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Issues for Renminbi Internationalization: An Overview

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Abstract

The growing weight of the People's Republic of China (PRC) in the world economy, measured by gross domestic product (GDP) and trade volume, has intensified debate on the potential international role of its currency—the renminbi (RMB). This paper provides an overview of RMB internationalization issues. Reviewing the current state of RMB internationalization, the paper finds that much progress has been made on RMB settlements for trade involving the PRC and on RMB-denominated bond issuance in Hong Kong, China, but that RMB internationalization is still limited due to capital account controls. The paper argues that a high degree of RMB internationalization requires significant capital account liberalization—supported by financial market liberalization including market-determined interest rates, and by effective financial regulation and supervision—which in turn would call for greater exchange rate flexibility so that the People's Bank of China (PBOC) can enjoy monetary policy autonomy. This, however, would pose a challenge for PRC authorities as hasty capital account liberalization could expose PRC financial markets to the risk of crisis. The paper also emphasizes the importance of institutional reforms—such as making the PBOC independent from political processes, improving the judicial system to implement rule of law, raising transparency and accountability of policy making, and democratizing the political regime—to make the RMB a truly international reserve currency. Finally, the paper explores the implications of RMB internationalization for the international monetary system.

JEL Classification: F31, F32, F33, F41

Contents

1. INTRODUCTION

Internationalization of the renminbi (RMB) is one of the more contentious and widely debated aspects of economic reform in the People's Republic of China (PRC). Wider use of the RMB in international transactions, both commercial and financial transactions and those undertaken by central banks and other official institutions, can be understood as a natural response to the growing weight of PRC trade and investment flows in the world economy. At the same time, top PRC officials have declared repeatedly currency internationalization to be a stated goal of policy, while the People's Bank of China and other government agencies have pursued a variety of initiatives designed to encourage the currency's wider use. Thus, whether wider international use of the RMB is a spontaneous market reaction or a manifestation of the PRC's growing ability and willingness to influence the shape and structure of the global economy is a matter of interpretation.

So too is the role of RMB internationalization in the process of the PRC's economic growth and development. Some will say that the cause of RMB internationalization is being advanced mainly in the interest of financial institutions, which see scope for doing international business in the currency as a lucrative source of potential income. Others argue that currency internationalization is supported by PRC firms that see the ability to do cross-border business in their own currency as a useful way of saving costs and maintaining competitive advantage. Those firms do not see why they should have to continue to incur the additional costs of conducting such business in United States (US) dollars and having to hedge the resulting exposures.

Similarly, it is argued in some circles that RMB internationalization is a natural corollary of the process of financial development and deepening currently under way in the PRC. As financial markets gain depth, width, and liquidity and are progressively opened to foreign investors, greater international use of the currency will come naturally. The counterpoint is that currency internationalization and the capital account liberalization required to advance it can be or are being used to ratchet up the pressure on PRC regulators to accelerate domestic financial reforms and hasten the process of financial development and opening.

Equally contentious is how quickly international use of the RMB is likely to expand. The PRC is already the world's largest exporter and will soon be the world's largest economy as measured by gross domestic product (GDP)—previous studies like Chinn and Frankel (2007) suggesting that economic size is an important determinant of the extent of international use of a national currency create a presumption that there should be momentum for more widespread use of the RMB on this ground alone. Other scholars emphasizing instead the issuing country's market liquidity, financial stability, and political structure as determinants of international currency status suggest that the requisite adjustments may take considerably longer. The optimists point to the fact that as much as 17% of the PRC's international trade is now settled in RMB and to the rapid growth of RMB bank balances and RMB bond issuance in Hong Kong, China. The pessimists respond that much of the trade is between the PRC and Hong Kong, China itself, a special case, and that the growth of RMB deposits in Hong Kong, China reflects and is driven by expectations of currency appreciation, an expectation that may not last indefinitely. The optimists note that the last currency to ascend to international status, the US dollar after World War I, was able to do so quickly once the US created an independent central bank to enhance market liquidity and once it undertook related institutional reforms. The pessimists object that the dollar lost many of its international gains in the financial crisis of the 1930s. They caution against prioritizing currency internationalization and capital account liberalization over domestic financial development and reform. They worry that allowing capital account liberalization to get too far out ahead of domestic financial reform might raise the risk of just such a crisis.

These are among the issues we seek to address in this paper. This overview is first concerned with establishing the facts. Most fundamentally, what is happening in terms of RMB internationalization? How, where, and why is the currency being adopted as an international unit of account, means of payment, and store of value? We are also interested in the economics and political economy of RMB internationalization. How does currency internationalization fit into the larger process of the PRC's economic reform? How does it fit into the PRC's political economy? Who, for example, is lobbying for and against it? What does this mean for the international monetary system?

The PRC is not like other countries. This makes it important to ask, critically, how much can be learned about the prospects and pitfalls of RMB internationalization from the experience of other countries. In particular, the PRC has a much more extensively controlled capital account of the balance of payments, and a more heavily controlled financial system and economy generally, than any other country that has previously aspired to elevate its national unit to international currency status. Thus, previous experience with capital account liberalization and associated financial risks, not simply in earlier reserve-currency countries but in emerging markets which the PRC's current circumstances more closely resemble, is directly relevant to the concerns of this paper.

We also inquire into the implications of RMB internationalization not just for the PRC but for other countries and, more broadly, for the international monetary and financial system. The effects of economic policies and conditions in the PRC will be stronger on countries that come to rely extensively on the RMB in their international transactions. Their commercial banks will come to rely more heavily on RMB funding. Their central banks are likely to place a heavier weight on the RMB when managing the exchange rate and foreign exchange reserves. It is therefore useful to attempt to determine which countries, or kind of countries, we are talking about. Are we talking mainly about Asian countries, in which case the RMB is likely to develop more into a regional than a global currency?

This brings us, in turn, to the implications of RMB internationalization for the structure of the international monetary system. Does the emergence of the RMB imply a world of competing international currencies or a system of overlapping regional currency blocs? Is a system in which both the US dollar and the RMB play major global roles likely to display better or worse stability properties than our current dollar-based system? Will it make for the smoother and more stable provision of global liquidity over time? Will it make for more disciplined policies on the part of the reserve-currency countries, since none of them will possess a monopoly of safe-haven status? Will it make for more volatile exchange rates between the major currencies, as investors making use of liquid markets in both currencies shift erratically between the dollar and the RMB?

Finally, what are the implications of RMB internationalization for the geography of international financial business and financial centers? Will this business be conducted offshore in a financial center like Hong Kong, China or London? Or will it migrate back onshore, whether to Shanghai or Beijing? What are the implications of the PRC's approach to RMB internationalization, which relies on these offshore centers as laboratories for testing out reforms, for these longer term developments?

Clearly, there is much to debate and discuss.

2. THE STATE OF PLAY

In line with its traditional approach to economic and financial reform, the PRC has pursued a strategy of gradualism in seeking to internationalize the RMB. In the first stage, it has encouraged cross-border use of the currency for trade settlement. As firms exporting to the PRC have acquired RMB receipts, they were allowed to maintain those receipts in the form of RMB bank deposits in Hong Kong, China and, subsequently, other offshore financial

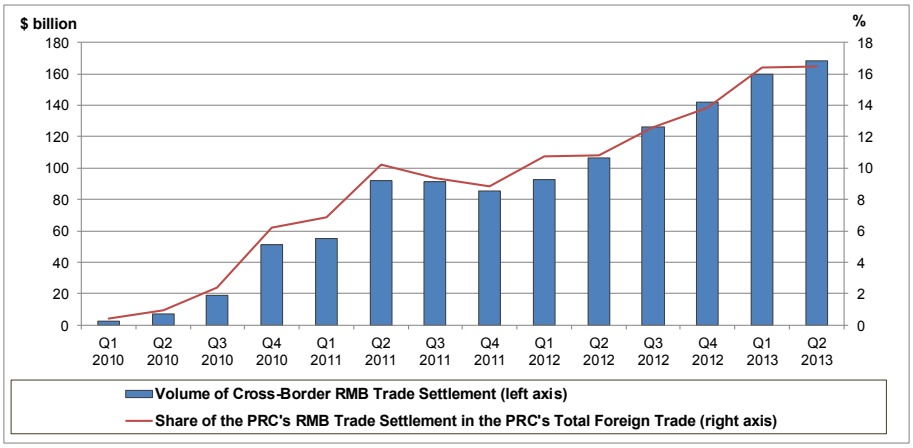
centers. The banks and firms acquiring those balances were then permitted to use them for a gradually widening range of investments in the PRC. Meanwhile, the People's Bank of China negotiated bilateral currency swap lines with foreign central banks to provide them with RMB liquidity in order to further encourage foreign authorities to permit their banks and firms to do business in RMB. Most recently, PRC authorities have announced the intention of experimenting with more comprehensive capital account liberalization over a limited geographical domain, by creating a Shanghai Free Trade Zone that will be largely open to financial transactions with the rest of the world.

2.1 Renminbi Trade Settlement

In the first step in the process of RMB internationalization, the PRC focused on promoting use of the currency for trade-related purposes. In July 2009, the PRC launched a pilot scheme that allowed use of the RMB in settlement of trade with Association of Southeast Asian Nations (ASEAN) member states as well as Hong Kong, China and Macau, China in five mainland PRC cities: Shanghai, Guangzhou, Shenzhen, Dongguan, and Zhuhai. In mid-2010, coverage of the scheme was expanded to 20 provinces, permitting firms in those provinces to settle their trade in RMB. Since then, authorization to settle trade in RMB has been extended nationwide, so that essentially all trade by the PRC can now be done so.

Take-up has been rapid. From a mere 1% of the PRC's total foreign trade in the second quarter of 2010, RMB trade settlement had ballooned almost 17-fold by the second quarter of 2013, reaching 16.5% of the PRC's total trade (Figure 1). Since the inception of the scheme, more than 80% of these trade settlements have been with Hong Kong, China, however, raising some questions about the generality of use of the RMB in trade settlement with the PRC.

Figure 1: Renminbi Trade Settlement



PRC = People's Republic of China, RMB = renminbi.
Sources: CEIC, PRC Premium Database; International Monetary Fund, *Direction of Trade Statistics.*

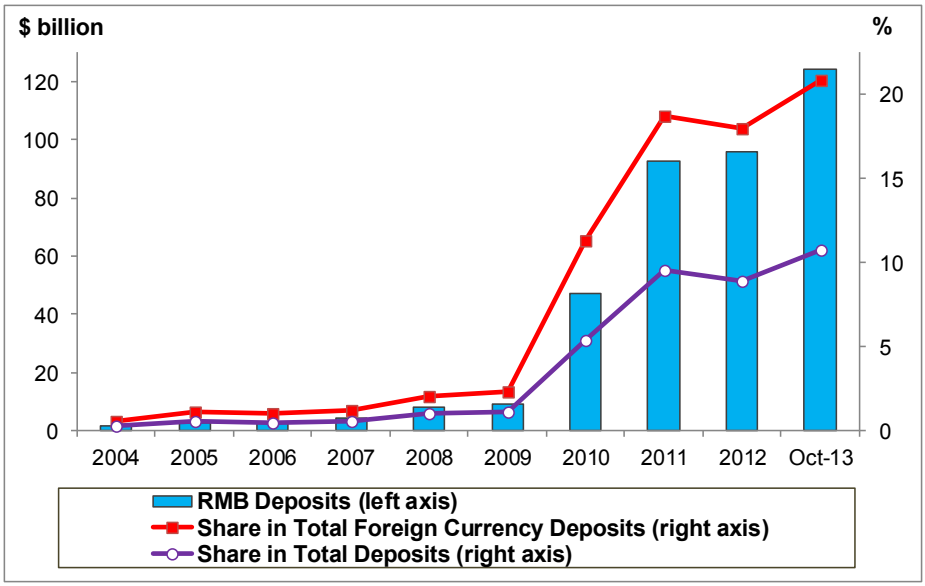
Initially, RMB trade settlement was skewed toward import settlement as opposed to settlement of PRC exports. At the end of 2010, for instance, the ratio of RMB receipts and payments was 1:5.5 (People's Bank of China 2012). One interpretation of this bias is that it likely reflected the lack of availability of RMB abroad and the incentive to hold RMB offshore in anticipation of the currency's appreciation. In other words, it reflected speculative motives rather than the convenience of invoicing and settling trade in the PRC's currency.

More recently, however, the ratio has narrowed. From 1:1.7 in 2011, it fell to 1:1.3 in the first half of 2013 (People's Bank of China 2013). This trend is in line with the turnaround in expectations of a RMB appreciation since the latter part of 2011. Such consistent expansion in the utilization of RMB in trade settlement, despite diminished expectations of RMB

appreciation in recent years, suggests that RMB internationalization is now being driven by fundamental changes rather than just by speculative motives.

Together with the expansion in RMB trade settlement, RMB deposits in Hong Kong, China have risen dramatically. While banks in Hong Kong, China were allowed to open RMB accounts as early as 2004, it was only in mid-2010, when the RMB settlement scheme was introduced, that RMB deposits in Hong Kong, China took off. Since then, the RMB has been allowed to flow back and forth between Hong Kong, China and the PRC for purposes related to trade settlement, as noted above. From about $9.2 billion at the end of 2009 (representing 1.1% of total deposits in Hong Kong, China), RMB deposits surged to $47.3 billion by the end of 2010 (5.4% of total deposits), $93 billion (9.5%) by the end of 2011, and then to $96 billion (about 9.0%) by the end of 2012 (Figure 2). The rate of increase slowed in 2012, but this may be less a reflection of any diminished attractiveness of the currency than investors in Hong Kong, China shifting away from RMB deposits into other RMB-denominated financial assets. Consistent with this interpretation, the value of RMB deposits in Hong Kong, China resumed its rise subsequently, reaching $124.6 billion, or about 10.8% of total deposits, at the end of October 2013.

Figure 2: Outstanding Renminbi Deposits in Hong Kong, China

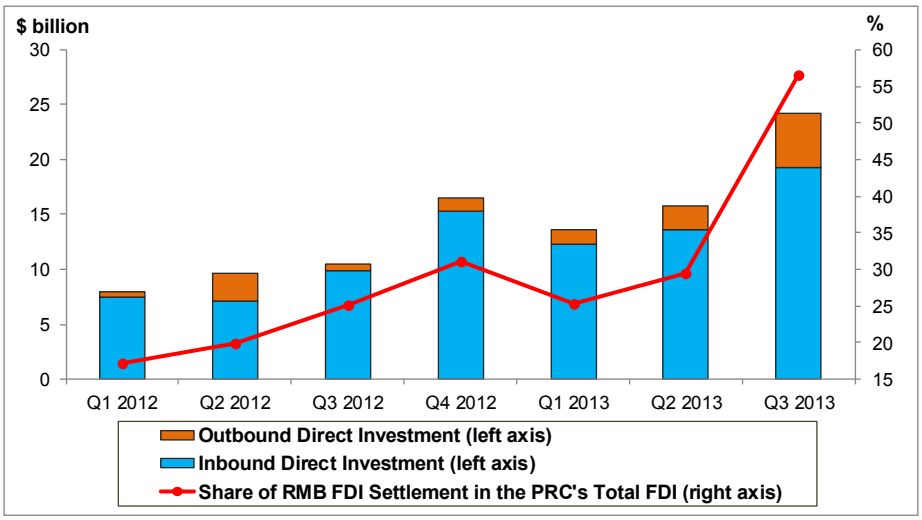


RMB = renminbi.
Note: The data refer to December of that year, unless otherwise specified.
Source: Hong Kong Monetary Authority (HKMA) Monetary Statistics.

2.2 Renminbi-Denominated Investment

Although the PRC authorities have continued to control inward and outward foreign direct investment (FDI), the controls in question have been relaxed in recent years. In addition, both the approval process in the use of the RMB for outward FDI by PRC enterprises and the actual use of the RMB for inward FDI in the PRC have been streamlined with the announcement of the Renminbi Outward Direct Investment scheme in January 2011 and the creation of the Renminbi FDI scheme in October of the same year. Ever since data were made available in early 2012, RMB-denominated and -settled FDI has accounted for about a third of the PRC's total FDI flows (Figure 3).

Figure 3: Renminbi-Denominated and -Settled Foreign Direct Investment



FDI = foreign direct investment, PRC = People's Republic of China, RMB = renminbi.
Sources: People's Bank of China, *China Monetary Policy Report*; CEIC, PRC Premium Database; Bloomberg.

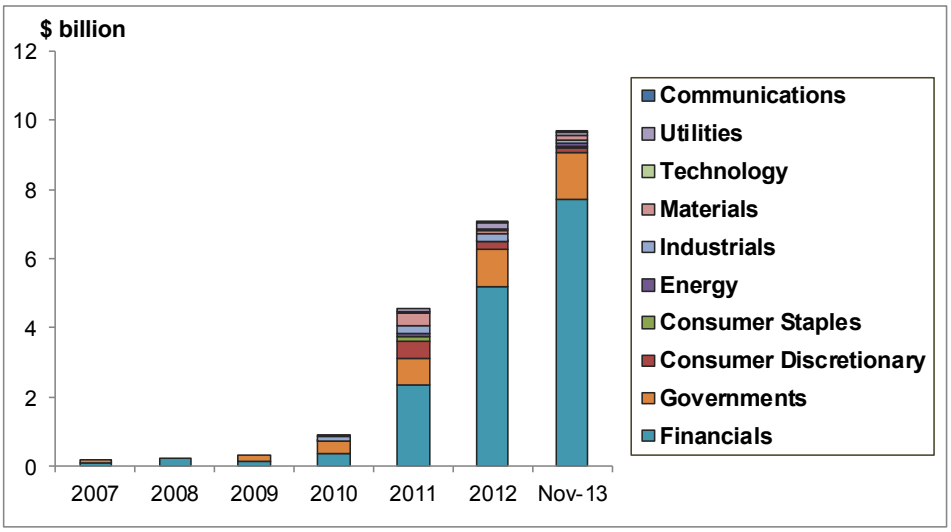
While the strictest controls are on portfolio investment flows, these controls have also been relaxed in recent years to expand the range of investors and the type of financial assets that are permitted to engage in cross-border transactions using the RMB. Since April 2006, preapproved institutional investors from the PRC have been allowed to invest in RMB-denominated financial instruments offshore, such as in Hong Kong, China. In August 2010, foreign central banks and certain types of foreign financial institutions were allowed to invest in the PRC's onshore interbank bond market. Then, in December 2011, the Renminbi Qualified Foreign Institutional Investor (RQFII) scheme was introduced to allow prequalified offshore institutions—including foreign central banks—to invest, subject to quota, in the PRC's onshore interbank bond market and equity market. Finally, the quota for RQFII was raised in April 2012, and onshore nonfinancial institutions were allowed to issue RMB bonds in Hong Kong, China in May 2012.

2.3 Renminbi Bond Issuance

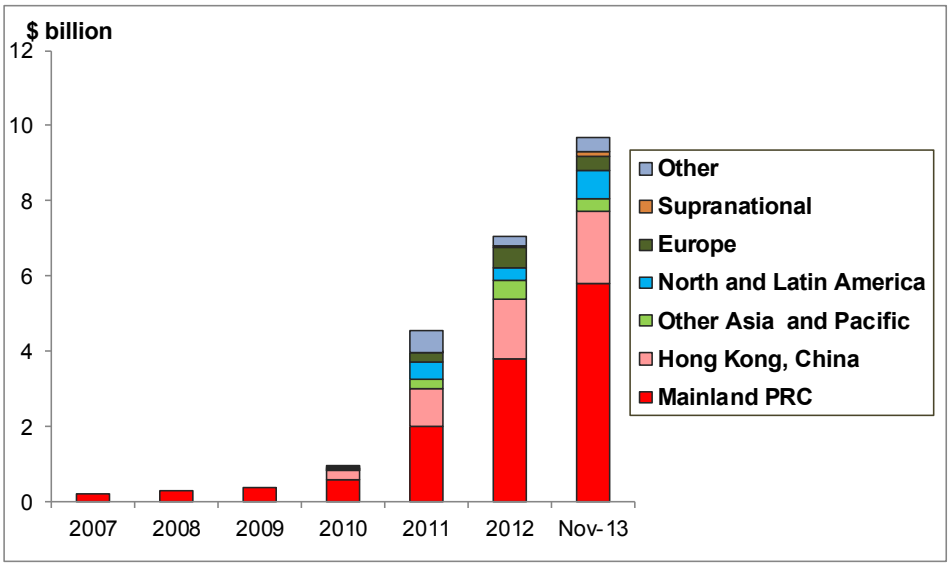
In addition to relaxing restrictions on inward and outward capital flows, official support by the PRC authorities has fostered the growth of an offshore RMB-denominated (dim sum) bond market in Hong Kong, China. Although the first dim sum bond was issued already in 2007, it was not until August 2010, when US corporation McDonald's became the first foreign private company to issue a RMB bond, that the offshore RMB-denominated bond market attracted significant international attention. Issuance then rose from $0.9 billion in 2010 to $4.6 billion in 2011, and to $7.1 billion in 2012. Issuance in the first 11 months of 2013 stood at $9.7 billion (Figure 4), continuing the earlier upward trend. Major issuers of RMB bonds are financial institutions (Figure 4A), and a large portion of these issuances are made by firms from mainland PRC; Hong Kong, China; and the rest of the world (Figure 4B).

Figure 4: Renminbi Bond Issuance in Hong Kong, China

A. Renminbi Bond Issuance by Industry



B. Renminbi Bond Issuance by Source Economy



PRC = People's Republic of China.
Source: Bloomberg.

2.4 Renminbi Currency Swaps and Direct Trading

Since late 2008, the PRC has concluded a series of bilateral RMB-denominated currency swap arrangements with the goal of providing foreign monetary authorities access to RMB liquidity and in turn encouraging them to authorize use of the currency by domestic banks and firms. The Republic of Korea was the first counterparty to such an agreement. Its December 2008 bilateral swap arrangement with the People's Bank of China was for CNY180 billion, with a maturity of 3 years. Prior to its expiration in 2011, the PRC and the Republic of Korea then renewed the arrangement, doubling the amount of the swap to CNY360 billion. Where the Republic of Korea led, a variety of other PRC trading partners

have followed. As of the end of October 2013, the PRC had signed fully 23 bilateral RMB-denominated swap arrangements with other economies (Table 1).[1]

Table 1: Renminbi-Denominated Bilateral Currency Swap Agreements by the People's Bank of China

Date signed	Economy	Value CNY billion	($ billion)	Note
1 Mar 2009*	Belarus	20.0	(2.9)	
1 Apr 2009*	Argentina	70.0	(10.2)	
Apr 2011	New Zealand	25.0	(3.8)	
Apr 2011	Uzbekistan	7.0	(0.1)	
Jun 2011	Kazakhstan	6.5	(1.0)	
Oct 2011	Republic of Korea (extended)	360.0	(56.6)	Swap amount increased from CNY180 billion in Dec 2008
Nov 2011	Hong Kong, China (extended)	400.0	(63.0)	Swap amount increased from CNY200 billion in Jan 2009
Dec 2011	Thailand	70.0	(11.0)	
Dec 2011	Pakistan	10.0	(1.6)	
Jan 2012	United Arab Emirates	35.0	(5.5)	
Feb 2012	Malaysia (extended)	180.0	(28.6)	Swap amount increased from CNY80 billion in Feb 2009
Feb 2012	Turkey	10.0	(1.6)	
Mar 2012	Mongolia (extended)	10.0	(1.6)	Swap amount increased from CNY5 billion in May 2011
Mar 2012	Australia	200.0	(31.6)	
Jun 2012	Ukraine	15.0	(2.3)	
Mar 2013	Brazil	190.0	(30.3)	
Mar 2013	Singapore (extended)	300.0	(47.8)	Swap amount increased from CNY150 billion in Jul 2010
Jun 2013	United Kingdom	200.0	(32.4)	
Sep 2013	Hungary	10.0	(1.6)	
Sep 2013	Albania	2.0	(0.3)	
Sep 2013	Iceland (extended)	3.5	(0.6)	
Oct 2013	Indonesia (extended)	100.0	(16.3)	
Oct 2013	Eurozone	350.0	(57.0)	

Notes: (i) Value in US dollars is calculated based on the US dollar–yuan exchange rate at the time of signing.
(ii) Asterisks (*) indicate that these agreements have likely expired as they are usually valid for 3 years unless they have been renewed.
Sources: People's Bank of China; Asian Development Bank, Asia Regional Integration Center (ARIC) website.

Since 2010, the PRC has also promoted direct trading of the RMB with non-US dollar currencies, to eliminate the need for foreign counterparties to first buy and sell dollars in order to move between third currencies and the RMB. It agreed on such direct currency trading with Malaysia (August 2010), the Russian Federation (November 2010), Japan (December 2011, effective in June 2012), and Australia (April 2013). When the PRC signed an agreement with Japan on direct currency trading, it also agreed to allow the Bank of Japan to hold RMB sovereign debt as foreign exchange reserves and to promote the issuance of RMB-denominated bonds by Japanese companies.

[1] This number does not include the bilateral currency swap arrangements that the PRC signed with six (Indonesia, Japan, the Republic of Korea, Malaysia, the Philippines, and Thailand) of the ASEAN+3 countries between 2001 and 2006 under the Chiang Mai Initiative bilateral currency swap agreements. Three of the six (with Japan, Malaysia, and the Philippines) were denominated in RMB and the other three in US dollars.

3. CAPITAL ACCOUNT LIBERALIZATION AND CURRENCY INTERNATIONALIZATION

That successful internationalization of the RMB will require further liberalization of the PRC's capital account is either a boon or a danger, depending on one's views. In the eyes of some, opening the capital account is a logical step in the ongoing development of PRC financial markets. Foreign investors are carriers of advanced financial technology and international best practice. Empirical studies have consistently found that foreign bank penetration and competition, in particular, have positive effects on financial development (see, e.g., Levine 1996). Through other eyes, capital account liberalization heightens financial volatility and the risk of crises, especially in countries with weak regulatory institutions and less developed financial markets. History, in this view, is littered with cases of countries that have experienced serious financial disruptions in the wake of capital account liberalization.

The obvious way of reconciling the two views is to note that the question is not whether or not to liberalize, but how to liberalize in terms of pace and sequencing. Domestic financial market liberalization—introducing market-determined interest rates, deregulating scope of financial businesses and market entry, and promoting composition—should be the first prerequisite. Supervision and regulation of domestic financial firms and markets should then be strengthened considerably in advance of capital account liberalization. Countries that have failed to meet this prerequisite have seen foreign capital inflows fuel risk-taking by banks and other investors, a process which has repeatedly come to grief.[2]

The regulatory prerequisites are considerable: Spain, for example, was widely touted as possessing an admirably regulated banking system just before its financial system was laid low by massive capital inflows leading to first a bubble and then a crash. This has led some observers to question whether capital account liberalization is in fact a feasible objective of policy or whether, given recent experience, countries should in fact resist pressure to move in that direction. Capital account restrictions can be thought of as a second-best form of prudential regulation where first best measures—capital requirements, liquidity requirements, and domestic supervision generally—do not suffice (Eichengreen and Mussa 1998). The takeaway from recent experience may be that first-best measures cannot be relied on in general. Brazil's use of capital inflow taxes, the Republic of Korea's limits on the foreign currency exposures of its banks, and even Iceland's and Cyprus's exchange controls can be thought of in this light. These observations point in turn to the question of whether the goal, for the foreseeable future, should be full capital account liberalization or limited liberalization, where taxes and restrictions on some types of international financial flows remain in place.

3.1 Capital Account Liberalization: Basic versus Full

PRC policy makers are by no means preparing to throw open the capital account. Instead, they are moving gradually and systematically in the direction of greater capital account liberalization, testing out early reforms before proceeding with others. Their stated goal is to have achieved only "basic" capital account convertibility, which means that it will be possible to freely buy and sell the currency for trade-related purposes as well as for a limited range of capital account and financial transactions, by 2015. This presumably means that short-term investments indicating speculative motivations will still be restricted, reflecting the now conventional wisdom that short-term capital movements create greater risks than long-term foreign investments (Kawai 2007).

[2] See Prasad and Rajan (2008) for issues of capital account liberalization.

This strategy in turn, however, raises as many questions as it answers. Will it be possible to limit short-term flows as policy makers liberalize current account transactions and long-term capital flows, or will market participants be able to use "leads and lags" in trade invoicing and settlement and relabel short-term capital flows as long-term flows to evade remaining restrictions? Will basic capital account convertibility be enough to facilitate significant RMB internationalization, or will foreign institutional investors, including central banks, require free access to the PRC's onshore markets before they are willing to hold significant balances in that form? Can PRC policy makers achieve their goal of transforming Shanghai into a first-tier international financial center without moving all the way to "full" capital account liberalization?

Logically, "full" capital account liberalization would seem more important for some functions of an international currency than others. Full liberalization is not obviously necessary to encourage widespread pricing, invoicing, and settlement of international merchandise transactions in RMB. More importers and exporters are likely to prefer RMB settlement if they can use the resulting balances for a wider range of financial transactions, but some limited financial liberalization might still be enough to encourage them to accept payment in this form. Companies contemplating long-term investments in the PRC would be more willing to accept payment in this form even if PRC policy makers stopped at the stage of basic capital account convertibility. Central banks with foreign exchange reserves far in excess of what they require for purposes of currency market intervention would presumably feel similarly. In contrast, central banks with actual intervention needs and other international investors who value market liquidity would be more inclined to think twice.

The PRC liberalization strategy thus implies that we should see the RMB make progress more rapidly as a currency for trade invoicing and settlement, as a vehicle for outward and inward FDI, and perhaps also as a currency of denomination for international bonds than as a funding currency for international banks or a form of foreign exchange reserves. Limited liberalization is unlikely to be enough, however, for international banks to use the RMB for liquidity management, for global institutional investors to include RMB assets as active portfolios, for multinational corporations to incorporate RMB for cash management programs, and for central banks to hold RMB as one of the most important reserve assets.

The risks of evasion and arbitrage—that once the PRC moves to basic capital account convertibility, remaining limits on international capital movements will become increasing porous and difficult to enforce—should not be underestimated. The PRC, however, has a relatively extensive and long-established administrative bureaucracy experienced in the application of controls. Klein (2012) has found controls tend to be more effective when they have been in place for an extended period rather than when they are newly imposed in response to excessive inflows or a crisis. This suggests that PRC policy makers should avoid prematurely removing the control apparatus. It also suggests that as the country moves to basic capital account convertibility, it should contemplate giving its financial regulators greater independence from politics. An independent agency is more likely to apply remaining restrictions in an evenhanded and predictable way—and evenhandedness and predictability are qualities especially valued by international investors.

3.2 Interest Rate Liberalization and Exchange Rate Flexibility

Another important point in the sequencing of capital account liberalization is that PRC policy makers need to proceed with interest rate liberalization, exchange rate flexibility, and capital account opening in an integrated way. The freer financial capital is to flow in and out of an economy, the more problematic interest rate floors and ceilings become. For example, the PRC has a long-standing policy of controlling bank deposit interest rates, though bank loan rates have been liberalized. The more avenues PRC savers face for transferring funds internationally due to high rates of return abroad, the more domestic disintermediation will result. This implies that the banks will have to be put on a true commercial footing—it will no

longer be possible to rely on them for policy lending—insofar as they are no longer the recipients of subsidized funding.

This shift also implies that the country will have to move toward a more market-determined exchange rate. The People's Bank of China has kept the exchange rate low by intervening in the foreign exchange market and then sterilizing the impact on the money supply by requiring the banks to deposit an increasing share of customer funds at the central bank. Decontrolling deposit interest rates could squeeze bank profitability and make this process more difficult.

These reforms are desirable on multiple grounds. Fully commercializing the state-owned commercial banks—particularly the four large ones—will intensify competition and apply pressure to increase efficiency. Distancing these banks from the government will harden their budget constraints. This should not be taken for granted, as the recent experience of other countries serves to remind. In other words, interest rate liberalization and bank commercialization are not substitutes for rigorous supervision and regulation. Decontrol of deposit interest rates will help to reduce the flow of funds to "shadow banking" systems such as through wealth management assets and local governments' financial platforms, which potentially contribute to the buildup of financial vulnerabilities. Further decontrol of lending rates will encourage enterprises to concentrate on a smaller number of efficient investment projects and allow private firms and households to have greater access to bank financing.

Finally, a more flexible exchange rate is an important macroeconomic adjustment facilitator as well as shock absorber for countries with relatively open capital accounts. History has shown that open capital accounts and pegged exchange rates are a toxic mix. Country authorities experiencing substantial capital inflows and outflows need to be able to adjust domestic policy in response by allowing the exchange rate to float. Attempting to peg the exchange rate when the capital account is even moderately open constrains the ability to do so.

PRC officials are aware of the connection and of the need to make the RMB much more flexible. In addition, exchange rate appreciation in response to balance of payments surpluses would raise the prices of locally produced goods and services relative to those of internationally traded goods—locally produced goods and services being where demand will grow most strongly as the PRC rebalances its economy toward consumption.[3] In this respect then, RMB internationalization should be thought of as integral to the larger ongoing process of rebalancing the PRC economy.[4] The question here is whether reform of the country's exchange rate system is proceeding fast enough, given the pace of capital account opening and currency internationalization.

One reason for a positive answer is that the PRC is a large economy. It is less subject to being inundated by a tidal wave of capital inflows than Cyprus or Ireland or, for that matter, even Spain. Hence, the need for sharp adjustments in domestic policy in response to capital movements will be less. At the same time, even a country as large as the United States saw its domestic economic and financial imbalances at least significantly aggravated by capital inflows in the period 2003–2007 (Obstfeld and Rogoff 2009). Hindsight suggests that the country would have been better off had policy been adjusted earlier and more extensive in response to those flows (Borio and Disyatat 2011).

[3] This shift in relative prices could also come about through relatively high inflation in the PRC, but high inflation has well-known economic and social costs.

[4] See Lardy and Borst (2013) for issues of the PRC's rebalancing.

4. RENMINBI INTERNATIONALIZATION IN HISTORICAL PERSPECTIVE

One way of gauging the scope for RMB internationalization is by comparing the PRC with other countries that have consciously sought to internationalize their currencies. In practice, there are only a limited number of such precedents—a fact which may tell us something about the prospects in and of itself. In this section, we focus on two such cases: the US and Japan.

4.1 Lessons from the United States

The US case is striking for the speed with which the dollar was successfully internationalized.[5] The dollar, it is important to recall, played essentially no international role prior to 1914. US banks were prohibited by the National Bank Act from branching abroad in order to originate foreign business. The country lacked a central bank to act as lender and liquidity provider of last resort to domestic financial markets. Its record of financial stability was checkered. The result was that the dollar was not held as foreign exchange reserves by central banks and governments in the rest of the world. It was not used as a currency of denomination for international trade or international bond issuance (in foreign financial centers to be marketed to international investors). Importers and exporters—even those in the US—when seeking trade credit for their international transactions, sourced it not in New York but in London, where it was denominated in pound sterling instead of dollars.

This situation was then transformed in barely 10 years, suggesting that the PRC's timetable for RMB internationalization is not entirely without precedent. The key policy initiative was the adoption of the Federal Reserve Act in 1913, which established a central bank to backstop financial markets and permitted commercial banks to branch abroad. US banks moved quickly to expand internationally, given the cover provided by World War I, which interrupted the provision of global financial services by London.

The Federal Reserve System moved equally aggressively to create a market in trade credits ("trade acceptances" in the contemporary parlance), discounting and purchasing such credits as needed to ensure a liquid market and stable prices. For much of the 1920s, the Federal Reserve Bank of New York was the single largest counterparty in this market. The bank also campaigned actively to encourage foreign central banks and governments to hold the US dollar as their foreign exchange reserves. The result was that by 1924, just 10 years after the Federal Reserve Banks launched its "dollar internationalization" policy, more foreign exchange reserves were held in dollars than in sterling. More trade credit was sourced in New York and denominated in dollars than was sourced in London and denominated in sterling. More international bonds were denominated in dollars than in sterling, leaving aside the special cases of the British Commonwealth and Empire.

Is it realistic to expect the PRC to emulate this example? The PRC is still a developing country; the US in 1924, in contrast, was the richest country in the world, as measured by per capita GDP. On the other hand, per capita GDP measured in 1990 international Geary–Khamis dollars is currently 20% higher in the PRC than it was in the US in 1924, given that the whole world has a much higher per capita income today than 90 years ago.[6] The implicit question is whether ability to attain international currency status depends on a country's absolute or relative level of economic development. The answer is not self-evident.

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[5] Here we draw on Eichengreen (2011).

[6] This according to the Maddison database, see http://www.ggdc.net/maddison/maddison-project/data.htm.

As for financial development, the ratio of bank deposits to GDP was 33% in the US in 1913; stock market capitalization as a share of GDP was 100%. In the PRC, stock market capitalization is on the order of 50% of GDP, while bank deposits are well in excess of 100% of GDP due to the unusually large role of state-owned commercial banks in the PRC financial system, reflecting the country's history as a planned economy. Overall, the PRC does not have a smaller financial system relative to its GDP than did the US in 1913 (and it has a considerably larger economy). The implicit question in this case is whether the structure of that financial system—and specifically whether it is bank- or market-based—matters for a country's currency internationalization aspirations.

Another noteworthy facet of the US experience is that what was created in 1913 was an independent central bank with the independence and autonomy needed to make credible commitments and gain the confidence of international investors. It is worth recalling that the decision to create an independent central bank was controversial. Delegating monetary and regulatory authority to an independent central bank did not work perfectly; to the contrary, the Federal Reserve was deeply implicated in the Great Depression of 1929–1933.

The decision taken in response to that depression, however, was to strengthen the independence and authority of the Federal Reserve System: the Secretary of the Treasury was stripped of his seat on the Federal Reserve Board, and authority to set discount rates was transferred from Reserve Banks to the Board in Washington, DC. The PRC still lacks an independent central bank with full autonomy to take monetary policy and regulatory decisions. The People's Bank of China is still viewed as an arm of the economic planning mechanism. This is something that will have to change if the PRC is to succeed fully in gaining the foreign investor confidence needed for currency internationalization.

4.2 Lessons from Japan's Yen Internationalization Efforts

Japan sought but failed to transform the yen into a leading international currency starting in the 1980s. Although the relative weight of the Japanese economy in the world rose substantially in the 1980s and the first half of the 1990s, international use of the yen did not rise as much. It is true that the yen became an international currency, achieving an 8.5% share in global foreign exchange reserves in the early 1990s, but its role has been limited in comparison to both the US dollar and the euro.

Several explanations can be given for the low international use of the yen. First, Japanese policy was not supportive of yen internationalization in the 1970s and most of the 1980s. Although Japan liberalized foreign exchange transactions for all purposes in principle in 1980, barriers to free international capital flows remained. It was only in the mid-1980s that Japan adopted a policy of facilitating international use of the yen by removing impediments to its use as an international currency. Until then, the Japanese authorities had taken the view that large capital inflows and outflows might be destabilizing, and that such movements would undermine the effectiveness of monetary policy by weakening the central bank's control of the money supply. Although Japan attempted to encourage yen internationalization by transforming Tokyo into an international financial center comparable to London and New York in the second half of the 1990s, this move came too late, as the country was soon mired in a systemic banking crisis.

Second, the prolonged stagnation of the Japanese economy in the 1990s and 2000s—the so-called "two lost decades"—hampered the process of currency internationalization. The bursting of asset price bubbles in the early 1990s, subsequent low economic growth, and a systemic banking crisis in 1997–1998 forced Japanese banks and multinational corporations to retreat from the global—including Asian—markets. Their declining global and Asian presence had a negative impact on yen internationalization as cross-border bank loans, international bond issuance, and international trade denominated in yen progressively declined over time.

Third, use of the Japanese yen in invoicing Japan's trade was limited for structural reasons, as explained by Kawai (1996). Japan depended on the US as its major export market, and the US dollar was the dominant invoicing currency there. Japan's neighbors also utilized the dollar, making it the norm in East Asia and the Pacific and handicapping the efforts of other currencies, like the yen, to gain traction in the region. In addition, a large part of Japan's imports consisted of minerals, fuels, other raw materials, and basic commodities, pricing and invoicing of which are dollar-denominated due to the global nature of their markets. Finally, the bulk of Japan's trade was handled by large trading companies (known as *sogoshosha*) and multinational corporations, which were able to manage exchange risks efficiently by pooling risks, marrying claims and liabilities, and borrowing and lending in foreign currencies, thereby creating no particular incentive to invoice in yen.

Fourth, money and capital markets, particularly for treasury bills and other short-term instruments, were not as well developed or deep as in New York or London due to functional and tax limitations in Tokyo. The lack of such short-term liquid assets in yen discouraged foreign central banks from holding yen as foreign exchange reserves. As a result, the yen was also a relatively unattractive currency in which to carry out international trade and capital transactions for private agents.

The PRC is clearly different from Japan in ways both favorable and unfavorable to RMB internationalization. For example, whereas Japan was reluctant to internationalize the yen in the 1980s and the first half of the 1990s, the PRC has aggressively promoted currency internationalization, particularly through use of the RMB for trade settlement, offshore bank deposits and bond issuance in RMB, and bilateral currency swaps with foreign central banks, as noted earlier. Similarly, while the PRC's growth rate is sure to decline over the next decades, due if nothing else to a shrinking labor force and population aging, the country can still realistically be expected to sustain a growth rate of 5%–6% into the 2020s. Such strong economic growth will support the continued progress of RMB internationalization, in contrast to the case of Japan.

At the same time, it is at least conceivable that the PRC could be caught in a middle-income trap, with per capita GDP stuck at low levels. Worse, financial market liberalization and capital account openness could lead to a financial crisis—a type of crisis Japan or Southeast Asian nations faced in the late 1990s. Thus, one of the biggest challenges for PRC policy makers would be to pursue economic reforms to avoid the middle-income trap as well as to establish effective regulatory and supervisory frameworks and credible crisis-resolution mechanisms to avoid a crisis, or at least a long period of post-crisis stagnation.

Although Japan had fully opened its financial system to the rest of the world by the late 1980s, it was not able to create a deep, broad, and liquid financial market which would have been needed for successful yen internationalization. In other words, capital account openness is necessary but not sufficient for successful currency internationalization. In addition, international investors will demand transparent, rules-based institutions in the PRC if they are to invest substantial amounts of their wealth in RMB. Such institutions are most likely associated with a mature democracy, which the PRC clearly lacks.

4.3 Political Prerequisites for Renminbi Internationalization

While the small sample of previous cases of currency internationalization makes such generalizations hazardous, it is nonetheless relevant to observe that there is no previous case—not Britain in the 19th century, not the US in the 20th century, and not even Japan in the 1980s—where currency intervention was undertaken in the presence of such a strong state role in the economy. The question is how fundamentally this will have to change to permit successful currency internationalization. Can the PRC leadership grant independence to its central bank and financial regulators, commercialize or even privatize the state-owned commercial banks, deregulate interest rates, and leave it at that? Or do these limited measures lead to a slippery slope in which (i) state-owned enterprises no longer enjoy

privileged access to finance, eventually face hard budget constraints and ultimately are privatized; (ii) prices must be decontrolled more generally; and (iii) the state's presence in the economy is systematically reduced?

Then, there are political implications. Can a country with a one-party system liberalize the capital account without undermining its political foundations? If households are able to vote with their feet by deciding in what country and currency to invest, will other forms of voting and political competition inevitably follow?

And, to turn the question around, is political reform a prerequisite for successful currency internationalization? The sterling and the dollar were the currencies of political democracies. Going back in time, earlier international currencies, the Dutch guilder, the Genoese denaro, and the Venetian ducat, were the currencies of republics or self-governing communes. Investors, if they are to hold a significant portion of their wealth in the form of a country's currency, will want reassurance that there are limits on arbitrary action by the issuer. Rule of law is clearly important, and checks on the executive created by political competition are one source of such assurance. This is not to imply that the PRC will have to move to a multi-party democratic system with contested elections in order to successfully internationalize the RMB. It will, however, have to significantly strengthen checks and balances on the Standing Committee, and the judiciary system—which affects the outcomes of economic and financial disputes—must become independent from the political system, not to mention the Standing Committee. The country will also have to move toward a well-defined federal system in which provincial governments counterbalance the role of the central government. It will have to allow the development of an independent media. It will have to strengthen the voice of nongovernment organizations.

Thus, currency internationalization may have implications not only for the PRC's economic model but also for its political model. Such political prerequisites would be greater if the RMB were to become a global reserve currency.

5. IMPLICATIONS FOR THE INTERNATIONAL MONETARY SYSTEM

Finally, we consider the implications of RMB internationalization for the international monetary system. In popular discussion, this issue is commonly framed as whether and when the RMB will displace the US dollar as the leading international reserve currency. However, recent scholarship suggests that this emphasis is misplaced. The conventional view is that there can only be one international reserve currency at a point in time. Recent historical scholarship shows, to the contrary, that several international currencies have regularly coexisted. The anomalous period from this point of view is the second half of the 20th century, a unique era when only the US possessed deep and liquid financial markets open to the rest of the world and, consequently, the dollar reigned supreme.

But there is no reason why, in the circumstances of the 21st century, the dollar and the RMB could not both play major global roles. There is no reason why the US should continue to possess a monopoly in international finance or why only its financial markets should be deep, liquid, and open. The increasing returns to scale and network externalities that create a tendency for importers, exporters, and international investors to gravitate toward one currency as a common unit of account and means of payment are less pronounced in a high-tech world where everyone has access to information on exchange rates in real time and currency conversion costs are low.

Of course, the same arguments suggesting that two currencies can share the international stage at a point in time also admit the possibility of more than two international reserve currencies. This suggests that PRC policy makers, when seeking to promote use of the RMB in trade settlements and international investment, should be cognizant of the possibility of

competition not just from the US dollar but from other sources, whether additional advanced countries or other emerging markets.

5.1 Implications for the International Monetary Fund and Special Drawing Rights

There are also the implications for the International Monetary Fund (IMF). Will the RMB be added to the basket comprising the special drawing rights (SDR)? Will the IMF when making loans provide RMB credit to its members? Will the PRC acquire a louder voice in decision making in the IMF? Will the IMF headquarters be moved to Beijing or Shanghai when the PRC economy becomes the world's largest?

The answer to all these questions is likely to be: perhaps, but not all at once. As the RMB comes to be used more widely in trade settlements and as a vehicle for cross-border financial flows, it will become logical for the IMF to provide emergency credit to at least some of its members in this form. And, as the PRC's weight in the world economy continues to grow, it will become logical for it to acquire more voice in the deliberations of the IMF. The constraint is the reluctance of the incumbent members with a seat at the Executive Board table and a voice in deliberations to cede authority and accept reduced voting shares. The more PRC policy makers, including the country's IMF executive director, advance policies designed to enhance global monetary and financial stability as opposed to simply defending the country's own interests, the easier it will be to overcome this resistance.

In 2011, the IMF Executive Board laid down the criteria that a country should meet in order for its currency to be included in the SDR basket (IMF 2011). First, the currency in question should be actively traded on foreign exchange markets. Second, there should be active markets in exchange-based and over-the-counter foreign exchange derivatives. Third, the country should have market-based interest rate instruments. And, fourth, the currency should be widely held as foreign exchange reserves.

The RMB already meets the first two conditions though the size of RMB in the global foreign exchange markets is still limited (2.2% in 2013). The policy reforms needed for currency internationalization will require it to meet the third. The fourth condition, that foreign central banks and governments hold a significant share of their foreign exchange reserves in the currency, is likely to be the sticking point. The world's central banks when making reserve-allocation decisions attach importance to market liquidity, and it will take time for the PRC to develop deep and liquid markets. There is also something of a chicken-and-egg problem. Central banks are more likely to hold a significant fraction of their reserves in RMB if the currency is added to the SDR basket, but in order to add it to the SDR basket, the IMF will first want to see a significant fraction of reserves held in this form.

5.2 Potential Instability of a Multiple Reserve Currency System

There are also worries that a system of competing international currencies could be unstable. Investors, including central banks, could be prone to shifting the composition of their reserve portfolios in response to events, rendering the exchange rates between the major currencies more volatile.

Historically, we have examples of both stable and unstable multiple reserve currency systems: a relatively stable configuration before 1913 when the sterling, the French franc, and the German mark all played consequential international roles, and an interwar system in which the sterling and the dollar competed but which suffered from severe instability. The stability of such a system, this history suggests, hinges on the stability of the policy in the issuing countries.

Even if foreign exchange speculators have a tendency to follow trends, central bank reserve managers behave differently. They tend to act as contrarians, buying currencies when they

depreciate and their share in the portfolio declines—thus acting like stabilizing speculators (Truman and Wong 2006). The euro crisis might seem to constitute a counterexample. As the crisis deepened and the euro depreciated in 2012, the world's central banks actively reduced the share of their foreign exchange reserves held in euros.[7] Even so, there was no collapse of the euro exchange rate, only the slow and steady depreciation appropriate for a relatively weak European economy.

5.3 Role of the Renminbi in Asia's Monetary System

Observers ask further whether the emergence of the RMB will hasten the regionalization of the international monetary system. This would happen if the RMB comes to be widely used for international transactions in Asia, while the role of the US dollar diminishes in the region, leading to the dollar and RMB sharing the international currency role. There may ultimately be some movement in this direction insofar as the PRC's trade is disproportionately concentrated in Asia. Regionalization may be further encouraged by the negotiation of bilateral currency swap lines between the PRC and neighboring Asian countries. Good political relationships with the Asian countries are also important for the RMB to play a key role. The PRC's territorial conflicts with Japan (in the East China Sea) and with the neighboring ASEAN member states, such as the Philippines and Viet Nam (in the South China Sea), need to be resolved. Even though some ASEAN member states may see a rising role of the RMB in their exchange rate policy and reserve holdings and may even stabilize their currencies to the RMB, Japan will not likely move significantly in that direction until these other disputes are resolved and the PRC establishes world-class institutions.

Peering further into the future, it is possible to imagine the currencies of other large Asian economies also someday playing consequential roles in the region. For example, one can imagine the Indian rupee as one day becoming the dominant international currency in South Asia. One can imagine renewed competition from the yen if Japan's economy is successfully revived. In this scenario, Asia will be the home to multiple reserve currencies, including (still) the US dollar, the RMB, the yen, and the Indian rupee.

6. CONCLUSION

The world has an interest in successful RMB internationalization. It wants to see the PRC rebalance its economy, a process to which currency internationalization can contribute. It does not want the PRC to fall prey to instability as it opens its financial markets and reforms its economy.

Beyond that, the world welcomes the PRC's emergence as a source of global liquidity. Globalization in the 21st century requires international liquidity to grease its wheels. It needs internationally accepted safe assets in which firms, households, and central banks can park their savings and which they can borrow when there is an increase in the need for liquid funding. For more than half a century, the US dollar has been the source of that liquidity, with US treasury obligations constituting the single largest and most liquid financial market in the world. However, as other countries, in the catch-up phase of growth, continue to expand more rapidly than the US, the demand for liquidity globally will outstrip the capacity of the US to provide it. The fiscal capacity of the US government to stand behind an adequate stock of safe and liquid treasury securities will come under strain.[8] Other sources of international liquidity will have to be developed to supplement the US and its dollar. The PRC and its

[7] This according to the IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) database (release of 29 March 2013).

[8] For a more extended discussion of these points, see Gourinchas and Jeanne (2012).

RMB are obvious candidates. Thus, the future of globalization may well turn on the success of the PRC's efforts to internationalize the RMB.

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