Renminbi Internationalization:
A Journey to Where?

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ABSTRACT

The renminbi is currently undergoing a process of internationalization which has raised fundamental questions about the evolution of the international monetary system and the dominance of the US dollar. In this paper, we assess how far the renminbi has travelled down the internationalization road and analyse the possibilities for it challenging the role of the US dollar in the future. We utilise Cohen's taxonomy to document the current dimensions of renminbi internationalization. Looking forward, we briefly summarize three common approaches to analyse currency internationalization and propose a new approach. We argue that renminbi internationalization should be seen as a response to crises, first the Asian Financial Crisis and then the Global Financial Crisis. As such, we argue, current internationalization has been driven by short term problem solving rather than a coherent long term strategy. The current path is best described as one of 'currency normalization' rather than 'currency dominance'.

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Paul Bowles and Baotai Wang

1.0 Introduction

Evidence of China's growing role in the international monetary system can readily be found as the recent eurozone request for a contribution from China to the European Financial Stability Facility testifies. Backed by its $3.2 trillion foreign exchange reserves China is well placed to exert increasing influence over evolution of the international monetary system. This system is currently dominated by the US dollar as the international reserve currency. This paper analyses whether the US dollar's dominant position is likely to be threatened by the rise of the renminbi.

This question has certainly garnered much recent attention with business and press reports both inside and outside of China suggest that the renminbi is, in Yu Yongding's (a former member of the Monetary Policy Committee at the People's Bank of China) words, on a "journey to the world". It is a journey which he sees as both "necessary" and "inevitable".[2] Yu's analysis came on the heels of an HSBC report which saw the renminbi becoming the third major international trade settlement currency, overtaking sterling, and joining the dollar and the euro.[3] Jumping from trade settlement currency to international reserve currency, another HSBC report boldly predicted that "if there is to be rival to the dollar as the world's reserve currency in the 21st century, it surely must be the Chinese renminbi." and it foresaw a "financial revolution of truly epic proportions."[4] Subramaniam has endorsed this bold prediction and argues that "the renminbi could become the premier reserve currency by the end of the decade, or early next decade."[5]

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[1] Our thanks to Greg Chin for his comments and many discussions about this topic. Thanks also to Brian MacLean for his helpful comments. We acknowledge funding from SSHRC.

[2] Yu Yongding, "The Renminbi's Journey to the World", *Caijing*, 31 May, 2011.

[3] HSBC expects the renminbi to become the third largest trade currency of the world, *News Release*, 19 July, 2011.

[4] Qu Hongbin, Sun Junwei, and Donna Kwok, "The Rise of the Redback: A guide to Renminbi Internationalization", *HSBC Global Research*, November 2010.

[5] Arvind Subramaniam, "Renminbi Rules: The Conditional Imminence of the Reserve Currency Transition", Peterson Institute for International Economics, *Working Paper 11-14*, September 2011, p.1

In less bullish terms, Chinese President Hu Jintao told the Wall Street Journal that "the current international currency system is the product of the past … But making the RMB an international currency will be a fairly long process."[6] Former People's Bank of China Governor Dai Xianglong predicted that it would be 15 to 20 years before the renminbi became an international currency (although he made no prediction about it becoming the *premier* international currency).[7]

There is much interest – and speculation – therefore in the future role the "redback" will play. If the renminbi does challenge, or more strongly replace, the dollar as the international reserve currency then a global monetary power shift of epic proportions would most certainly have taken place. But jumping from currency internationalization to currency dominance is a big jump and one which needs careful analysis. In this paper, we assess the "journey to the world" with the intent of determining where this journey's destination is likely to be.

To make an assessment requires, firstly, an understanding of what it means to be an international currency. Here, Cohen's (1971) taxonomy of the three functions and six dimensions of an international currency provide an excellent (and the standard) starting point. In the next section we apply this taxonomy to the renminbi. This provides us with an understanding of the current state of renminbi internationalization based upon which we are able to make an assessment of how far along the "journey to the world" the renminbi has now travelled. We argue that, despite the recent rapid increase in the international use of the renminbi, the journey thus far has only just left the station.

To go beyond the description of how far the renminbi has travelled to date, we also need to address the question of why the journey is being undertaken at all. This will enable us to chart its possible future destination. In Section 3, we start by briefly identifying three existing approaches to this question which we term the determinants, the historical and the cost-benefit approaches. We then propose a fourth approach which takes as its starting point the fact that renminbi internationalization policies have been introduced in response to crises. Contextualising these policies in this way enables us to tease out the factors which we believe are the most important in shedding light on the renminbi's future journey.

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[6] Q & A with Hu Jintao, *Wall Street Journal*, January 18, 2011

[7] See http://www.ce.cn/macro/more/201106/26/t20110626_22503311.shtml

Based on this, we argue that the progress to renminbi internationalization to date, as befits crisis responses, is based on short-term problem solving rather than a coherent long run strategy. As such there are contradictory policies in operation which will need substantial adjustment if the path of renminbi internationalisation is to challenge the role of the dollar in the international monetary system. Our analysis leads us to support the proposition the end point of the renminbi's journey is more likely to be 'currency normalisation' than 'currency dominance'.

2.0 Currency internationalization: The taxanomy applied to the renminbi

To understand the extent of the renminbi internationalization journey travelled thus far, the taxonomy of currency internationalization developed by Cohen (1971) and presented in Table 1 below, provides a useful departure point for analysis.[8] It shows the three functions of money and how an international currency would serve these functions for both official and private agents thereby giving us six dimensions for investigation.

Table 1: Dimensions of International Currencies

Function of Money	Official	Private
Store of Value	International Reserve	Investment currency (including currency substitution)
Medium of Exchange	Currency for foreign exchange intervention	Settlement currency for trade in goods and financial assets
Unit of Account	Anchor for currency peg	Denomination currency for trade in goods and financial assets

We now examine what role the renminbi plays in each of these six cells, starting firstly with the three official functions and then moving on to the private functions.

2.1. International reserves.

At present the renminbi (RMB) plays only a limited role as an official international reserve currency. The reason for this is straightforward: as a non-fully convertible currency, central banks have little incentive to hold the renminbi as an official reserve currency. Nevertheless, some have begun to do so. The first to do so was the central bank of the Philippines which accepted the RMB in 2006 as a reserve currency. Following the Philippines, Belarus, Malaysia, Korea, and Cambodia have also used the RMB as a reserve currency. Furthermore, on September 6, 2011, Nigeria announced that it would

[8] Cohen, B. J., (1971), *The Future of Sterling as an International Currency*, London: Macmillan. See also Kenen, P. (1983), "The Role of the Dollar as an International Reserve Currency", *Occasional Papers No.13*, Group of Thirty.

continue its strategy of diversification of foreign exchange reserve, and keep 5% - 10% of its total foreign reserves in the form of RMB and/or the RMB denominated assets.[9]

Parallel to this development, there has also been discussion of the possible use of the RMB as part of the SDR, the international reserve asset created in 1969 by the IMF to supplement its member country's official reserves. The SDR is not itself a currency but can be exchanged for any freely traded currency. The value of the SDR is determined by a basket of currencies which consists of the US dollar, yen, euro and pound sterling. The composition of the basket is reviewed by the IMF every five years and, at its last review in November 2010, the RMB was touted for inclusion.[10] However, the lack of full capital account convertibility for the RMB meant that it was not included. The next review will be in 2015.[11]

2.2 Intervention currency

The main way in which the RMB has become an official foreign exchange intervention currency is through the bilateral swap agreements which have been entered into by the People's Bank. These have come in two phases, the first as part of Chiang Mai Initiative in the wake of the Asian Financial Crisis in 1997 and the second in the wake of the Global Financial Crisis in 2007.

Between 2001 and 2004, China entered into bilateral currency swap agreements with six members of the Chiang Mai Initiative (Thailand, Japan, South Korea, Malaysia, Philippines and Indonesia) worth US$ 23.5 billion.[12]

In the second wave of agreements, China has signed bilateral currency swap agreements with twelve countries, including some from outside of the region, totaling approximately US$ 130 billion and shown below in Table 2.

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[9] *Financial News*, September 7, 2011. In interviews with senior officials in November 2010 we were told that several European countries had contacted the People's Bank to discuss holding renminbi official reserves.

[10] Zhou Xiaochuan, Governor of the People's Bank of China, ahs denied that China asked for the renminbi to be part of the SDR and said that China was not "particularly anxious" for this to happen. He believed that it was just "a matter of time" before it would happen anyway. See http://finance.ifeng.com/news/macro/20110909/4564351.shtml

[11] For a critique of the IMF's position not to include the RMB in the SDR basket see Huang Zhilong, "Reasons for SDR's Exclusion of RMB Don't Hold Water", Paper presented at the Second Global Think Tank Summit, June 25-26, 2011, Beijing.

[12] See Gao and Yu , "Internationalization of the Renminbi", *mimeograph*, 2009: 4. The agreements were the Philippines and Indonesia were subsequently amended in 2007 and 2006 respectively.

Table 2: Currency Swap Agreements to entered into by the People's Bank since 2008

Date	Central Bank	Value (RMB bn)	Maturity	Cumulative Total (RMB bn)
12/12/2008	South Korea	180	3 Yrs	180
01/20/2009	Hong Kong	200	3 Yrs	380
02/08/2009	Malaysia	80	3 Yrs	460
03/11/2009	Belarus	20	3 Yrs	480
03/23/2009	Indonesia	100	3 Yrs	580
04/02/2009	Argentina	70	3 Yrs	650
06/09/2010	Iceland	3.5	3 Yrs	653.5
07/23/2010	Singapore	150	3 Yrs	803.5
04/18/2011	New Zealand	25	3 Yrs	828.5
04/19/2011	Uzbekistan	0.7	3 Yrs	829.2
05/06/2011	Mongolia	5	3 Yrs	834.2
06/13/2011	Kazakhstan	6.5	3 Yrs	840.7

Source: People's Bank of China

2.3 Anchor currency

The renminbi is not used as an anchor currency by any countries. One possible candidate might be the Hong Kong dollar, currently pegged to the US dollar, given the increasing economic integration of the two economies and the political status of Hong Kong as a Special Administrative Region of China. However, Article 112 of Hong Kong's Basic Law states that "no foreign exchange control policies shall be applied in the Hong Kong Special Administrative Region. The Hong Kong dollar shall be freely convertible… The Government of the Hong Kong Special Administrative Region shall safeguard the free flow of capital within, into and out of the Region." This would make pegging to a non-freely convertible currency difficult to say the least. Despite concern over the current US dollar peg in the face of a depreciating dollar, therefore, there is unlikely to be any change.

Many countries in the region have managed float exchange rate regimes.[13] However, only one, Singapore, operates a managed float with against an anchor basket of currencies. The composition and weights of currencies in the basket are undisclosed but market analysts typically estimate the weights to be US dollar 60%, yen 25% and euro 15%.[14]

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[13] See, IMF, *De Facto Classification of Exchange Rate Regimes and Monetary Policy Frameworks*, February 25, 2009.

[14] See, for example, "Singapore Currency Intervention Totaled $17 Billion, DBS Says", *Bloomberg Businessweek*, December 06, 2010

There would appear to be little if any role for the renminbi. Recently, however, there has been some research which suggests that the RMB is playing a larger role and it has been suggested that the renminbi may be playing some role as a regional anchor currency.[15] It should be noted, however, that the increasing correlations between the Asian currency index and the RMB could be due to the former increasingly tracking the latter or vice versa as the RMB has moved to more of a managed float and away from the dollar peg since June 2010. Higher correlations do not, in themselves, prove a regional anchor role for the RMB.

2.4 Investment currency

Moving to private uses of the renminbi as an international currency, renminbi denominated bond issues are occurring. The first stage of this was associated with the issue of bonds under the Asian Bond Fund (Phase 2) launched in June 2005. Under the auspices of this initiative, a Pan-Asian bond index fund denominated in eight national (or quasi-sovereign) currencies as well as eight local bond funds denominated in each separate currency were created. Both funds included China with a total value of US$ 1 billion allocated by the Executives' Meeting of East Asia and Pacific Central Banks (EMEAPC) Group to the Pan-Asian and local bond funds.[16]

Since then, renminbi denominated bonds have been issued in Hong Kong (so-called 'dim sum' bonds) for both government and corporate borrowers. Bond issues in Hong Kong totaled RMB 10 billion in 2007, RMB 12 billion in 2008 and RMB 16 billion in 2009.[17] The China Development Bank issued the first overseas RMB bond in 2007 and this was followed by other mainland bank issues as well as the first by an overseas borrower (HSBC) in 2009. In July 2010 liberalisation of the conditions for bond issuers were announced with no restrictions on types of issuer or volumes for offshore RMB bond issues. As a result, the value of bonds issued in the second half of 2010 equalled that (RMB 38 billion) of the previous three years.[18] In the first nine months of 2011, renminbi bond issues reached RMB 120 billion.[19]

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[15] See "Asian FX Gravitating to China", *HSBC Global Research, Asian FX Focus*, June 1. 2011.

[16] See Julia Leung, "Developing Bond Markets in Asia: Experience with ABF2", *BIS Paper No. 26*, February 2006, 74-79

[17] See Ming Zhang, "Offshore Renminbi (RMB) Bond Market is Poised to Expand Faster", *CASS Policy Brief 2011.003*, January 13, 2011.

[18] Philip Moore, "Offshore RMB: Capital Markey History in the Making" in Euroweek, *Offshore RMB Bonds: A New Global Market,* June 2011, p.5

[19] See *Hong Kong Business*, October 6, 2011 at http://hongkongbusiness.hk/financial-services/asia/proceeds-dim-sum-bond-reaches-rmb1202b-year

Since first issued in 2007, RMB bond issuers have included the Ministry of Finance, China Development Bank, China Export and Import Bank, Bank of China, Bank of Communications, China Construction Bank, HSBC (China), Bank of East Asia (China), Hopewell Highway Infrastructure Limited, McDonald's, Unilever, Tesco, the Royal Bank of Scotland, Volkswagen, the Asian Development Bank and the International Financial Corporation (the private sector arm of the World Bank). The World Bank itself issued its first RMB bond in January 2011 worth RMB 500 million.[20] Russia's JSC VTB Bank became the first 'emerging market' firm to issue renminbi bonds in December 2010.[21] While Hong Kong has been chosen by the Chinese government as the preferred issuing location, London, New York and Singapore are also being discussed in the media as possible future locations.

As well as the issue of renminbi denominated bonds, there are several other ways in which China's capital account has been opened for investment purposes. Firstly, the Qualified Investor schemes allow investors to engage in cross-border capital account transactions. The QFII (Qualified Foreign Institutional Investors) program began in 2003 and allowed approved foreign institutional investors to invest in China's capital market (mainly the stock market). The program was initially restricted to around a dozen investors but, as of July 2011, 115 foreign financial institutions had qualified status with most doing so in the past few years. In addition, the quota for an individual QFII was raised to US$ 1 billion in 2009 (from US$ 0.8 billion) although an individual QFII cannot hold more than 10% of the total stocks of any Chinese trading company.[22] These measures have partially opened the capital account and allow approved foreign institutions to convert foreign currency (typically US dollars) into renminbi for investment in the mainland stock market (through Special Account for A shares).[23]

More recently announced is the Renmibi Qualified Foreign Institutional Investor (RQFII) scheme, also known as 'mini-QFII'. This allows Hong Kong-based security companies to invest RMB in the A share market.[24] The initial quota for RQFII funds has been set at 20 billion yuan (approx. US$ 3 billion) and can be seen as a measure to increase the

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[20] See http://treasury.worldbank.org/cmd/htm/FirstChineseRenminbiBond.html

[21] Zhang *op cit*.

[22] See http://baike.baidu.com/view/24777.htm

[23] For discussion of capital controls in China see wendy Dobson and Paul Masson, "Will the Renminbi become a World Currency?", China Economic Review, 20, 2009, pp. 124-135.

[24] See Wang Duan and Lui Wei, "Two-Way Yuan Traffic Picking Up in Hong Kong", *Caixin*, 24 August, 2011. See also "RQFII Enhances HK's Role as Offshore RMB Centre", *Xinhua*, September 14, 2011.

internationalisation of the renminbi by facilitating a reverse flow of renminbi back into the mainland..

With respect to the QDII (Qualified Domestic Institutional Investors) program, the Bank of China was the first financial institution to sell QDII products in 2006. Under this program Chinese residents can invest in the Hong Kong stock market through approved mainland institutions. Now, the Industrial and Commercial Bank of China (ICBC), China Merchants Bank, and several funds also have QDII business, although QDII business has been very slow (because of high risk and low returns since the world financial crisis).[25]

Finally, in August, 2011, the Ministry of Commerce issued a (draft) notice on issues related to direct investment of cross-border RMB. It stated that foreign investors are permitted to make direct investments in China using RMB obtained from cross-border trade settlement in RMB (see below), or from holding RMB bonds and/or stocks. The conditions of making RMB direct investment include: the minimum amount is 0.3 billion RMB; the investment is restricted to (1) financing guarantees, financial leasing, microfinance, auction and other industries; (2) foreign investment companies, foreign investment in venture capital or equity investment firm; (3) the cement, steel, aluminum, shipbuilding and other national macro-control industries. The draft also made clear that foreign investors could not invest directly or indirectly in securities and financial derivatives.[26]

2.5 Trade settlement

The renminbi has been used unofficially in trade settlement with neighbouring countries for the past two decades. However, official sanction and promotion of this began in July 2009. The PBOC then launched a trade settlement service between Hong Kong and five mainland cities. 365 firms were selected to pilot the export settlement program. In June 2010, this was then extended to cover all foreign trade between 20 provinces and Hong Kong, Macau and ASEAN countries. The number of participating firms has increased to 67,000.[27] In August 2011, new regulations extended coverage to the entire country and

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[25] See http://baike.baidu.com/view/24795.htm

[26] See http://www.chinanews.com/cj/2011/08-23/3276134.shtml. The announcement coincided with Vice Premier Li Keqiang's visit to Hong Kong during which he announced new measures to stimulate cross-border renminbi use. These measures included allowing renminbi denominated FDI from Hong Kong, permitting non-financial institutions from the mainland to issue renminbi denominated bonds, expanding the renminbi cross border trade settlement scheme and accelerating Hong Kong banks' "cross-city" sub-branch openings in Guangdong. These measures were widely welcomed by the banking sector in Hong Kong which had complained about the low profitability of renminbi deposit holdings since there were limited uses for them. See Lulu Chen,"A Lift for HK Banks from Li's Measures", *South China Morning Post*, September 5 ,2011, B3.

[27] Moore, *op. cit*, p.5

most participating firms can now settle trade in RMB with any trading partner not just those in neighbouring countries.[28]

Renminbi accounts were first permitted in Hong Kong in 2004 and the permitted value of deposits has gradually been increased over time with major increases announced in 2009 as part of the trade settlement expansion program. The result has been a raid growth in renminbi deposits held in Hong Kong financial institutions. The total value of renminbi deposits increased by six fold between mid 2010 and mid-2011 as shown in Appendix Table 1. The largest increase has been in corporate deposits.[29]

2.6 Renminbi internationalization: how far?

The above discussion outlines some of the measures that have been taken to internationalize the renminbi. However, while recent initiatives have been very rapid it is still necessary to put the figures quoted in comparative context. To this end, it is important to note that:

(1) in terms of the currency distribution of global foreign exchange market turnover, the renminbi accounted for just 0.15% of the global total in April 2010 compared to the US dollar at 42.5%, the euro at 19.5%, the yen at 9.5% and the pound at 6.5%. The renminbi ranked 24th overall in daily turnover.[30]

(2) in terms of global foreign exchange turnover by currency pair, the US dollar/renminbi market was 1% of the total market in April 2010 compared to 28% for the US dollar/Euro and 14% for the US dollar/Yen markets.[31]

(3) the renminbi is used to settle approximately 8.6% of China's trade (3rd quarter 2011). This corresponds to 40.2% of Japan's exports which were invoiced in yen and 24.6% of its imports invoiced in yen in 2009.[32]

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[28] "China Extends Geographical Coverage of Cross-border Trade Settlement in RMB to Entire Nation", PBOC website, August 23, 2011.

[29] See Dong He, "The International Use of the Renminbi: Developments and Prospects", Special Lecture at the Columbia-Tsinghua Conference on Exchange Rates and the New International Monetary System, Beijing, 27-28 June 2011.

[30] Bank of International Settlements, *Triennial Central Bank Survey, Foreign Exchange and Derivatives Market Activity in April 2010, Preliminary Results*, Monetary and Economic Department, September 2010 p.9

[31] *Ibid*, p. 10

(4) according to a "back-of-the-envelope calculation" by Gao and Yu (2009: 7), "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."

(5) China's 'dim sum' bond issues in the first 9 months of 2011 are approximately 13% of Japan's international yen-denominated bonds over the same period.[33]

The implications of this are that renminbi internationalization, for all the headlines and rapid policy change, remains a long way from being in a position to compete with, let alone, replace the dollar.[34] The question, therefore, turns to a consideration of the future; what type of journey is the renminbi on? We consider this question in the next section.

3.0 The journey forward

In terms of sketching and assessing the prospects for the future of the renminbi, we can identify three main (but partly overlapping and often combined in practice) approaches have been taken in the literature to date.[35] We term these the determinants, the historical and the cost-benefit approaches.

The first approach looks at the determinants of an international currency and then assesses the extent to which China meets the requirements. For example, Frankel identifies economic size, confidence in the currency and depth of capital markets as the "fundamental determinants of international currency status."[36] While China might readily be accepted as a large economy and the stability of the exchange rate may be taken as an indicator of confidence in the renminbi, in Frankel's view, the absence of deep, open and

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[32] "Research Paper and Policy Recommendations on Ways to Promote Foreign Trade Settlements Denominated in Local Currencies in East Asia", Commissioned by the ASEAN Secretariat, February 2010, Institute for International Monetary Affairs.
[33] Authors' calculations. Based on yen bond data from http://about.bloomberg.com/pdf/gfi.pdf

[34] This conclusion is also reached by Xiaoli Chen and Yin-wong Cheung, "Renminbi Going Global", China and the World Economy, 19, 2, 2011, pp. 1-18 following a similar analysis.

[35] Space limitations mean that we summarize these approaches only in brief here using one or two representative papers for illustrative purposes.

[36] Jeffrey Frankel, "Historical Precedents for the Internationalization of the RMB", Written for a workshop organized by the Council on Foreign Relations and the China Development Research Foundation Beijing, November 1, 2011. Another paper adopting this approach is Friedrich Wu, Rongfang Pan, and Di Wang, "Renminbi's Potential to Become a Global Currency", China and the World Economy, 18, 1, 2010, pp. 63-81.

liquid capital markets in China means that "the renminbi will not be challenging the dollar for a long time."[37] In any case, even if the three determinants were favourable, it is unclear whether these are necessary or sufficient conditions for international currency status.

The second approach is historical examining how previous rising powers, most notably the US, transitioned to dominant status and how the dollar correspondingly replaced sterling as the dominant international currency. For example, Eichengreen and Flandreau argue that, contrary to the conventional wisdom that network externalities provide the lead international currency with a long period of insulation from challengers, that the US "went in only ten years from a position where the dollar had no place as an international currency and New York was a negligible source of finance for international trade to one where the dollar was at least sterling's coequal and New York rivaled London as a source of trade credit."[38] On the basis of this, they argue that "the renminbi's emergence may be quicker than widely presumed."[39] Eichengreen seems to have backed away from this somewhat in his most recent work and suggests that that the renminbi may become a regional reserve currency or a subsidiary reserve currency but not a dominant reserve currency any time soon.[40] Subramanian's reasons for predicting that the renminbi will become the world's premier reserve currency, quoted earlier, also use this approach. He argues that the economic dominance of the US over Britain was followed a decade later by currency dominance and that, applying the same criteria to contemporary China and the US, puts renminbi dominance a decade or so away from now.[41] Whether extrapolating from one historical case can produce a generalisable rule seems, to us, to be problematic.

The third approach provides a cost benefit analysis of currency internationalization and assesses whether, for China, the benefits are likely to exceed the costs on the assumption

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[37] While these three determinants are common in the economics literature, Helleiner has added that there may also be political determinants of international currency status. Political factors may enter indirectly, through affecting the three economic determinants identified above, or directly for reasons unrelated to economics but which are seen as politically important goals to countries. See Eric Helliener, "Political Determinants of International Currencies: What Future for the US dollar?", *Review of International Political Economy*, 15, 3, 354-78, 2008.

[38] Barry Eichengreen and Marc Flandreau, "The Federal Reserve, the Bank of England, and the Rise of the Dollar as an International Currency, 1914-1939", July 2010, p. 2. Paper prepared for the BIS Annual Research Conference, Lucerne, 24-25 June 2010.

[39] *Ibid*.p.2

[40] See Barry Eichengreen, *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*, Oxford: OUP, 2011, p. 147.

[41] *Op cit*. p.1

that future policy is guided by this type of calculus. Ago and Yu provide a list of the costs and benefits to China of renminbi internationalization.[42] The benefits include: (I) the reduction of exchange rate risk for Chinese firms; (ii) increasing the efficiency and development of China's financial institutions by enabling them to access a larger pool of resources; (iii) an increase in cross-border trade; (iv) the seignior age earned by the government as a result of non-residents holding renminbi, and (v) the preservation of the value of its foreign exchange reserves if more of China's claims on the US were renminbi denominated. Against this are the costs which include: (i) the need to substantially reduce capital controls which would have the potential to cause considerable instability in an over-monetized, inflexible economy with shallow capital markets; and (ii) increases the potential for speculative currency attacks. In the face of these benefits and costs, Gao and Yu answer their rhetorical question of whether China really wishes to internationalise the renminbi with the answer "both yes and no".[43] This approach has focused on the cost-benefit analysis to China; presumably also of importance is a cost-benefit analysis for the rest of the world in having the renminbi as an international currency which would also need to be taken into account.[44]

The three main approaches used to date are therefore inconclusive; the determinants approach points to a long time before the renminbi is likely to challenge the dollar, the historical approach suggests a relatively short period to renminbi dominance while the cost-benefit approach does not provide a clear policy guide either. Each also has their problems as we have suggested above. In order to shed further light on this contested question we propose a fourth approach.

We start from the fact that renminbi internationalization, and the measures outlined in the section 2, have arisen as a policy response to crises. As such, renminbi internationalization and the measures introduced to facilitate it need to be contextualized. As Gao and Yu correctly note, "the process of internationalization of the renminbi is ad hoc to say the least."[45] This arises precisely because the process has been a response to crises and has therefore been implemented to address short run as well as long run issues. Seen in this light, the process raises the following four key questions:

(1) What problems were caused by the crises and why were the renminbi internationalization measures seen as a solution to them?

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[42] Gao and Yu, *op cit*, 2009, pp. 8-11.

[43] *Ibid*. p7

[44] On this point, see also "Losing Control: The renminbi will be internationalized whether Beijing likes it or not", China Economic Review, February 2011.

[45] *Ibid*, p.7

(2) Do the measures adopted solve the problems adequately? The answer to this may be yes, no or that the problems were better addressed by other policy measures;

(3) Do the short term crisis measures adopted provide a coherent basis for long run renminbi internationalisation?

(4) Are the causes of the crisis likely to remain and hence the need for renminbi internationalization measures to continue?

We argue that the renminbi's journey forward depends on answers to these hitherto neglected questions. We consider each question further below.

3.1 Crisis problems and renminbi internationalization as a solution

The first crisis to which renminbi internationalization was seen as a solution was the Asian Financial Crisis in 1997. The speculative attacks on currencies and the contents of the IMF rescue packages spurred what Higgott termed the 'politics of resentment' in the region.[46] The regional response was the Chang Mai Initiative aimed at providing the region with its own institutional response to currency crises in the form of greater access to foreign currency by central banks in the region. China was initially at best ambivalent to this Japanese-led initiative but eventually joined in the regional initiative.[47] The currency swap agreements between 2001 and 2004 identified in section 2.2 as part of the Chang Mai Initiative were the result of this as China contributed to the regional solutions to possible future currency crises. The provision of a currency swap for countries in the region facing foreign exchange difficulties would enable the latter to continue to engage in trade and provide sources of reserves. For the renminbi swaps this was of limited utility to the extent that the renminbi was not fully convertible and hence of limited use in foreign exchange market interventions for central banks of crisis affected countries. Nevertheless, it did demonstrate an economic solidarity with countries in the region and played to China's self-interest in preserving stability in the region. While China, with capital controls and large reserves, might not be a target for foreign exchange speculators, it nevertheless had an interest in its regional neighbours not being easy targets either. The Asian Bond Fund (see section 2.4), launched in 2005, was an extension of the desire to provide deeper regional financial markets which could insulate countries from currency crises.

The second, and much bigger push for renminbi internationalization, came after the Global Financial Crisis in 2008. In fact, in interviews with senior officials in Beijing, we were told that prior to the GFC, renminbi internationalization was an issue which was of interest to academics but which had little interest for policy-makers. The GFC changed

[46] Richard Higgott, "The Asian Economic Crisis: A Study in the Politics of Resentment", *New Political Economy,* 3, 3, 1998, pp. 333–355.

[47] See Paul Bowles, "Asia's Post-Crisis Regionalism: Bringing the State Back in: Keeping the (United) States Out", *Review of International Political Economy*, 2002

all that as policy-makers were faced with a series of issues to which they were required to respond. A push for renmibi internationalization was one of the responses.[48]

Despite the fact that both crises are termed 'financial crises' they are, in fact, quite different. In the Asian Financial Crisis, it was speculative currency attacks that wreaked havoc in the region with Asian currencies falling and with China affected through falling export growth rates. The Global Financial Crisis also led to falling export growth rates for China but this time the concern was, from China's point of view, with a depreciating dollar as a result of US monetary policy and the potential inflationary pressures in China caused by hot money inflows in the expectation of renminbi appreciation.

Renminbi internationalisation measures following the Global Financial Crisis (GFC) therefore had different objectives from those of the Asian Financial Crisis period. The GFC measures were centred on two concerns: to reduce exchange rate risk for Chinese importers and exporters and thereby maintain trade volumes in the face of volatile international demand and, secondly, to reduce and diversify foreign exchange reserves so as to avoid capital losses on China's over $3 trillion foreign exchange reserves of which 60-70 per cent are estimated to be held in US dollar denominated assets.

These concerns were evident in the immediate aftermath of the crisis when the Zhou Xiaochuan, Governor of the People's Bank of China, proposed solutions to the financial crisis which included the increased use of the SDR as a super-sovereign currency. However, while eye-catching, it was part of a broader analysis of the causes of the financial crisis which centred on the combined influence of (i) failures of regulations on financial institutions which resulted in pro-cyclical regulatory regimes; (ii) asymmetric monitoring and surveillance on the part of international institutions which paid more attention to developing country policies than those in the advanced core, especially the U.S.; and (iii) the role of the US dollar as the international reserve currency.

With respect to the pro-cyclical nature of international financial regulation as a contributing cause, Zhou argued that herd behaviour of the rating agencies caused significant problems in that they all provided relatively high ratings to many subprime products only to then all downgrade their ratings simultaneously and swiftly.[49] Akin to a "sudden stop" of inflows causing a currency crisis, as happened in the Asia in 1997, this particular "sudden downgrade" caused a liquidity crisis for many financial institutions. The solution to this, according to Zhou, was that, "regulators need to encourage financial institutions to enhance internal rating capability to rely less on external ratings, and … central banks and regulators should impose requirement whereby use of external ratings should not exceed 50 per cent of business activities, at least for systemically important financial institutions. Internal capabilities should be developed to exercise independent judgment on credit risks at such organizations."[50]

[48] Interviews 110 and 610.

[49] Zhou, Xiaochuan, (2008), "Changing Pro-cyclicality for Financial and Economic Stability", *mimeograph*.

[50] *Ibid*

There are other features of the international financial architecture which Zhou also argued need to be reformed. Included in this are pro-cycle accounting procedures which follow the market in value assets and the pro-cyclical nature of the capital adequacy ratios required under the Basel II framework. For Zhou, China's own close supervision and recapitalization of its banking system together with its "limited exposure to overseas markets" has served it well.

To these regulatory failures, China's policy-makers also made the argument that a more fundamental problem arose from the role played by the U.S. dollar as both a domestic currency and the international reserve currency. Put briefly, the critique advanced by China's policy-makers is that an international currency which also serves as a domestic currency places the issuing country in a position where its actions may best serve its domestic interests to the detriment of the international system.

According to Chinese analysis, the international monetary system requires an international currency which meets three conditions: (i) stable over time and issued according to transparent rules; (ii) managed to meet global liquidity needs; and (iii) not subject to the interests of any one country.

The present system, and the dominant role of the US dollar, clearly did not meet these conditions. The dollar's instability, and its position as a credit-based national currency, is regarded as "a rare special case in history".[51] The US, according to Chinese analysis, deliberately kept interest rates low in the 2000s and allowed the US dollar to depreciate thereby putting its interests above those of the international system as a whole. For China, this resulted in particular policy challenges. Firstly, it meant that the value of its reserves was subject to downward threat. Secondly, as the US dollar depreciated in the 2000s, international commodity prices increased causing inflationary pressures in commodity importing countries such as China.

The role of the US dollar as the international reserve currency also prevented the US economy from undergoing the domestic adjustments that it required. The solution was seen as the greater use of a "super-sovereign" currency, in particular the SDR. This solution, and its announcement shortly before the London G20 Summit in July 2009 attracted widespread attention and served the purpose of countering, and diverting attention away from, the argument that it was China's "imbalances" which were to blame for the crisis.[52]

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[51] Zhou, Xiaochuan, (2009), "Reform of the International Monetary System", March 23.

[52] See, for example, Bernanke, B., (2007), "Global Imbalance: Recent Developments and Prospects", the Bundesbank lecture, Berlin, Germany September 11, http://www.federalresrve.gov/newsevents/speech/bernanke20070911.htm

While Zhou's pronouncements on the role of the dollar garnered much attention, the beginnings of renminbi internationalisation had less to do with the grand scheme of providing a global rival to the dollar and much more to do with the reaction to US monetary policy in general, and the Obama stimulus package and quantitative easing (QE) in particular. These latter measures were widely interpreted in China as being based, not on the need for additional liquidity in the US financial or corporate sector, but as a deliberate attempt to depreciate the value of the dollar.[53] It was this monetary policy stance by the US Fed that prompted increased renminbi internationalization measures in order to enable Chinese firms engaged in foreign trade to avoid currency risk and to attempt to limit the build up reserves of potentially further depreciating US dollars. Importantly, renminbi internationalization was also beneficial to key interests inside China. It was supported by the Ministry of Commerce as a way of helping the export constituency which it promotes. It also had the support of the People's Bank, which would be required to implement the measures required for renminbi internationalization, since it offered a mechanism to slow the build up of dollar denominated foreign exchange reserves by reducing the role of the dollar in trade settlement thereby reducing sterilization interventions and their inflationary consequences.[54] This convergence of interests between the Ministry of Commerce and PBOC, absent on many exchange rate issues, worked in favour of renminbi internationalization at this time.

The second phase of currency swap agreements outlined in 2.3 were concentrated on border countries but also sought to expand the range of countries covered beyond the Chiang Mia Initiative countries and were more focused on providing the means for central banks to cover trade settlement than they were to provide them with resources to fend off international speculators as was the intent in the first phase currency swaps.

The encouragement of the increasing use of the renminbi as a trade settlement currency, intended to reduce currency risk, spurred the growth of the offshore currency market in Hong Kong. The ability to open renminbi accounts in the SAR and the increase in the

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[53] See for example, Zhang Min, "The costs of RMB internationalization", *CASS RCIF Policy Brief, No. 09081*, November 17, 2009 for the argument that the stimulus package threatened dollar depreciation. In interviews with senior officials and researchers in November 2010, the international, rather than domestic, agenda of QE2 was stressed to us. Mark Carney, Governor of the Bank of Canada, has recently expressed the view that "the unspoken issue with quantitative easing writ large is the exchange rate channel." (See Kevin Carmichael, "Carney: QE's stealth effect is a weaker currency", *Global and Mail*, Thursday October 27, 2011). The issue was not "unspoken" in our meetings in China.

[54] It has also been argued that the GFC highlighted China's currency international asset imbalances and the need to reduce risks. The better management of these risks, the responsibility of the State Administration of Foreign Exchange, also made renminbi internationalization attractive. See Yin-wong Cheung, G. Ma, and R. McCauley, "Renminbising China's Foreign Assets", Pacific Review, 16, 1, 2011, pp. 1-17.

deposit limits facilitated this use. However, this still left unresolved what other, more profitable, uses holders of renminbi could find. The incentive to hold renminbi as a demand deposit attracted little interest payment but did offer the prospect of currency appreciation. However, other mechanisms were also needed to make the use of renminbi more attractive as a trade settlement currency.[55] This spurred the development of the 'dim sum' bond market, providing a financial asset for renminbi currency holders. The development of the QFII, QDII and RQFII programs also relaxed some capital controls.

3.2. Adequacy of measures adopted

The first phase of official currency swaps petered out without their significant use or enhancement. There are many reasons for the slowing of the Chang Mai Initiative including the rivalries between China and Japan, the receding fear of a subsequent currency crisis but perhaps the most important was the fact that countries in the region found alternative mechanisms to solve the problem posed by the threat of currency crises in the form of increased levels of official reserves. As has been well-documented, the post-crisis response in Asia involved a substantial increase in official foreign exchange reserves designed to be capable of withstanding future currency attacks at best and the need to resort to the IMF at least. Some countries, most notably Malaysia, also introduced capital controls to meet the same goals. Thus, the slow pace of Asian monetary regionalism and regional currency internationalization, including of the renminbi, post-1997 can be explained to a significant degree by the fact that countries found alternative ways of protecting themselves from the perceived threat.[56]

The post-GFC crisis renminbi internationalization measures have, as we have seen, been larger and more broad-based in terms of covering a wider range of currency internationalization dimensions. They have not, however, been without their problems as pointed out by a number of economists at CASS.[57] In particular, there has been a

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[55] While the Hong Kong financial sector has been pleased with its role as China's designated renminbi internationalization hub, it has nevertheless been concerned by that its renminbi deposits have increased but with few loan opportunities from which it can make profits. The sector has therefore been active in lobbying Beijing for greater flexibility in the use of renminbi funds. See Chen, *South China Morning Post, op cit.*

[56] For an alternative assessment which argues that there has been a significant regional response to the global financial crisis see Gregory Chin, "After the Global Financial Crisis: The Evolution of Asian Regionalism and Economic Globalization", September 2011. We view the measures adopted as too small, especially in quantitative terms, to represent a major regional response to the global crisis.

[57] The arguments presented here draw upon works from CASS's Institute of World Economics and Politics, namely, Yu Yongding (2011) "Rethinking the Road Map of RMB Internationalization", *CASS RCIF Policy Brief, No. 2011.056*, September 14; Zhang Ming (2011a) "Progress and Worries of RMB Internationalization", *CASS RCIF Policy Brief, No. 2011.006*, February 11; Zhang Min (2011b) "RMB Internationalization: the Perspectives of on-shore and off-shore", *CASS Working Paper Series, No. 2011W09*,

mismatch (known as the "crooked foot" in China) between the willingness of importers and exporters to use the renminbi as a trade settlement vehicle. It is estimated that 80-90 per cent of the use of the renminbi as a trade settlement currency has been by importers, that is, by mainland enterprises paying for imports with renminbi. Relatively few Chinese exporters have received renminbi as payment for their exporters. This could be interpreted as a short term imbalance caused by insufficient renminbi balances held overseas. However, this has been questioned since the holding of renminbi deposits off-shore is prompted, at least in part, by anticipation of currency appreciation and therefore its use as a trade settlement currency by overseas purchasers of Chinese goods is limited given that purchasers have the option of using (expected depreciating) US dollars as the settlement currency.

The importance of this mismatch, and the length of time for which it is likely to continue, is that it has it implications for the need for central bank intervention in the foreign exchange market and the size of China's reserves. The fact that importers are more willing to settle trade in renminbi than exporters means that there is a net increase in China's foreign exchange reserves since importers no longer require US dollars to settle trade while exporters still receive them. In this case, the PBOC must intervene to purchase the excess supply of dollars if it wishes to remove pressure for exchange rate appreciation. Zhang Bin (2011) estimates that for the period from the beginning of 2010 to the end of the first quarter in 2011, this increased China's foreign exchange reserves by US $123-138 billion, a substantial increase (approximately 20 per cent of the total increase over the period) and the opposite outcome of the intention of renminbi internationalisation which is intended to reduce the build up of dollar reserves.[58]

The solution proposed to this problem by the CASS economists is not a reversal of the renminbi internationalisation process but a greater degree of exchange rate flexibility which would remove the 'import bias' of current trade settlement by removing (or reducing) the degree of certainty over renminbi appreciation. At the same time, the renminbi appreciation which would accompany greater exchange rate flexibility, would reduce China's trade surplus and hence foreign exchange build up. The CASS group has argued the case for greater exchange rate flexibility for many years and regard renminbi internationalization as an attempt to escape from the dollar trap without exchange rate reform. Their position is that renminbi internationalization should be a complement to exchange rate regime reform not a substitute for it. The authorities, to this point, however, have taken a different position and have not been willing to allow greater exchange rate flexibility and their behaviour in the two financial crises has been to maintain a dollar peg in the face of external uncertainty. It is unlikely, therefore, that any

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June 29; Zhang Bin (2011) "RMB Internationalization Process in Reverse Order", *CASS RCIF Policy Brief, No. 2011.036*, June 22.

[58] This unexpected outcome was reported in "RMB Trade Settlement Puts Upward Pressure on Forex Reserves", *China Daily*, July 29, 2011

large change in exchange rate regime will be forthcoming as the global financial crisis continues to unfold. In which case, it leaves the problem which the CASS researchers have identified as perhaps being more persistent than might initially be imagined and which threatens to undermine the utility of renminbi internationalization as a crisis solution.

3.3 Short term measures and long-term strategy

It is widely argued that to be an international currency requires that the currency be fully convertible. The renminbi is not fully convertible in the capital account and China is therefore forging a new path of 'internationalisation without full convertibility'. It is the case that capital flows have been liberalized as have some inflows through, for example, the QFII and QDII channels. Many authors have seen a path of gradual capital account liberalization and currency convertibility being pursued.

However, it is important to note that the internationalization measures announced in the wake of the global financial crisis were accompanied by some regulatory measures which were aimed at reducing capital inflows. In particular, the response to QE2 was to both recognize the need for greater insulation from dollar depreciation by increasing the international use of the renminbi *and* the need to deter capital inflows in response to that anticipated depreciation. Shortly after the US Federal Reserve announced QE2 in November 2009, China's State Administration of Foreign Exchange (SAFE) issued a Decree with 27 Articles all designed to tighten to regulatory procedures for approval, use, monitoring and punishment for non-compliance of Qualified Foreign Institutional Investors.[59] All were designed to prevent any circumvention of the intended uses of QFII funds into speculative inflows in response to US monetary policy.[60]

This example illustrates the complex, and on occasion contradictory, interaction between crisis management and renminbi internationalization. It suggests that China is not about to remove the "firewall" of capital controls while there are threats to its financial stability and that short-term crisis management will contain policies which do not advance long term objectives.[61]

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[59] See *Announcement of the State Administration of Foreign Exchange*, November 13, 2009.

[60] See, for example, Lian Sheng Zheng, "US Fed's QE2: Cause, Trend, Impacts", *CASS Policy Brief No. 2010.075*, November 7, 2010 who argued that QE2 increased the possibility of destabilizing hot money inflows into China.

[61] As Zhang Min *op cit* has noted, "a restricted or controlled capital account is the last available firewall to China in protecting itself from the volatility of the international financial market." Given the leadership's priority on stability, it is unlikely to dismantle this quickly. Zhou Xiaochuan has stressed that there is no timetable for renminbi convertibility. See "No Timetable for Yuan's Convertibility: Central Bank Governor", *Caijing*, 9 September 2010.

3.4 Crisis persistence

It would be a brave pundit to predict that the global financial crisis is behind us and the US will come out of the current recession without the need to further depreciate its currency through mechanisms including further bouts of quantitative easing. If there is one thing that we have learned over the past three years it is that reports of the end of the global financial crisis have been greatly exaggerated. There is also no end in sight to China's accumulating US dollar assets even if the pace may managed by some diversification. In short, the conditions and concerns which have spurred renminbi internationalization to date remain in place and so a reversal of policy should not be expected. Ironically, however, the longer these conditions and concerns remain in place, the less likely is renminbi internationalisation to be fully realized as the prospects for capital account convertibility are thereby reduced. China is more likely to muddle through with its current policy of internationalization without full convertibility and with the occasional deliberate use of increased capital controls.

It is for this reason that China's policy-makers talk about renminbi internationalization as a medium term objective rather than the more rapid process which others have suggested. But what will renminbi internationalization mean at the end of this journey in terms of its position in the currency hierarchy and its challenge to the dominance of the US dollar? Of course, the answer to this can only be speculative but we turn to this in our conclusion.

4.0 Conclusion

There has been much recent speculation about if and when the renminbi will challenge the dollar as an international currency. This has been fuelled in large part by the measures which the Chinese government has taken over the past 2 to 3 years to promote renminbi internationalization with Hong Kong playing a crucial role as the off-shore testing ground. We reviewed the measures which have been introduced, utilising Kenen's taxonomy of the dimensions of currency internationalisation as a guide to the analysis. On the basis of this, the extent and the speed with which internationalisation has taken place has certainly been noteworthy. However, we also showed that the international use of the renminbi still remains low in comparative context.

This leaves open the question of what might expected for the renminbi's future journey. There have been a number of different frameworks used to analyze this question and we briefly reviewed three here which we identified as the determinants, the historical and the cost-benefit approaches. Perhaps unsurprisingly, there was no concensus opinion among these approaches.

In this paper, we adopted a different approach rooted in the context that renminbi international measures have been introduced as response to crises, first the Asian Financial Crisis, and subsequently the Global Financial Crisis. This highlighted the fact that the first phase of renminbi internationalization was as part of the Chiang Mai

Initiative, consisted mainly of currency swap agreements with other central banks in the region, was designed to address short-term liquidity needs, and tending to peter out over time as countries found more effective mechanisms to ward off currency attacks in the form of increased reserve accumulation.

The second phase has been more comprehensive, involving currency swap agreements, off-shore bond issues, off-shore deposit taking, renminbi trade settlement, and investment facilities for qualified investors. Rapid as some of these changes have been, problems have arisen in terms of the mismatch between importers and exporters use of the renminbi trade settlement facility and the contradictions between increased controls on capital inflows as a short term measure to address the effects of anticipated dollar depreciation and the convertibility requirements for longer term renminbi internationalisation.

Based on this, our assessment is that predictions of a rapid internationalization of the renminbi are misplaced and the potential for the redback to challenge the greenback at any time in the foreseeable future is limited at best. Our analysis suggests that what we are witnessing is a 'normalisation' of the role renminbi.[62] This normalization recognizes the position from which China is now starting and how relatively limited the international use of the renminbi is now as noted in section 2.5 above. China, as the world's second largest trading country, is unusual at present in the low volume of trade and asset holding conducted in its currency. This point is made by Zhang Min who notes that "it is very rare that the currency of the world's second largest economy is not an international currency"[63] and has to conduct its trade through a third country's currency. This is a more appropriate use of historical experience and suggests that the role of the renminbi is likely to increase therefore so that China's experience is closer to the norm. But this normalization is much less dramatic than the international monetary power shift which others have predicted. An important distinction must be made between a normalization process in which the renminbi becomes an international currency, and one of a number of such currencies, and internationalization in which the renminbi becomes the main international currency. It is the former, not the latter that we are now witnessing.

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[62] The term 'normalisation' is used by Dong He, *op cit*. He defines it as "facilitating use of the renminbi in trade and direct investment between Chinese residents and non-residents on a voluntary basis." It is not, he continues, the "promotion of its wide international use". We find the term appealing but add to He's definition the recognition of the limited role comparative role that the renminbi now plays thereby highlighting how far the renminbi internationalization process has to go before it reaches the international norm.

[63] Zhang Min, *op cit*, 2011b. Norman Chan, Chief Executive of the Hong Kong Monetary Authority has made a similar point: "The yuan is not an international currency and the world does not trade using the yuan system. The yuan was not allowed to be used for bilateral trade and investment before 2009. This was very abnormal and had to be rectified, first and foremost." Quoted in Wang Duan and Liu Wei, "Flying Yuan and the Hong Kong Landing Strip", *Caixin*, 9 June, 2011.