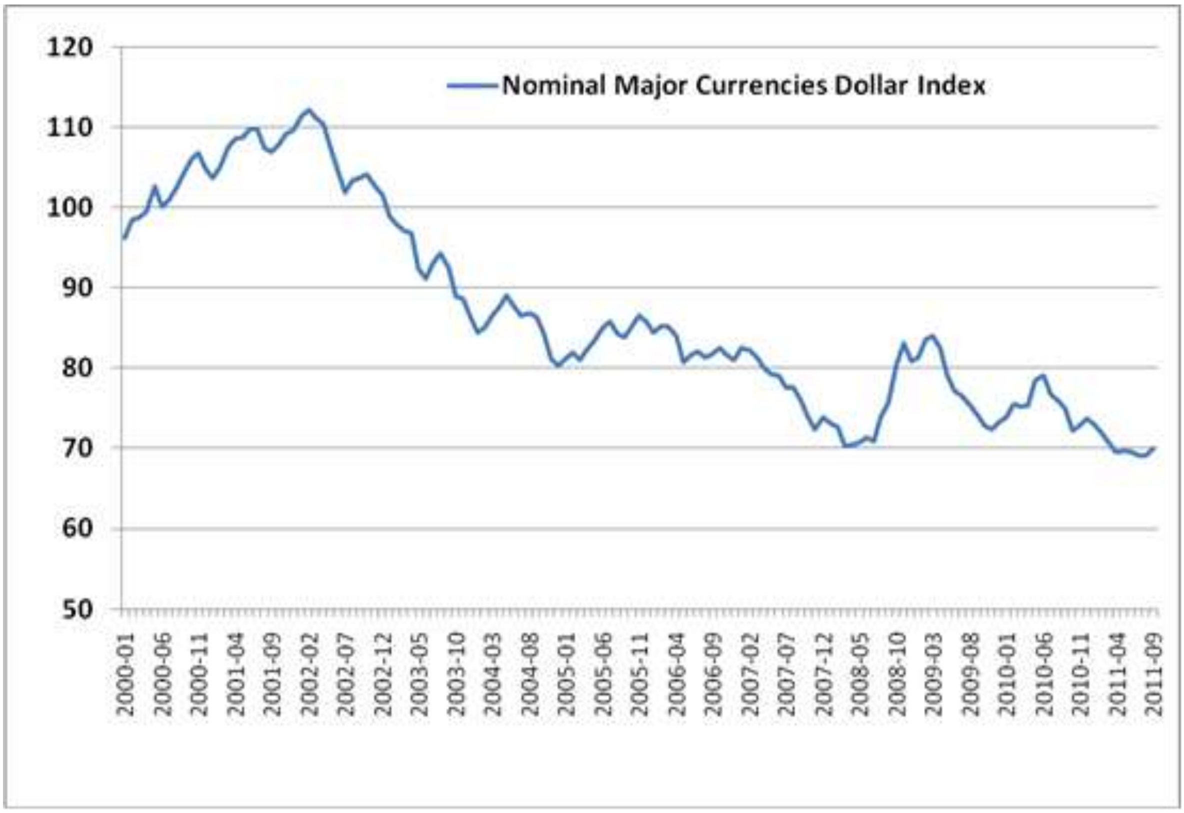
Why is a non-convertible currency such as RMB drawing so much global attention? The simple answer is that the ongoing debt and other economic malaise in America and Europe do not bode well for their currencies. On the other hand, China's better economic outlook including its projected overtaking of America as the world's number one economy as early as within this decade has accelerated the ascendance of the RMB much earlier than one could have anticipated even a couple of years back. This is not to say that today's monetary *lingua franca* the USD will be replaced by the RMB or any other currency anytime time soon but its dominant position may erode over time (Eichengreen, 2011 and Wall Street Journal, 2011).

That said there are a number of internal and external factors requiring China to internationalize its currency. First, while China's exchange rate policies have served its mercantilist objectives well for decades, they have been achieved at some cost. Beijing's policies 'to suppress its consumers and rewards its producers' and its unique demographic setting generated twin surpluses - current and capital (financial) accounts in the economy leading to accumulation of gargantuan foreign exchange reserves (US$3.2 trillion as of June 2011).[16] This excess saving is being recycled in mainly US dollar and to a lesser extent Euro denominated assets, among others.[17]

According to the State Administration of Foreign Exchange (SAFE), China, at the end of March 2011, China's external financial assets hit US$4.8 trillion, a rise of 17 percent over the same at the end of 2010. Among the external financial assets, direct investments abroad totaled US$317.4 billion, portfolio investments accumulated to US$263.5 billion, other investments reached US$698.3 billion, and reserve assets stockpiled US$3115.6 billion (State Administration of Foreign Exchange, 2011).

Whirling in the 'dollar trap', Beijing is worried about the long-term decline of the USD (Figure 1) that could markedly depreciate China's accumulation of USD denominated assets. China's holding of USD assets is over 2 trillion; these include nearly US$1.6 trillion short-term and long-term treasury securities (Figure 2). Internationalization of the RMB will require China holding less USD denominated assets minimizing the risk of capital losses on its foreign-exchange reserves. However, this cannot be done hastily. Beijing intends to diversify its reserves away from the USD without wiping out their value.

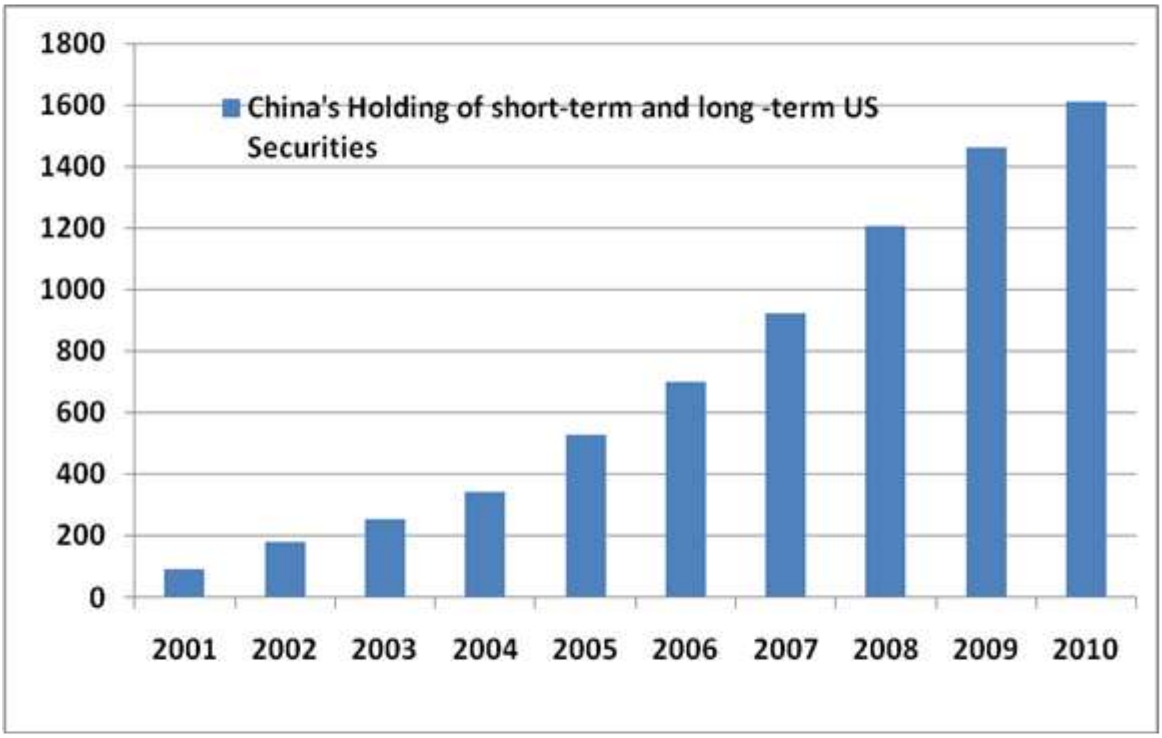
Figure 1: Nominal Major Currencies Dollar Index: January 1990-September 2011



Source: Based on Foreign Exhcnage Rates- H.10 *Federal Reserves.*

Another notable feature is that while the global official reserves has reached nearly US$ 9 trillion, the share of unallocative reserves is rising even faster vis-à-vis allocative reserves. It is believed that China accounts for most of the unallocative reserves (International Monetary Fund, 2011). Second, denominating and settling trade contracts in the RMB could allow Chinese firms to forego foreign exchange risk without incurring any hedging costs.

Figure 2: China's Holding of Short-Term and Long-Term US Securities (in billion US$)



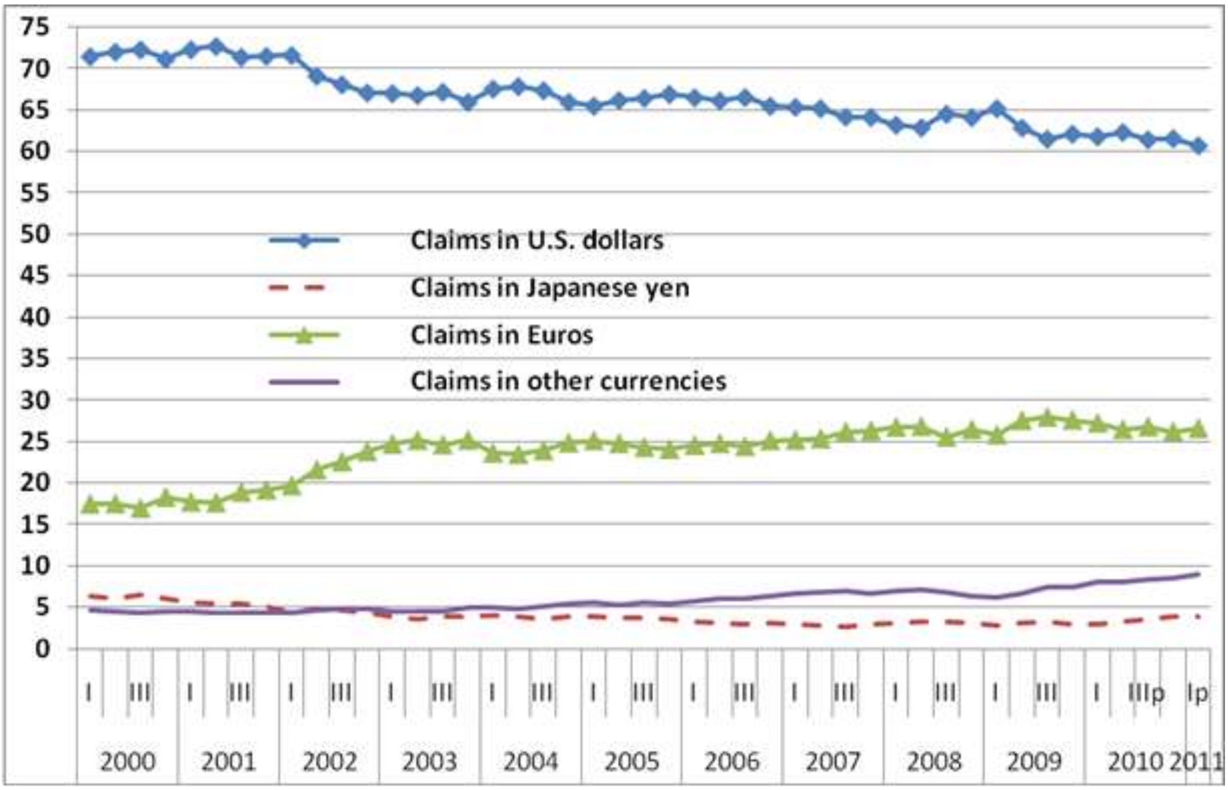
Source: United States Department of the Treasury, 2010

Third, the potential long term economic decline of US, Japan and Europe and the spectacular rise of emerging markets, rapid advancement of technology, financial sector reforms around the world might dawn an era for multiple reserve currencies. China may possibly lead the way facilitating room for other key emerging market currencies including the Indian Rupee in the not too distant future.

While no single currency is currently in a position to replace the role of the USD, America's abuse of its 'exorbitant privilege' has created some serious structural economic problems that could gradually decrease the USD's global role as a store of value, a unit of account and a medium of exchange (Eichengreen, 2011). Markets are questioning the USD's role as the principal international reserve currency and standard medium of exchange. As can be seen in Figure 3 the dollar's share as a top reserve currency is falling gradually - in the past one decade its share declined from over 70 percent in 2000 to 60 percent in the first quarter of 2011. It is in this changing scenario that Zhou Xiaochuan, the Bank of China President, urged the replacement of the USD as the world's reserve currency with a diversified basket of major currencies controlled by the IMF (Xiaochuan, 2009).

Finally, for almost half a century until the advent of the Euro in 1999 and the current rise of emerging markets, the USD had no real credible competitor. Japan had the best chance to challenge the USD. However, the focus of Japan's industrial policy was based on, among others, competitive exchange rate policy. Along with this the economy's two-decade long stagnation (also known as 'lost decades'), very high debt-to-GDP ratio and adverse demography have been the key reasons behind the yen's less than expected role in the global economy. Moreover, for historical and geopolitical reasons, most Asian countries were reluctant to use the yen for trade or financial transactions (Lee, 2010).[18] The currency accounted for only 8 percent of total global reserves at its peak in 1991 (International Monetary Fund, 2010).

Figure 3: Currency Composition of Official Foreign Exchange (allocative) Reserves (% share)



Source: International Monetary Fund, 2011

A broader interest in the yen is challenged by Japan's protracted economic slowdown. This also poses a challenge for another dominant currency, the Euro. The euro, as Barry Eichengreen has observed, is a currency without a state (Eichengreen, 2011). With a heterogeneous political structure there is no credible executive branch to address the risks the currency is exposed to. This became quite clear during the recent recession. Notwithstanding this, the role the euro wants to play in global trade and finance also deserves a mention. As the current European Central Bank President states, 'the euro was always perceived as a necessary step to accomplish the European single market, rather than to be an international competitor for the USD (International Monetary Fund, 2010). The euro has remained the second most important reserve currency after the USD since its inception. It accounts for roughly a quarter of global reserves (Figure 3). However, owing to the less than effective functioning of the currency union, the continent's potential long term decline and adverse demography may not elevate, if not decline, its status from that which it currently enjoys.

The rise of emerging markets is evident not only in their growing share in global GDP or stability in their macroeconomic indicators. In the past decade there have been a number of unprecedented developments as far as emerging market currencies are concerned. First, currencies of most emerging markets have been remarkably stable in the past decade. Many observers call this a paradigm shift for emerging markets that earlier saw their currencies losing value vis-à-vis the USD and other major currencies.

Second, since 2001 the currencies of emerging markets have substantially outperformed the USD, including interest payments on deposits (UBS, 2009). Third, most emerging markets have independent central banks with explicit inflation targets. Their governance structure has also improved markedly. Fourth, the rising share of emerging markets in global GDP has increased the expectation of currency appreciation in these economies.

As observed by UBS AG, due to this development it is inevitable that more trade will be invoiced in currencies other than the USD, especially if those currencies start to be seen as stores of value in their own right, with an adverse effect on the Greenback (UBS, 2009).

Additionally, technology is also facilitating room for multiple international currencies. As Eichengreen notes 'that not so long ago, there may have been room in the world for only one true international currency (Wall Street Journal, 2011). Given the difficulty of comparing prices in different currencies, it was sensible for exporters, importers and bond issuers all to quote their prices and invoice their transactions in dollars, if only to avoid confusing their customers. Now, however, nearly everyone carries hand-held devices that can be used to compare prices in different currencies in real time.'

Some argue that the elimination of capital controls has removed the USD's unique status as the principal medium of exchange in retail markets.[19] Tourists no longer need to have USD travelers' cheques as credit cards invoiced in other currencies (Brazilian Lira, for instance) are universally accepted.

The growing distrust in major currencies like the USD, the Euro and the yen is making other minor semi-internationalized currencies (Figure 3) and alternative mode of reserves (store of value) popular as far as store of value is concerned. Special Drawing Rights (SDR) and gold are two such asset classes that received much attention following the financial crisis. However, being quasi-liquid assets their role in global finance is limited. Neither SDR nor gold is used to invoice or settle trade.

There is a discussion on the inclusion of the RMB in the basket of currencies that forms the SDR, a monetary unit of international reserve assets maintained by the IMF.[20] The SDR currencies that many call "quasi-money" or "funny money" are selected based on the size of the exports and free usability of the currency. To be included the RMB has to be a convertible currency. The culmination of all these events has created some room for the RMB to play a greater role in the region as well as internationally.

4.2 Beijing's Responses to Make the RMB a Global Currency

As discussed given the changing global scenarios as well as its own necessities China has launched a number of projects to internationalize its currency. However, this has little international precedent as no country has ever attempted to globalize its currency when its interest rates are still administered, credit is directed, exchange rate is (*de facto*) non-market determined, the currency is partially convertible and capital is controlled. Nevertheless, all these conservative policies helped China maintain a relatively low inflation and the economy has been resilient to external shocks.

Past experience shows that currency convertibility generally preceded internationalization and in some instances (the Japanese yen and the Deutschmark) full convertibility did not even lead to full internationalization. Nevertheless, Beijing wants to regionalize as well as internationalize its currency in three stages: price and settle international trade, as an investment vehicle and as an international reserve.[21] A number of specific projects have been initiated in this connection. These are: settlement of trade through the RMB, development of offshore RMB bond markets and currency swap agreements. A pilot cross-border settlement agreement between Hong Kong and five of China's large trade cities including Shanghai and Guangzhou was launched.[22] The scheme subsequently broadened in June 2010 to include 20 provinces. Banks in Hong Kong, Macau and ASEAN can participate in China's pilot scheme for RMB cross border settlement. The objective is to facilitate settlement of trade goods and services related transactions.

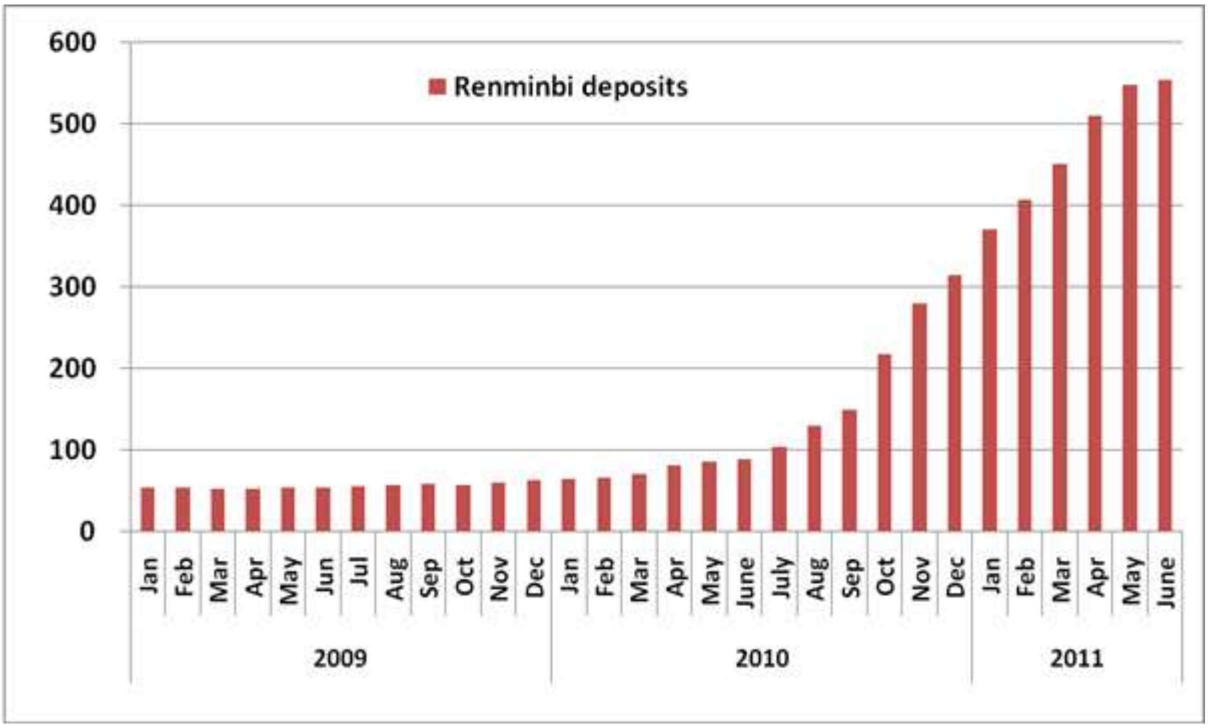
By the first quarter of 2011 seven percent of China's total trade was settled in the RMB (Financial Times, 2011). Indeed, of late the RMB has emerged as a *de facto* currency of settlement and payment in most of its neighboring countries namely Russia, Vietnam, Thailand, Myanmar and North Korea. Moreover, to ensure the availability of RMB liquidity, the People's Bank of China (PBoC), the country's Central Bank, has signed currency swap agreements worth over RMB 800 billion (US$130 billion) with a number of countries including South Korea, Malaysia, Belarus, Indonesia, Argentina, Iceland, New Zealand, Singapore, Mongolia, Uzbekistan and the southern Chinese territory of Hong Kong (Deutsche Börse Group, 2011). This will allow China to receive RMB instead of USD in exchange of its goods.

These facilities could be extended to other countries with which China has extensive trade relations. Some analysts foresee that almost US$2 trillion worth of cross-border trade can be settled in RMB. A number of recent academic papers argue that the internationalization of China's currency could lead to the creation of a *de facto* RMB currency bloc in East and Southeast Asia (Park and Song, 2011 and Park, 2010). This is largely due to China's emergence as the largest exports and the second largest imports market for developing Asia; over 40 percent of China's imports originate from its neighbouring countries and over 20 percent exports are directed to them. Much of the trade in East Asia can be settled in RMB. China is also the center of the East Asian production network and there are huge inflows and outflows of FDI in the region.

There is, however, one major concern. In the absence of a market-determined Chinese exchange rate and strong expectation for RMB appreciation, importers of the Mainland's products may not be very comfortable using the RMB as a settlement currency. Foreign exporters, however, have much incentive to receive RMB.

Hong Kong is the epicenter of Beijing's attempt to make the RMB an international currency; it has become a dual currency city of late as its own currency is pegged to the USD. The Mainland has been placing much emphasis on its special administrative region to make it an offshore RMB trading hub since 2004. Indeed, in many ways - from political freedom to financial products experiments - Hong Kong is the Mainland's laboratory. Singapore is also in the race to make the city-state an off-shore RMB trading hub. Renminbi trade settlement conducted through Hong Kong banks reached RMB800 billion in the first half of 2011 which is more than double the figure for 2010 (Hong Kong Monetary Authority, 2011). RMB deposit accounts in Hong Kong are growing exponentially - amounting to over RMB550 billion by the end of June 2011 (Figure 4) with corporate accounts for 71% of the total deposits (Hong Kong Monetary Authority, 2011).

Figure 4: Renminbi Deposits in Hong Kong (in RMB billion Yuan)



Source: Hong Kong Monetary Authority, 2011

The development of the RMB bond market is critical for the internationalization of China's currency, particularly to set the benchmark 'risk-free' interest rate for RMB debt. Foreign investors are allowed to invest in RMB-denominated bonds, known as the *dim sum bond* in Hong Kong.[23] The Asian Development Bank sold RMB1.2 billion (US$180 million) of RMB-denominated debt. Corporate houses and banks are issuing similar bonds. In the first six months of 2011, thirty eight entities issued RMB bonds in Hong Kong amounting to RMB42.7 billion (Hong Kong Monetary Authority, 2011).

Given the limited investment opportunities for RMB depositors, financial actors in Hong Kong are devising several products beyond *dim sumbonds* to cater to the demands of investors who are seeking higher returns from their growing RMB deposits. The first RMB-dominated initial public offering (IPO) outside mainland China opened in Hong Kong in April 2011. There is much appetite for RMB-denominated structured and derivative products.

The number of participating banks in Hong Kong's RMB clearing platform stood at 180 at the end of June, of which 157 are subsidiaries and branches of overseas banks and overseas branches of Mainland banks, creating an RMB payment and settlement network covering over 30 countries globally (Hong Kong Monetary Authority, 2011).

The PBoC is allowing the foreign enterprises to raise RMB funds in offshore RMB markets and repatriate them back to the mainland as FDI. The enterprises in China can remit RMB out of the Mainland for outward direct investments. There is also a proposal to allow offshore RMB funds to invest in the equity and bond markets on the Mainland through qualified foreign institutional investors.

However, China's progress as far as its currency internationalization is concerned is still limited to the region. Some experts regard the gradual regionalization (some called it 'Asianisation of renminbi') of the RMB as a sub-optimal target vis-à-vis the complete internationalization of the RMB (Subacchi, 2010). China's immediate priority appears to be regional rather than international. In other word, the regionalization of the RMB seems to be an intermediate step towards complete internationalization.

Nonetheless, the offshore development of a currency can be achieved with limited convertibility of the concerned currency. Drawing on the evidence of the Eurodollar market in the 1960s and 1970s experts argue that full capital account liberalization is neither necessary nor sufficient for substantial offshore use of a currency (Dong and McCauley, 2010). That said, no currency has ever been internationalized before its capital account has been fully liberalized. This is also necessary to make the RMB a vehicle currency in a third country outside of East Asia.

Then why is China pursuing a gradual liberalization policy with regard to its capital account convertibility? The reason, as discussed, is that China's financial system is not mature enough to absorb shocks associated with the mobility of foreign capital and associated exchange rate volatility, *inter alia*. Moreover, there is a strong export lobby in Beijing that opposes a rapid convertibility of capital account as such a move could appreciate RMB exchange rate, costing export competitiveness. Furthermore, keeping the offshore and onshore markets separated – but within the same country – will enable China's supervisory authorities to monitor the flow of external funds between offshore and onshore accounts, and to avoid the huge influx of funds that could shock domestic financial markets (Subacchi, 2010).

The final point of discussion is Beijing's position concerning full capital account convertibility which is the way forward to make the RMB a monetary *lingua franca* like the USD. With simulation results Lee (2010) shows that "once the RMB were to become more convertible, the currency can gradually grow to become an international currency within the region and beyond—sharing from about 3% to 12% of international reserves by 2035." [24] The author also observed that, as we stressed in section II, since other major currencies stagger, the RMB may rise more quickly as an international currency than many anticipate.

Apparently, the authorities are committed to taking the necessary measures with regard to capital account convertibility for the RMB gradually, as stated in its12th five-year plan (2011-2015) [China Daily, 2010]. The goal is also implicit in the State Council's objective of making Shanghai a global financial center by 2020 (Mu and Seng, 2010). China has made some progress with regard to its capital account convertibility since its entry into the WTO in 2001. This has been heightened of late when Beijing adopted some concrete measures to make Hong Kong an RMB offshore market, as discussed in this section. However, China's capital controls remain highly restrictive even in comparison with other emerging markets (Chinn and Ito, 2007) and (Lardy and Douglass, 2011).

According to theclassification by the IMF of the total of 40 capital account transaction items falling into seven categories, those that remain strictly controlled in China mainly relate to cross-border transactions of financial derivatives (Yam, 2011).[25] The other items are all, to a significant degree, convertible; the extent of RMB convertibility in the capital account has been substantially raised. The authority's position in this regard is that China would steadily relax the restrictions on cross-border capital transactions, refine the monitoring and analytical system on cross-border funds as well as on the foundation of effective and timely monitoring of information, and risks being kept manageable, realize step by step RMB convertibility for capital items.

China's gradualism policies concerning capital account convertibility are understandable. The theoretical argument is that capital account convertibility increases the efficiency of allocation and use of capital which in turn enhances the effectiveness of financial intermediation eventually promoting economic growth and development (Fischer, 1998). However, empirical evidence does not always support the theory in this regard (Stiglitz, 2000). Even the IMF justifies the imposition of capital controls under certain circumstances (The Guardian, 2011).

Nevertheless, Beijing's move towards full capital account liberalization has been marred by a few factors: lack of a strong domestic banking system, relatively underdeveloped domestic financial markets and absence of market-determined equilibrium exchange rate. Administrative interest rates and directed credit are the two major drags in China's domestic banking sector. If China liberalized the capital account under the existing conditions, the banks might be forced to raise deposit rates to prevent potential large outflows of deposits that could trigger a liquidity crisis for the banking system (Lardy and Douglass, 2011).

Another key drawback is China's relatively underdeveloped and unbalanced growth of the capital market and other financial structures. This is particularly important for full convertibility of the capital account. Moreover, well developed capital markets can be an additional source of funding for the corporate sector driving more competition in the banking sector. China's current administered interest rate regime bars this from happening. A deep and liquid capital market can manage high volume of capital inflows and outflows absorbing the risks associated with capital movements. Furthermore, China has to allow markets to determine the RMB exchange rate eventually, also known as equilibrium exchange rate. In the absence of sound financial systems the economy could be subject to volatilities owing to the linkages between capital flow and exchanges rates.

5. Conclusion and the Way Forward

The RMB's ascendance as a potential global reserve currency is mainly attributed to four factors. First, the ongoing shift in global economic structure in favour of emerging economies led by China is making the way for a number of new reserve currencies. Second, China's own economic restructuring that places higher emphasis on 'internal demand' as a source of growth requires its exchange rate to be determined by the forces of market. The third reason that has close association with the preceding one is that with its current growth model that generate excessive savings forces China to rely on the USD and other reserve currencies to store their wealth. The long term outlook of those currencies does not fare well. Fourth, rapid advances in technology are making room for more than one dominant currency.

The global economic structure is changing rapidly with a large number of advanced economies such as the United States, Eurozone economies and Japan losing their economic dominance and some of the large emerging markets gaining.[26] Given the historic nexus between economic rise and fall of economic powers and the associated role of their currencies, the ongoing economic restructuring does not bode well for today's dominant reserve currencies. While the USD remains the supreme global currency and no single currency is currently in a position to challenge its role, the greenback might lose its preeminent position in global trade and finance owing to a number of factors, as discussed in the paper. The euro's journey to become the world's premium currency has been largely shattered by the ongoing economic and debt crises in Europe. Even if the currency survives as the zone's single currency, the long run prospects of euro do not look good owing to the continent's adverse demography. Japan's industrial policy bared the yen to be a truly global currency. Now owing to similar demography of Western Europe and long term economic decline, its role in the global economy is not likely to increase.

While the emerging markets are still long way to go as far as their currency internationalization is concerned, with their economic rise, increasing share in global trade, economic reform, financial market development and stable macroeconomic environment their currencies could play greater role in the global trade and finance in the near future. This is reflected by the fact that the currencies of most emerging markets have been remarkably stable in the past decade and most emerging markets economies are in long term appreciation trends vis-à-vis the USD and the euro. Additionally, technology is also facilitating room for multiple international currencies that we discussed briefly in the preceding sections.

The world is perhaps heading towards an era of multiple currency reserve system whereby the Chinese currency could play greater role in the global economy along with the USD, the euro and the Japanese yen. Subsequently, some other emerging market currencies could follow the RMB. However, the question is how soon RMB would become an international currency performing the three key tasks? The Chinese currency has already fulfilled two important criteria (size of GDP and trade volume) as far currency internationalization is concerned. However, currency internationalization generally followed by the concerned economy's emergence as an economic power. That means there is always a considerable time lag.

While the currency internationalization is the result of market choice, not the outcome of government's intervention, in the case of China both forces are playing critical role given the economic structure of the country. As discussed, Beijing responding to the market forces as well as its own need has taken several measures to regionalise as well as internationalize its currency. China initially wants to make RMB a popular trade settlement currency in East and Southeast Asia. Eventually this can be extended to other regions, especially Africa and Latin America with whom China has extensive trading and strategic relations. This sub-optimal approach is perhaps appropriate at this stage as the development of China's financial sector and other structural changes could take much time in supporting the internationalization process of RMB.

China has signed a number of currency swap deals with central banks in the region as well as other parts of the world. It is also making Hong Kong a RMB trading hub to increase RMB liquidity and products. The well developed financial markets of Hong Kong are being used to devise numerous RMB products such as bonds to set the benchmark 'risk-free' interest rate for RMB debt. A number of other leading financial centers, particularly Singapore and London, are keen to develop RMB trading hubs eventually competing with Hong Kong given the growing business interest in the Chinese currency.

Nevertheless, success of RMB internationalization is still limited to the region, particularly bordering countries of the Mainland. This is largely due to China's sub-optimal approach with regards to its currency internationalisation. First, its financial markets remain relatively underdeveloped. Secondly, the Chinese generally prefer to adopt 'slow and steady' approach when it comes to undertaking major changes what they call it 'crossing the river by feeling the rocks'.

Going forward the key challenge for China is to encourage the usage of RMB beyond the region. This can only be done by making RMB freely convertible in terms of capital account. While there are a large number of restrictions placed on its capital account transactions, China is committed to relaxing them in line with its financial markets reforms which is again closely associated with its plan to make Shanghai a global financial hub by 2020.

Nevertheless, given the rapid changes in the global economy owing to debt and other economic malaise in the US and Europe, market forces might prompt RMB's arrival much earlier than the schedule to fill up the vacuum that is being created in the global trade and finance as far reserve currency is concerned.

In this study we assessed the current status and prospect of RMB becoming a global currency in the near future. Although we found a good potential for RMB to challenge USD as the world's currency, our findings in no way indicate RMB becoming a substitute for the USD at least for the next few years. Another limitation of our study is that it is based solely on qualitative analysis, which left out some economic indicators (data) and their linkages in this dynamic global economy. Hence, our findings need readers' discretion.

Endnotes

[1] China is the only country that sustained over 9 percent GDP growth rates for three consecutive decades since 1980 (*World Development Indicators*, World Bank). Indeed no country could achieve what China demonstrated through sustained GDP growth rates for such a long period in the history of modern economic growth.

[2] See Beware the Middle-Income Trap: China's Roaring Growth Cannot Last Indefinitely, *The Economist*, 23 June 2011.

[3] The USD accounts for 85 per cent of all foreign exchange transactions (as two currencies are involved in each transaction, currencies share amounts to 200 per cent, instead of 100 per cent). The greenback is the dominant currency in all four classes of foreign exchange markets- forwards, spot, option and swaps. Moreover, the USD remains the most important currency for invoicing and settling international transactions. It accounts for almost half of the global stock of international debt securities. Central Banks around the world hold more than 60 per cent of their foreign exchange reserves in USD (Eichengreen, 2011, p.2, Papaioannou and Porte, 2008), and Wall Street Journal, 2011).

[4] Indeed Greenback's spectacular rise has prompted many to call it not just America's currency; it's the world's (Wall Street Journal, 2011).

[5] The RMB experienced gradual appreciation vis-à-vis the USD until 1997. The currency was pegged to USD (8.27 RMB per USD) from 1997 to 2005. However, the RMB appreciated over 25 percent since it was de pegged in 2005. Beijing re-pegged its currency with USD in 2008 when the global crisis intensified. The currency, nevertheless, is now allowed to be determined by the market forces to some extent, known as 'managed float exchange rate' system.

[6] Apart from the *Economist*' the Big-Mac index there are a number of studies that show that the Chinese currency has been significantly undervalued (Council for Foreign Relations, 2010). However, since China resumed a managed appreciation in June 2010, the currency has risen over 6 per cent against the USD (See The Wages of China Bashing, *TheEconomist,*07 September 2011).

[7] Nevertheless, there is a debate over whether the existing imbalances are caused by China (Claessenset al., 2010, Yongding, 2007, Wyplosz, 2010, and McKinnon and Schnabl, 2009).

[8] The United States and European policy makers often blame China for an undervalued RMB, which they argue is the major cause of China's huge trade surplus (Rodrik, 2009 and Washington Post, 2011).
[9] Development of high-end manufacturing and service sectors is the key in this regard (Business Times,2010, Financial Times, 2011, and Prasad, 2009).
[10] For a brief account on China's financial repression, see Lardy (2008); and for the nexus between China's exchange rate regime and its financial system, see Linden (2010).
[11] The top three merchandise exporters in 2010 were China ($1.58 trillion, or 10 per cent of world exports), the United States ($1.28 trillion, 8 per cent of world) and Germany ($1.27 trillion, 8 per cent of world) and the top three merchandise importers were the United States ($1.97 trillion, 13 per cent of world imports), China ($1.40 trillion , 9 per cent of world) and Germany ($1.07 trillion 7 per cent of world (World Trade Organization, 2011).
[12] China's foreign exchange, equity and bond markets are much smaller than that of the United States, Euro Zone and Japan.
[13] For theoretical literature on seigniorage see Neumann (1992).
[14] That investors demand when any given security cannot be easily converted into cash, and converted at the fair market value.
[15] Nevertheless, the currency internationalisation does not necessarily involve the removal of all restrictions on capital movements.
[16] China's demographic transition has been slightly, if not substantially, different than its East Asian neighbours. Thanks to its one-child policy the Mainland's working age to non-working age ratio has been very high leading to lower dependency ratio and exceptionally high savings rates.
[17] This fundamental disequilibrium in global finance is being captured in global imbalances literature. See Claessens*et al.* (2010).
[18] While the geo-political aspect of the internationalization of RMB is beyond the scope of this paper, citing the example of Japan some opined that "despite its growing economic and financial influence, it is doubtful whether other Asian countries are prepared to submit to a regional hegemony. It could depend on how the PRC's political system and regional geopolitics evolve over time."
[19] As observed by many analysts, in 1980, exchange controls were a norm, even in the advanced economies of Japan and Australia, now most countries have substantially reduced or eliminated these controls (UBS, 2009).
[20] The basket comprises four currencies; namely, the USD, the Euro, the pound sterling and the Japanese Yen weighing 41.9, 37.4, 11.3, and 9.4.4 percent respectively. See Chen and Cheung (2011, p.5).
[21] Nevertheless, it is argued that currency internationalization is the result of market choice, not the outcome of government's encouragement (Li, 2007).
[22] For details see Hong Kong and Shanghai Banking Corporation Limited, "RMB Cross-borderTrade Settlement", available at http://www.hsbc.com.cn/1/2/commercial-banking/international-banking/rmb-trade-settlement; accessed 23 February 2012.
[23]Named after the bite-size delicacies served in Hong Kong tea houses.These bonds are attractive to both investors and issuers (Allen and Overy, 2011).
[24] Lee (2010) estimates the international reserve currency demand function which shows that the RMB's lowest standing in the rank of an international currency is strongly related to its capital account restrictions.
[25]By the end of 2004, looking at China's position in respect of the 43 items of transactions in the capital account specified by the International Monetary Fund, a self-assessment by SAFE indicated that 11 items were convertible, another 11 items were subject to relatively few restrictions 15 items were subject to relatively more restrictions and 6 items were strictly controlled (Yam, 2011, p.13). For a brief summary of restrictions on major capital transactions in China, see Yam (2011, pp. 10-13).
[26] See Power shift: Emerging vsDevelopedEconomies, *The Economist*, 4 August 2011. Also see Foreign Affairs 2008, "The Rise of China and the Future of the West", January-February 2008.

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