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China and the SDR
Financial Liberalization through the Back Door

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Executive Summary

The authors analyze the motives for China's special drawing rights (SDRs) campaign. They argue that the campaign was a strategy used by the champions of financial liberalization in China to force the pace of reform. It was also a strategy with significant risks. Reaching agreement with the International Monetary Fund (IMF) on adding the renminbi to the currency basket required a judgment that the currency was freely usable for cross-border transactions. Achieving that agreement in turn required relaxing China's comprehensive system of capital controls, and ensuring that a larger volume of cross-border capital flows was consistent with financial stability required domestic reforms to strengthen the financial system.

But this was a strategy with limits. History is replete with examples of countries that have used external financial liberalization to create pressure for domestic reform. Unfortunately, the domestic reforms needed for the sustainability of those external measures do not always follow. External liberalization does not automatically weaken the influence of domestic interests resisting reform. When resistance is intense, the liberalization of cross-border financial flows can remain out in front of accompanying reforms of domestic financial governance and regulation. The result in this case can be volatile capital movements with destabilizing financial consequences, which is what China experienced in 2015.

Introduction

On October 1, 2016, China's currency, the renminbi, was added to the basket making up the IMF's SDR official reserves. The event was widely hailed as historic, especially in China, signalling, it was said, China's emergence as a significant stakeholder in the global monetary and financial system. It was viewed as a major step in modernizing the international system to meet the needs of the twenty-first century. It was seen as reflecting the progress the country had made in modernizing its financial system and enhancing the utility of its currency for cross-border transactions. It was indicative of China's growing influence on the global stage, concluding as it did a multi-year campaign in which the Chinese had advocated the addition of their currency to a basket that previously was the exclusive preserve of a handful of advanced countries. "[Its] inclusion into the SDR is a milestone in the internationalization of the renminbi, and is an affirmation of the success of China's economic development and results of the reform and opening up of the financial sector," was the way the People's Bank of China (PBoC) put it (quoted in Reuters 2016).

Others of a more skeptical bent argued that the importance of the event was heavily symbolic. The SDR was not widely used in commercial or official transactions, and there was little demand by investors for the creation of SDR-denominated assets. Adding the renminbi did not significantly enhance the attractions of the SDR basket for official and commercial use. Since few investors had SDR-linked liabilities, there would be little incentive to hold additional renminbi assets for hedging purposes. Nor did adding the renminbi to the IMF's reserve unit automatically give the Chinese government additional voice and votes in the Fund. In this view, including the renminbi to the SDR basket was, for Chinese officialdom, essentially a vanity project.

In this paper, the authors seek to recover the motives behind China's SDR campaign. They will argue that the campaign to add the renminbi to the SDR basket was not just a vanity project but a strategy used by the advocates of financial liberalization in China to force the pace of reform. This strategy came with significant risks. Reaching agreement with the IMF on adding the renminbi to the basket required a judgment by the Fund that the currency was freely usable for cross-border transactions, which in turn required the relaxation of China's heretofore comprehensive capital controls.[1] As well, ensuring that the larger volume of cross-border capital flows pursuant on external liberalization was consistent with the maintenance of financial stability required additional domestic reforms to strengthen the financial system. Thus, a straight line ran from expansion of the SDR basket to pressure for Chinese financial liberalization and reform.

1 Relaxation is not necessarily synonymous with elimination; see footnote 5 and the further discussion under "Reverse Pressure" later in this paper.

However, this was a strategy with limits. History is replete with examples of countries that have used external financial liberalization to create pressure for domestic reform, and not all such episodes ended happily. The domestic reforms needed for the sustainability of those external measures do not always follow in short order. External liberalization does not automatically cut the ground out from under vested interests resisting reform. When resistance is intense, the liberalization of cross-border financial flows can remain out in front of accompanying reforms of domestic financial governance and regulation. The result can be volatile capital movements with destabilizing financial consequences.

This is what China experienced in 2015 as it liberalized its external accounts and domestic financial markets in preparation for the IMF's determination, on November 15, that the renminbi was freely usable. It experienced large cross-border capital flows, financial volatility and reserve losses indicative of pressure on the exchange rate. To buttress stability, regulators were forced to restore and tighten restrictions on international financial transactions. In the wake of those restrictions, take-up of the renminbi as a vehicle for cross-border transactions slowed and, on some dimensions, went into reverse. This is not to suggest that Chinese officials have abandoned their efforts to internationalize the renminbi and to deepen and strengthen domestic financial markets. Nonetheless, this recent experience underscores the limits of a strategy that uses external liberalization as a stalking horse for domestic reform.

The implication, for China and generally, is that external liberalization should accompany domestic reform rather than precede and seek to force it. A constituency for financial reform must first be built at home. And the argument for reform should be based on its merits.

To be sure, adding the renminbi to the SDR basket was not sold to stakeholders as a tactic for forcing the pace of reform, since influential vested interests opposed the liberalization measures in question, or at least their imminent implementation. Chinese banks worried that deposit-rate decontrol and foreign competition would shrink their profit margins.[2] State-owned enterprises and regional governments worried about loss of concessionary access to finance.[3] Exporters were not all enamoured of the more variable exchange rate likely to accompany external financial liberalization.

Rather, it was asserted that adding the renminbi to the SDR would enhance China's stature as a global player. It would give the country a seat at the top table. It would encourage wider use of the renminbi in settlement of cross-border transactions. It would reduce the dominance of the dollar in the operation of the international monetary and financial system, and in so doing limit China's own dependence on the greenback. These arguments resonated in circles where it had long been argued that a less dollar-centric international monetary and financial system was in China's interest, among those in China who had argued for a more prominent role for the SDR, and among commentators who asserted that China should speak with a louder voice in matters of global economic and financial governance. These were arguments designed to appeal even to domestic stakeholders skeptical of the merits of rapid financial liberalization, in other words. In effect, they were designed to advance financial liberalization through the back door.

Two additional methodological issues should be addressed before proceeding. First, shedding light on China's motives requires placing the SDR issue in the context of Chinese economic reform and showing how the addition of the renminbi to the SDR basket relates to changes in the structure of the Chinese economy. It requires relating the issue to changes in China's international economic relations and analyzing Chinese officials' approaches to managing those changes. And it requires placing the SDR in its historical context — that is, acknowledging that China's views of the SDR have a long history and understanding how those views have evolved over time — as this paper will seek to do, beginning in the next section.

Second, this paper focuses on the views and motives of the Chinese authorities, and not those of IMF officials and policy makers in other countries. The Chinese side of the story is important in and of itself. Piecing together the full picture of international deliberations, in any case, will have to wait until the IMF archives for the calendar

2 Evidence on the impact of foreign bank competition is mixed; see Dong (2013) and Luo et al. (2015). On the effects of deposit-rate decontrol, see García-Herrero, Gavilá and Santabárbara (2009) and Wildau (2015).

3 See the discussion in Steinberg (2015).

year 2015 have been opened.[4] This paper's goal is neither to provide a positive assessment of whether the renminbi, in fact, met the criterion of being freely usable for cross-border transactions nor to offer a normative assessment of whether the IMF and its shareholders were wise to deem it so in 2015.[5] These are interesting and important questions, but they are not the focus here.

China and the SDR

Statements by China's directors on the IMF executive board, where the SDR is regularly discussed, provide a window onto that country's changing views on the SDR. Those statements, summarized in meeting minutes of the IMF's executive board (as maintained in the IMF Archives), trace the evolution of official Chinese views.[6]

In the early 1980s, China's representatives in the IMF emphasized the desirability of additional SDR allocations as a mechanism for providing development finance to poor countries.[7] China itself did not need foreign finance, given its high domestic savings rate, but it aligned itself with externally dependent developing countries, whose private market access was limited in the wake of the Latin American debt crisis and whose domestic savings rates were lower.[8] At this stage, China's interventions on this topic were relatively brief and couched in general terms, but they were informed by skepticism about the operation of private capital markets and returned repeatedly to this theme.[9]

In the second half of the 1980s, China's representatives at the Fund continued to speak of the desirability of new SDR allocations to help meet development needs, but they also began to advocate a more prominent role for the SDR in the international monetary system. To their earlier skepticism about the reliability of private capital markets they added skepticism about the dollar, warning of the fragility of a dollar-based international monetary system in a period when, after sharp appreciation, the dollar showed signs of reversing direction.[10] China's interventions in the board were now increasingly assertive and detailed.[11]

Thus, China's interest in and advocacy of reform of the international monetary system are not new, but in fact extend back more than 30 years. One reason why those earlier developments are not widely appreciated is that China subsequently adopted a less prominent stance on the SDR. By the 1990s, Chinese officials had grown disenchanted by the fact that there had been no agreement on a new SDR allocation.[12] In addition, the country's quota and voting rights in the IMF were not increased

4 Transcripts of the deliberations of the IMF executive board, for example, are available after a lag of five years.

5 The renminbi was clearly less freely usable in cross-border transactions than the four incumbent members of the basket (the dollar, the euro, the pound sterling and the yen), none of which are the currencies of countries still maintaining capital controls (significant limits on use of their currencies in either current or capital account transactions). How much less freely usable depends, however, on the specific category of transaction considered. The IMF itself, addressing questions on the 2015 SDR decision, noted that when sterling and the yen were first deemed freely usable, both the United Kingdom and Japan had some capital account restrictions in place (IMF 2015). In other words, the historic status of those currencies, rather than their current status, might be the appropriate basis for comparison.

6 We discuss the criteria adopted by the IMF to determine whether a currency is freely usable later in this paper, in the section "Reverse Pressure." Whether the IMF's 2015 decision accorded with those criteria is a question we leave to legal scholars.

7 The inaugural comments from a Chinese IMF executive director on the topic of SDRs focused on the link between SDR allocations and the provision of finance for development purposes. At the December 1980 board meeting, Zicun Zhang announced his preference for a direct link between SDRs and economic development — that is, allocating SDRs directly to low-income countries with the most urgent need for resources that might be used to finance imports of capital equipment and otherwise meet their development needs (IMF Archives, Executive Board Meetings Series, Zhang (CH), 17/12/80 afternoon session, p. 5). In January 1981, Zhang argued that a new allocation was warranted — a sentiment, he observed, shared by most of the other speakers on the board (IMF Archives, Executive Board Meetings Series, Zhang (CH), 21/1/81, pp. 24-25).

8 In early 1983, Chinese Alternate Director Wang depicted a new allocation as urgent for mitigating liquidity problems for countries whose reserve holdings were deficient. With adequate reserves, he suggested, developing countries could implement adjustments in a more orderly fashion (IMF Archives, Executive Board Meeting Series, Wang (CH), 1/8/83, p. 20).

9 In a sense, China saw the SDR then much as it sees the Asian Infrastructure Investment Bank now, as a way of providing investible resources to poor countries while deepening political links with countries supportive of the resource transfer, not least China itself.

10 IMF Archives, Executive Board Meetings Series, Wang (CH), 26/3/84, p.36; Huang (CH), 25/3/86, p. 44; and Huang (CH), 31/1/86, p. 24.

11 See, for example, IMF Archives, Executive Board Meetings Series, Huang (CH), 31/1/86, p. 23; Huang (CH), 26/2/86 afternoon session, p. 10; Huang (CH), 25/3/86, p. 43.

12 China's representatives did, however, voice support for Managing Director Michel Camdessus's 1993 proposal for a new allocation — a proposal that went nowhere, in the event: see IMF Archives, Executive Board Meetings Series, Wei (CH) 19/4//93, pp. 24-25.

to a degree commensurate with its rising share of global trade and GDP.[13] The Asian financial crisis of 1997-1998 then caused countries in the region, including China, to grow disenchanted with the IMF more generally. An expanded role for the SDR would imply an expanded role for the IMF, something that Asian countries, including China, saw as a mixed blessing. In particular, China showed little enthusiasm about transforming the IMF into an SDR-based international lender of last resort, given the Fund's mixed record of success in the Asian crisis, and the fact that China itself was unlikely to need help from any such lender.[14] Its interventions on the issue of the SDR focused on the desirability of a new allocation to augment the reserves of crisis-prone emerging markets.

Once the Asian crisis receded, however, China's representatives returned to the SDR question, advancing broader arguments than before. They again argued for a new allocation as a way of lowering the cost of external finance for emerging markets and attenuating the risks of commercial borrowing.[15] They reiterated the desirability of reforming the international monetary system to provide a more prominent role for the SDR. Not surprisingly for representatives of what remained a heavily planned or controlled economy, they argued that relying on SDR allocations would allow global policy makers to more precisely control the supply of international liquidity. The priorities of Chinese policy makers, as revealed by their contributions to SDR-related discussions in the Fund, were to provide a stable source of external finance to poor countries, ensure an adequate supply of global liquidity and encourage reform of the international monetary system in less dollar-centric directions.

Starting in 2005, coincident with the attention paid to the problem of "global imbalances," including China's own current account surplus and the large current account deficit of the United States, and to the corrosive implications of those imbalances for the international monetary role of the dollar, Chinese spokesmen began to moot these possibilities in the context of a broader set of reforms designed to rebalance the global economy.[16] They suggested that global imbalances, and specifically China's surplus, were a phenomenon intrinsic to what was sometimes called "the revived Bretton Woods System," in which countries operating capital controls could accumulate foreign reserves only by running current account surpluses, and that they could accumulate reserves in dollars only if the United States ran current account deficits (see Dooley, Folkerts-Landau and Garber 2004). Chinese directors suggested a number of concrete steps to enhance the attractions and broaden usage of the SDR and render it a more attractive alternative to the dollar: improving the liquidity of SDR-denominated instruments by encouraging their incorporation into private investment portfolios and allowing SDR-denominated instruments to be transferred between public and private sectors; establishing a SDR futures market; and considering new allocations.[17]

An essay by Zhou Xiaochuan, governor of the PBoC, published in the wake of a global crisis that highlighted the limitations of the prevailing dollar-based global monetary and financial system, then lent public prominence to the arguments that the country's representatives in the Fund's executive board had been making for years. Zhou argued that the principal international reserve currency should be "disconnected from individual nations and...remain stable in the long run, thus removing the inherent deficiencies caused by using credit-based national currencies" (Zhou 2009, 2). Considering its extensive US dollar reserves, China had a substantial stake in this reform process, he observed. Zhou's specific proposal was to "set up an open-ended SDR-denominated fund" at the IMF, through which market participants could exchange dollar balances for SDRs (ibid., 3). Essentially, this was a twenty-first-century successor to the substitution account, a proposal

13 An ad hoc increase in China's quota from 2.95 to 3.0 percent was finally agreed in 2001 in acknowledgment of this fact.

14 China was equally skeptical about Japanese proposals for an Asian Monetary Fund, mooted by the Japanese government at the height of the Asian financial crisis, reflecting worries that any such new entity would be led by the Japanese government, a regional rival. See Lipscy (2003).

15 IMF Archives, Executive Board Meetings Series, Wei (CH), 12/12/01, p. 40.

16 Thus, IMF directors Wang and Xu appealed to the SDR's superior store of value as a feature that added to its attractiveness as a reserve asset. In this realm, the SDR's low volatility when compared to currency cross rates warranted a discussion not only of the SDR valuation method, but also, according to Wang and Xu, of "how to promote [the] use of the SDR, especially when there is a risk that a major currency may experience a large fluctuation against another in the face of increasing global imbalances" (IMF Archives, Executive Board Meetings Series, Wang and Xu (CH), 23/11/05, p. 10).

17 IMF Archives, Executive Board Meetings Series, Wang and Xu (CH), 23/11/05, p. 10. Coincident with this emphasis on reform of the international monetary system, the Third National Conference on Finance in 2007 placed greater emphasis on international financial issues than its predecessors in 1997 and 2002.

rejected by the board in 1980, and based on the idea that substituting SDRs for dollars would mitigate and eventually eliminate the risks associated with a depreciating greenback.[18]

Three months after Zhou's essay, with the next five-year review of SDR basket composition approaching, China's executive director offered a number of arguments for including additional currencies in the SDR basket.[19] An expanded and better diversified basket, he suggested, might exhibit more stability against the major currencies. Such stability might in turn enhance the liquidity and utility of SDR assets. China might be prepared to accept SDRs in payment from other governments, its directors suggested, if there was agreement on expanding the SDR basket.[20] In the event, when the review was concluded in 2010, China's system of capital controls was still sufficiently restrictive that the currency was again deemed not freely usable (see IMF 2010). As a result, all eyes looked forward to 2015.

It is possible, then, to trace an evolution in China's views. Initially, the country's representatives in the executive board viewed the SDR as an instrument of development finance, a position that the country never entirely abandoned. Eventually, they came to advocate making the SDR "the principal reserve asset in the international monetary system" (IMF 2016, art VIII), as required by the second amendment of the IMF's Articles of Agreement, thereby creating an alternative to the existing dollar-centric international monetary system and the imbalances it entailed. They advocated an expanded role for the SDR as an instrument with which the global policy community could better regulate the supply of international liquidity. Thus, over time, the SDR became more central to their thinking about desirable reforms of the international monetary and financial system. Through 2010, however, Chinese directors alluded only obliquely to the possibility of adding the renminbi to the SDR basket.

18 On these earlier proposals for a substitution account, see Kenen (1981). The same author revisited the case in the early 2000s (Kenen 2010).

19 IMF Archives, Executive Board Meetings Series, He (CH), 26/6/09, p. 47.

20 IMF Archives, Executive Board Meetings Series, He and Wang (CH), 26/6/09, p. 25.

Renminbi Internationalization

At the same time that Zhou and other Chinese officials were advocating a more prominent role for the SDR in the operation of the international monetary system, China launched a campaign to promote wider international use of its currency, the renminbi. It is important, therefore, to understand how SDR reform and renminbi internationalization fit together.

Renminbi internationalization was both a spontaneous and a directed phenomenon. In the 1980s and 1990s, and especially after it joined the World Trade Organization in 2001, China was emerging as a major trading country.[21] Trade, together with tourism, provided multiple channels, some loosely regulated, through which foreigners could spontaneously acquire renminbi and the currency could circulate outside the country. In an effort to track and regularize this phenomenon, Chinese officials allowed banks in Hong Kong, starting in 2004, to accept renminbi deposits and to exchange and remit renminbi balances in small amounts. In 2007, financial institutions were permitted to issue renminbi-denominated (dim sum) bonds in Hong Kong. In 2009, large enterprises in five Chinese cities were then authorized to settle their trade-related transactions in renminbi with counterparties in Hong Kong, Macau, Taiwan and the countries of the Association of Southeast Asian Nations. All of this led to considerable growth of renminbi balances in Hong Kong and to a proliferation of renminbi-denominated financial products. At this point, the process of renminbi internationalization was fully under way.

In the second stage, the Chinese authorities took a number of proactive steps to further encourage use of the renminbi in trade invoicing and settlements, cross-border financial transactions, and official as well as private use, not just in Hong Kong but other foreign financial centres as well, and ultimately in China itself. They sought to foster the further growth of the market that had spontaneously developed offshore in Hong Kong and, its viability having been established, bring it

21 China overtook the United States as the single largest trading nation in 2013.

onshore.[22] The pilot trade settlement scheme was extended to additional cities and provinces and then to essentially all Chinese companies, regions and foreign counterparties. The PBoC designated one of the "Big Four" state-owned commercial banks as the official renminbi clearing bank for a succession of foreign financial centres, easing the process of clearing and settling renminbi-based financial transactions. (See Table 1.) It extended renminbi swap lines to central banks on every continent, encouraging those foreign central banks and regulators to allow financial institutions under their jurisdiction to engage in renminbi-denominated transactions and take positions in assets denominated in the currency.[23] (See Table 2.)

To bring this business back on shore, designated offshore banks (mainly in Hong Kong) were then authorized, starting in 2010, to invest their renminbi balances in the Chinese interbank bond market. First Xinjiang and then other provinces were opened to foreign direct investment (FDI) of renminbi funds. In 2014, foreign and domestic equity markets were linked by the Shanghai-Hong Kong Stock Connect, through which investors on the Shanghai and Hong Kong stock exchanges could trade shares on the other market using their local brokers and clearing houses.[24] A range of reforms were implemented in the years leading up to 2015 to relax restrictions on financial inflows and outflows between China and the rest of the world, all with the stated goal of encouraging international use of the renminbi.

The motivations for this Chinese policy of renminbi internationalization were several and varied.[25] First, there was the convenience value for Chinese banks and firms of wider international use of their currency, along with the expectation that widening that use further would enhance their international competitiveness.

Second, there was the hope that fostering wider international use of the renminbi would reduce the dependence of Chinese importers and exporters of merchandise and financial services on the dollar, the currency of a country that is China's sometime friend and whose stability is periodically cast into doubt.[26] This might have additional advantages in terms of financial stability, insofar as commodities and energy, which China imports, would no longer be priced solely in dollars, whereas a substantial share of the revenues of Chinese enterprises accrue in renminbi. In a world where commodities such as oil were also priced in renminbi, currency mismatches for those enterprises might be less, in other words.[27]

Third, there was the argument that a more symmetrical, multipolar international monetary and financial system organized around the currencies of all of the leading commercial and financial powers, and not just the US dollar, might be more symmetrical, operate more smoothly and not be subject to the global imbalances of the revived Bretton Woods System.

Fourth, there were arguments of prestige, that a first-class power should have a first-class international currency, just as a first-class country has a national airline and an aircraft carrier.

What, then, were the connections between renminbi internationalization and inclusion of the currency in the SDR basket? To put it another way, why did Chinese officials evidently see including the currency in the basket as an important aspect of the renminbi-internationalization push?[28] Advocating for the addition of the renminbi to the SDR basket is most immediately consistent with the prestige-based rationale for currency internationalization. Inclusion in the SDR basket, along with the dollar, the euro, the pound sterling and the yen, cemented the renminbi's status as one of the top five international currencies, conferring prestige. In the words of one team

22 A discussion of these steps is found in Eichengreen and Kawai (2015).

23 The concern was that the local central bank had to have renminbi on hand in order to provide it to a local institution with an uncovered renminbi position when, *inter alia*, the exchange rate moved against it.

24 This was then followed by the Shenzhen-Hong Kong Stock Connect in December 2016, and by a China-Hong Kong Bond Connect allowing investors on both sides to trade bonds on one another's interbank markets.

25 What follows synthesizes the previous work of one of the authors on this subject (e.g., Eichengreen and Kawai (2015)) and that of other scholars such as Lau (2012); Huang, Wang and Gang (2015); and Yu (2015).

26 This hope extended to the balance sheet of the PBoC itself, insofar as leading international currencies tend to float freely, obviating the need for the central banks that issue them to hold significant foreign reserves (in China's case, in dollars).

27 Thus, China has announced plans to address this mismatch in early 2018, allowing a renminbi-denominated oil futures contract to be traded on the Shanghai Futures Exchange (Johnson 2018).

28 "Evidently," since they were actively lobbying for the currency's inclusion in the SDR basket at the same time as they were prominently mounting their renminbi-internationalization push.

Table 1: Offshore Renminbi Clearing Banks (updated to December 2017)

Location	Responsible Bank	Date of Establishment
Hong Kong, China	Bank of China	September 2003
Macau, China	Bank of China	September 2004
Vientiane, Laos	Industrial and Commercial Bank of China	June 2012
Taiwan, China	Bank of China	November 2012
Singapore	Industrial and Commercial Bank of China	February 2013
Phnom Penh, Cambodia	Industrial and Commercial Bank of China	March 2014
London, United Kingdom	China Construction Bank	June 2014
Frankfurt, Germany	Bank of China	June 2014
Seoul, South Korea	Bank of Communications	July 2014
Paris, France	Bank of China	September 2014
Luxembourg	Industrial and Commercial Bank of China	September 2014
Doha, Qatar	Industrial and Commercial Bank of China	November 2014
Sydney, Australia	Bank of China	November 2014
Toronto, Canada	Industrial and Commercial Bank of China	November 2014
Kuala Lumpur, Malaysia	Bank of China	January 2015
Bangkok, Thailand	Industrial and Commercial Bank of China	January 2015
Santiago, Chile	China Construction Bank	May 2015
Budapest, Hungary	Bank of China	June 2015
Johannesburg, South Africa	Bank of China	July 2015
Buenos Aires, Argentina	Industrial and Commercial Bank of China	September 2015
Lusaka, Zambia	Bank of China	September 2015
Zurich, Switzerland	China Construction Bank	November 2015
Moscow, Russia	Industrial and Commercial Bank of China	September 2016
New York, United States	Bank of China	September 2016

Data source: PBoC.

Table 2: Central Bank Swap Lines with PBoC (updated to December 2017)

Bank	Date	Amount*	Duration
Bank of Korea	April 20, 2009	180 (billion CNY)/38 (trillion KRW)	3 years
	October 26, 2011	360 (billion CNY)/64 (trillion KRW)	
	October 11, 2014	360 (billion CNY)/64 (trillion KRW)	
Hong Kong Monetary Authority	January 20, 2009	200 (billion CNY)/227 (billion HKD)	3 years
	November 22, 2011	400 (billion CNY)/490 (billion HKD)	
	November 22, 2014	400 (billion CNY)/505 (billion HKD)	
	November 22, 2017	400 (billion CNY)/470 (billion HKD)	
Bank Negara Malaysia	February 8, 2009	80 (billion CNY)/40 (billion MYR)	3 years
	February 8, 2012	180 (billion CNY)/90 (billion MYR)	
	April 17, 2015	180 (billion CNY)/90 (billion MYR)	
National Bank of the Republic of Belarus	March 11, 2009	20 (billion CNY)/8 (trillion BYN)	3 years
	May 10, 2015	7 (billion CNY)/16 (trillion BYN)	
Bank Indonesia	March 23, 2009	100 (billion CNY)/175 (trillion IDR)	3 years
	October 1, 2013	100 (billion CNY)/175 (trillion IDR)	
Central Bank of Argentina	April 2, 2009	70 (billion CNY)/38 (billion ARS)	3 years
	July 18, 2014	70 (billion CNY)/90 (billion ARS)	
	July 18, 2017	70 (billion CNY)/155 (billion ARS)	
Central Bank of Iceland	June 9, 2010	3.5 (billion CNY)/66 (billion ISK)	3 years
	September 11, 2013	3.5 (billion CNY)/66 (billion ISK)	
	December 21, 2016	3.5 (billion CNY)/66 (billion ISK)	
Monetary Authority of Singapore	July 23, 2010	150 (billion CNY)/30 (billion SGD)	3 years
	March 7, 2013	300 (billion CNY)/60 (billion SGD)	
	March 7, 2016	300 (billion CNY)/64 (billion SGD)	
Reserve Bank of New Zealand	April 18, 2011	25 (billion CNY)/5 (billion NZD)	3 years
	April 25, 2014	25 (billion CNY)/5 (billion NZD)	
	May 19, 2017	25 (billion CNY)/5 (billion NZD)	
Central Bank of the Republic of Uzbekistan	April 19, 2011	0.7 (billion CNY)/167 (billion UZS)	3 years
Bank of Mongolia	May 6, 2011	5 (billion CNY)/1 (trillion MNT)	3 years
	March 20, 2012	10 (billion CNY)/2 (trillion MNT)	
	August 21, 2014	15 (billion CNY)/4.5 (trillion MNT)	
	July 6, 2017	15 (billion CNY)/5.4 (trillion MNT)	
National Bank of Kazakhstan	June 13, 2011	7 (billion CNY)/150 (billion KZT)	3 years
	December 14, 2014	7 (billion CNY)/200 (billion KZT)	
Bank of Thailand	December 22, 2011	70 (billion CNY)/320 (billion THB)	3 years
	December 22, 2014	70 (billion CNY)/370 (billion THB)	
State Bank of Pakistan	December 23, 2011	10 (billion CNY)/140 (billion PKR)	3 years
	December 23, 2014	10 (billion CNY)/165 (billion PKR)	
Central Bank of the United Arab Emirates	January 17, 2012	35 (billion CNY)/20 (billion AED)	3 years
	December 14, 2015	35 (billion CNY)/20 (billion AED)	

Bank	Date	Amount*	Duration
Central Bank of the Republic of Turkey	February 21, 2012	10 (billion CNY)/3 (billion TRY)	3 years
	September 26, 2015	12 (billion CNY)/5 (billion TRY)	
Reserve Bank of Australia	March 22, 2012	200 (billion CNY)/30 (billion AUD)	3 years
	March 30, 2015	200 (billion CNY)/40 (billion AUD)	
National Bank of Ukraine	June 26, 2012	15 (billion CNY)/19 (billion UAH)	3 years
	May 15, 2015	15 (billion CNY)/54 (billion UAH)	
Banco Central do Brasil	March 26, 2013	190 (billion CNY)/60 (billion BRL)	3 years
Bank of England	June 22, 2013	200 (billion CNY)/20 (billion GBP)	3 years
	October 20, 2015	350 (billion CNY)/35 (billion GBP)	
National Bank of Hungary	September 9, 2013	10 (billion CNY)/375 (billion HUF)	3 years
	September 12, 2016	10 (billion CNY)/416 (billion HUF)	
Bank of Albania	September 12, 2013	2 (billion CNY)/35.8 (billion ALL)	3 years
European Central Bank	October 8, 2013	350 (billion CNY)/45 (billion EUR)	3 years
	September 27, 2016	350 (billion CNY)/45 (billion EUR)	
Swiss National Bank	July 21, 2014	150 (billion CNY)/21 (billion CHF)	3 years
	July 21, 2017	150 (billion CNY)/21 (billion CHF)	
Central Bank of Sri Lanka	September 16, 2014	10 (billion CNY)/225 (billion LKR)	3 years
Central Bank of Russian Federation	Ocrober 13, 2014	150 (billion CNY)/815 (billion RUB)	3 years
Qatar Central Bank	November 3, 2014	35 (billion CNY)/20.8 (billion QAR)	3 years
Bank of Canada	November 8, 2014	200 (billion CNY)/30 (billion CAD)	3 years
Centrale Bank van Suriname	March 18, 2015	1 (billion CNY)/0.52 (billion SRD)	3 years
Central Bank of Armenia	March 25, 2015	1 (billion CNY)/77 (billion AMD)	3 years
South African Reserve Bank	April 10, 2015	30 (billion CNY)/54 (billion ZAR)	3 years
Banco Central de Chile	May 25, 2015	22 (billion CNY)/2.2 (trillion CLP)	3 years
National Bank of Tajikistan	September 3, 2015	3 (billion CNY)/3 (billion TJS)	3 years
Bank Al-Maghrib	May 11, 2016	10 (billion CNY)/15 (billion MAD)	3 years
National Bank of Serbia	June 17, 2016	1.5 (billion CNY)/27 (billion RSD)	3 years
Central Bank of Egypt	December 6, 2016	18 (billion CNY)/47 (billion EGP)	3 years
Total	3343.7 (billion CNY)		

Data source: PBoC.

*International Organization for Standardization currency codes.

of researchers, the renminbi's inclusion "is important symbolically as it elevates the Chinese currency to the premier global status. It is also an acknowledgement of China's monumental economic development over the past 35 years."[29]

In contrast, it was not clear that including the renminbi in the SDR basket would further the other three goals. It was not clear that it would encourage banks and firms, in China or elsewhere, to invoice or settle their merchandise transactions in the currency, since there is little, if any, commercial use of the SDR. On the financial side, some argued that adding the renminbi to the SDR basket would encourage other investors to hold the currency as a way of tracking its movement or hedging their exposure to it (Chen 2015). But there are few exposures to hedge, insofar as there are little private trading and few open positions in SDRs. As one currency trader put it, "It's not like the SDR is the MSCI world index, where if a company is included, a bunch of portfolio managers need to go out and buy it."[30] Or, as Fitch, one of the rating agencies, put it, they did "not expect this [addition of the renminbi to the SDR basket] to lead to a material shift in the demand for renminbi assets globally in the short term" (quoted in Allen 2015).

Reverse Pressure

A fifth — and key — rationale for renminbi internationalization is that facilitating international use of the currency was part and parcel with the process of domestic financial reform. Temporally, efforts to reform Chinese banking and finance intensified at the middle of the first decade of the twenty-first century — the same point at which the process of renminbi internationalization got underway. Both aspects involved removing restrictions and official diktat as drivers of financial outcomes, and replacing them with commercial motives and rules-based supervision and regulation. Domestically, state banks were commercialized. Trust companies and other shadow banks were permitted to expand their financial operations; capital markets were allowed to develop (more enterprises were allowed to list, and additional entities were allowed to trade, on the Shanghai Stock Exchange, and corporate bond markets were fostered). Internationally, restrictions on inward and outward capital movements were relaxed or removed, as described above. Both dimensions can be understood as part of an effort to move China from a centrally planned and controlled financial system to more decentralized, market-based financial arrangements.

Moreover, it could be argued that renminbi internationalization would heighten the urgency of domestic financial reforms and, for that reason, speed their implementation. Relaxing restrictions on capital account transactions was apt to increase financial inflows and outflows. Internal controls, management practices, and supervision and regulation would have to be strengthened in order for Chinese banks to withstand the larger volume of flows. Chinese banks, facing increased competition from abroad, would have to compete for funding and make investment decisions on a commercial basis, limiting scope for the operation of the traditional system of administered credit. Statutory ceilings on lending and deposit rates would have to be removed to bring domestic interest rates into line with foreign rates on what were now more deeply integrated domestic and foreign markets. Regulation of stock and bond markets would have to be strengthened to meet international standards for transparency and market integrity, given that institutions now had the option of investing in securities at home or abroad. On the macroeconomic front, it would be necessary to move from earlier arrangements, in which the renminbi was pegged to the dollar, to a more flexible exchange rate regime, in which currency movements were allowed to buffer the domestic economy from capital flow surges, and in which capital flow reversals did not threaten to exhaust the authorities' foreign reserves and destabilize the currency.

It followed, if these things were not done, that banks would fail. Enterprises would default on their debts. Stock markets would fluctuate wildly. Exchange rate commitments would be cast into doubt. In all these ways, then, the relaxation of capital account restrictions that was integral to

29 The quote is by "a BMI Research team," cited by Elena Holodny (2016). See again the PBoC's statement heralding the IMF's decision, quoted in the opening paragraph of the present paper.

30 Cited in Adinolfi (2015). Governments have exposure to SDRs, but this is not exposure that they typically hedge.

the campaign for renminbi internationalization ratcheted up the pressure for domestic financial reform.

It is at this point where renminbi internationalization connects with expansion of the SDR basket. To qualify for inclusion in the basket, the renminbi had to be deemed freely usable. A freely usable currency is defined in the IMF's Articles of Agreement (IMF 2016) as one that is widely used to make payments for international transactions and widely traded on the principal foreign exchange markets. In 1977, IMF staff proposed that assessment of whether a currency is freely usable for international transactions should be based on the extent to which trade in goods and services is paid for in that currency and on the volume of capital transactions denominated in that currency. It proposed further that the assessment of whether a currency is widely traded should be based on the volume of transactions, the existence of forward markets and the spread between the buy and sell prices in the foreign exchange market.[31]

The implication was that in order for the renminbi to be added to the SDR basket, China needed not just to relax its capital controls but also to accelerate the domestic financial reforms that were essential concomitants of capital account liberalization.[32] Logically, this meant that qualifying the country's currency for inclusion in the SDR basket was a priority goal for those seeking to force the pace of financial reform by proceeding immediately with financial opening. The lure of qualifying for inclusion in the SDR basket was a source of "reverse pressure" for internal reform, in much the same way that joining the World Trade Organization in 2001 was a source of pressure to move to market economy status (Dongmin 2015; Sheng 2015).[33] To put it another way, the SDR was the impatient reformers' "Trojan horse" (Wildau and Mitchell 2016).

Xiaochuan Zhou, long-time governor of the PBoC, can be seen as the exemplar of this strategy. Zhou repeatedly emphasized the importance of strengthening the supervision and regulation of Chinese financial markets and institutions through the adoption of international standards. In 2009, as noted above, he authored an essay highlighting the desirability of steps to enhance the role of the SDR in the global monetary and financial system (Zhou 2009). That essay did not explicitly refer to adding the renminbi to the SDR basket, although it can be seen as hinting in that direction. More generally, there were few mentions of the SDR and SDR-basket composition on the central government's website prior to 2015, as Figure 1 shows. Nor did Zhou's essay draw a link between a more prominent role for the SDR and domestic financial reforms. However, in a subsequent speech posted to the PBoC website (Zhou 2017), these links appear explicitly. To limit systematic financial risks, Zhou begins, it is essential to "accelerate financial sector's reform and opening up" (authors' translation). Zhou continues: "Internationalization of the RMB and the two-way opening up of the financial sector have promoted the continuous improvement of the financial system."[34]

At about the same time as this speech — specifically, on the occasion of the first anniversary of the renminbi's addition to the SDR basket — the PBoC issued a Chinese-language monograph (International Department of PBoC 2017), whose title can be translated as *The Journey toward the SDR's Inclusion of the Renminbi* — essentially, an elaboration of Zhou's views. Its central point was that the addition of the renminbi to the SDR basket "can be considered as a milestone, which is not only the result of reform and openness in the past 39 years, but also an important driving force for China's further reform and opening up" (ibid.).

In a concurrent interview in the finance and economics magazine *Caijing* (2017) , intended for not only domestic but also foreign consumption, Zhou referred as well to "the ratcheting effect" of SDR inclusion on domestic economic reform: "The RMB's addition to the SDR will promote China's further opening up and make it irreversible…The renminbi is increasingly used by international organizations and in financial markets following its addition to the SDR; laws and regulations

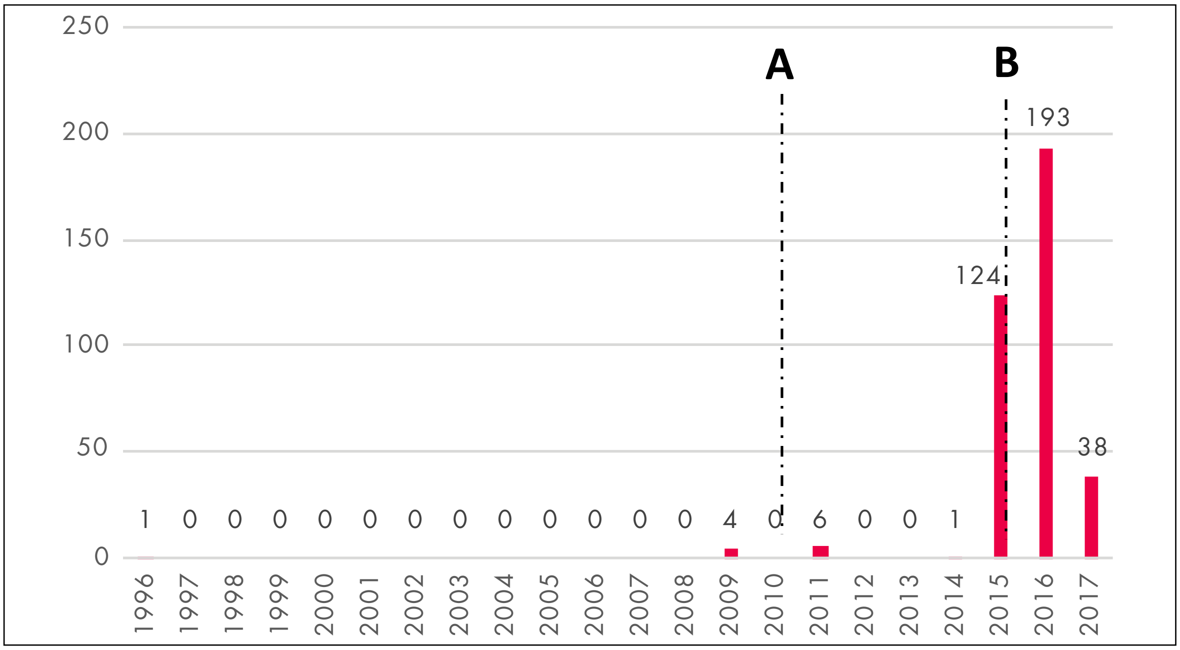
31 Those criteria were then clarified and adopted by the IMF executive board in a decision in 2000.

32 Note that the need was to "relax" rather than to "dismantle" or "eliminate" these controls. Capital account convertibility — the absence of all capital controls — has not always been a prerequisite historically for a determination of free usability (see footnote 5 in the Introduction).

33 To the extent that Chinese officials and their public valued the prestige attached to their currency's inclusion in the SDR basket — that is, saw it as affirming their country's and their currency's first-class international status — support for liberalizing international financial transactions as a way of acquiring that prestige would be correspondingly greater. Recall again the PBoC's statement on the day the IMF decision was announced, as cited earlier.

34 Ibid. Inclusion of the renminbi in the SDR basket, Zhou observed, served to strengthen China's role in international financial governance.

Figure 1: Number of Mentions of SDR on the Chinese Central Government Website (per year, 1996–2017)



Data sources: Central Government of the People's Republic of China website (www.gov.cn) and authors' calculations.
Notes: A: 2010 review of SDR's basket composition, which aroused official discussion in China.
B: 2015 review of SDR's basket composition.

have also been revised; traders and investors are following the new rules. So it's very difficult and expensive for China to step back." Not only did the goal of qualifying for the SDR intensify the pressure for domestic financial reform, in other words, but it made the latter process irreversible.

This discussion of the SDR and domestic financial reform in *Caijing* also acknowledged the existence of an alternative view, according to which the relaxation of capital account restrictions — as necessary for the renminbi to be deemed freely usable — should wait on prior domestic reforms. But Zhou, *Caijing's* reporters recounted, did not agree with this argument. Rather, as his views were characterized there, "he thinks that the inclusion of the RMB in the SDR means that the RMB exchange rate mechanism needs to be reformed, foreign exchange control should be gradually reduced, and the free use of RMB should be continuously improved. *And it is not the case that you have to wait until all the conditions are met before you can implement all the above reforms*" (emphasis added). Zhou concluded that there was "no ideal sequence for reform, but instead opportunities should be taken as they come" (ibid.). The possibility of adding the renminbi to the SDR basket can be understood as one of those opportunities.

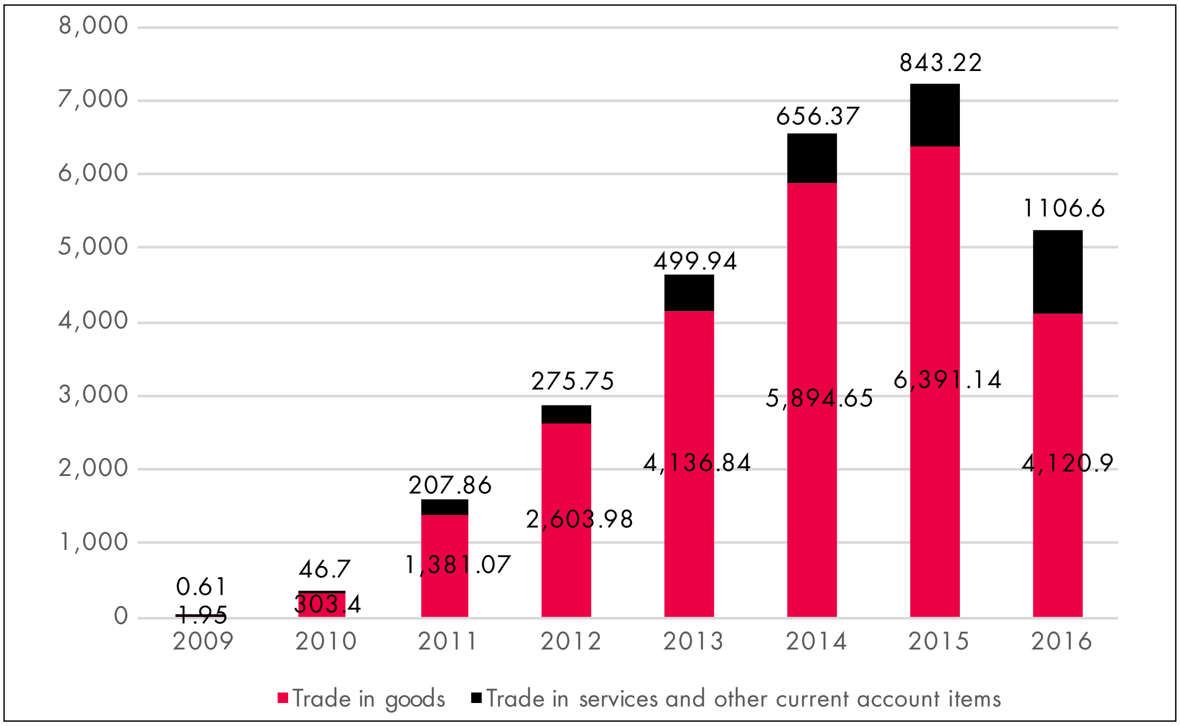
What Happened

The first five years of the renminbi internationalization push, dating from Zhou's 2009 speech, saw a sharp increase in international use of China's currency. From one percent of China's total foreign trade in the second quarter of 2010, renminbi trade settlement ballooned almost seventeenfold by mid-2013, reaching 16.5 percent of China's total trade.[35] (See Figure 2.) That explosive growth slowed subsequently, to 41 percent in 2014 and 10 percent in 2015.

Banks in Hong Kong had been allowed to open renminbi accounts as early as 2004, but it was

35 Admittedly, 80 percent of these trade settlements were with Hong Kong, which raises questions about the generality of use of the RMB in trade settlement with China.

Figure 2: Renminbi Trade Settlement (2009–2016) in Billion Yuan



Data source: PBoC.

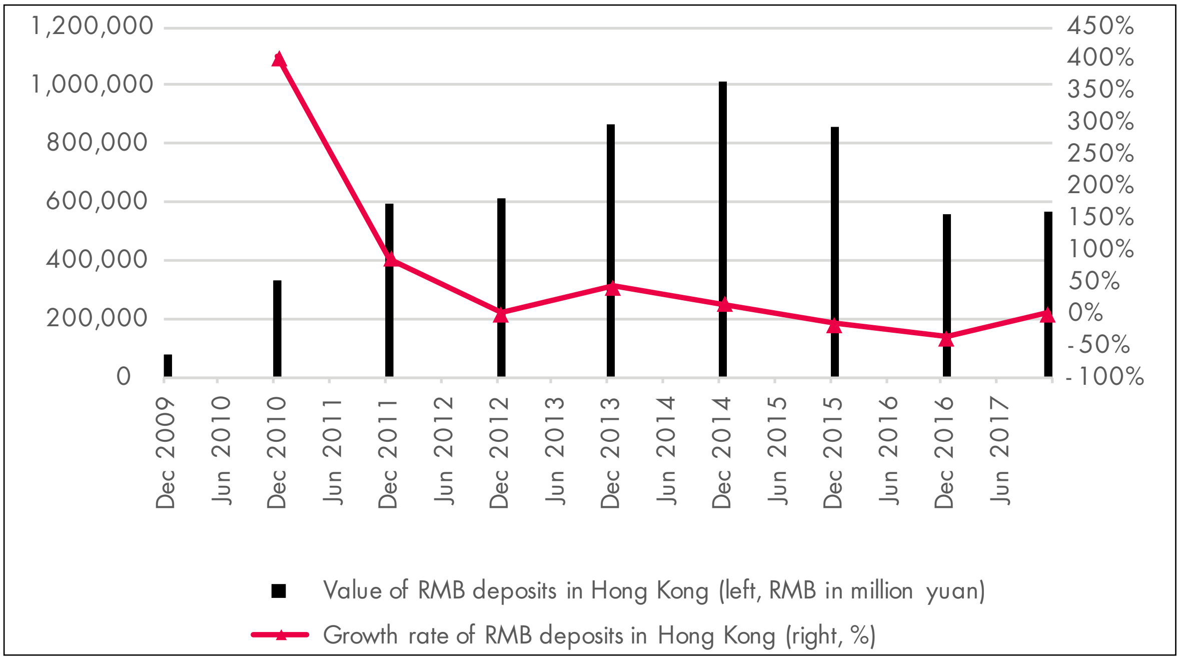
only in mid-2010, when the renminbi settlement scheme was introduced, that renminbi deposits in Hong Kong took off. Since then, renminbi have been allowed to flow between Hong Kong and the rest of China for purposes related to trade settlement, as noted above. From some \$9.2 billion[36] at the end of 2009 (representing one percent of total deposits in Hong Kong), renminbi deposits surged to \$47.3 billion by the end of 2010 (5.4 percent of total deposits), \$93 billion (9.5 percent) by the end of 2011 and \$96 billion (about nine percent of total deposits) by the end of 2012. The rate of increase slowed starting in 2012, but this reflected not so much any diminished attractiveness of the currency as Hong Kong investors' shifting away from renminbi deposits and into other renminbi-denominated financial assets (Figure 3). Consistent with this interpretation, the value of renminbi deposits in Hong Kong resumed its rise subsequently, reaching \$124.6 billion, or about 11 percent of total deposits, at the end of October 2013.

Although the authorities continued to regulate inward and outward FDI, the controls in question were progressively relaxed. The approval process for the use of renminbi funds for outward FDI by Chinese enterprises and the procedures for use of the renminbi for inward FDI were streamlined with the announcement of the Renminbi Outward Direct Investment scheme in January 2011 and the creation of a renminbi FDI scheme the following October. In the period 2012–2014, renminbi-denominated and settled FDI accounted for about one-third of China's total FDI flows. The result was a noticeable increase in use of the renminbi for inward and outward FDI-related purposes. As Figure 4 shows, in the first part of the period the most rapid growth of renminbi-denominated transactions was on the inbound investment side, whereas in the period's second half the most rapid growth was on the outbound investment side.

Issuance of renminbi-denominated bonds on the dim sum market, meanwhile, rose from \$0.9 billion in 2010 to \$4.6 billion in 2011 and \$7.1 billion in 2012. Between the first quarter of 2010 and the first quarter of 2015, the global share of international debt securities denominated in renminbi rose by a factor of six. Renminbi bonds were issued

36 Dollar values throughout refer to US currency.

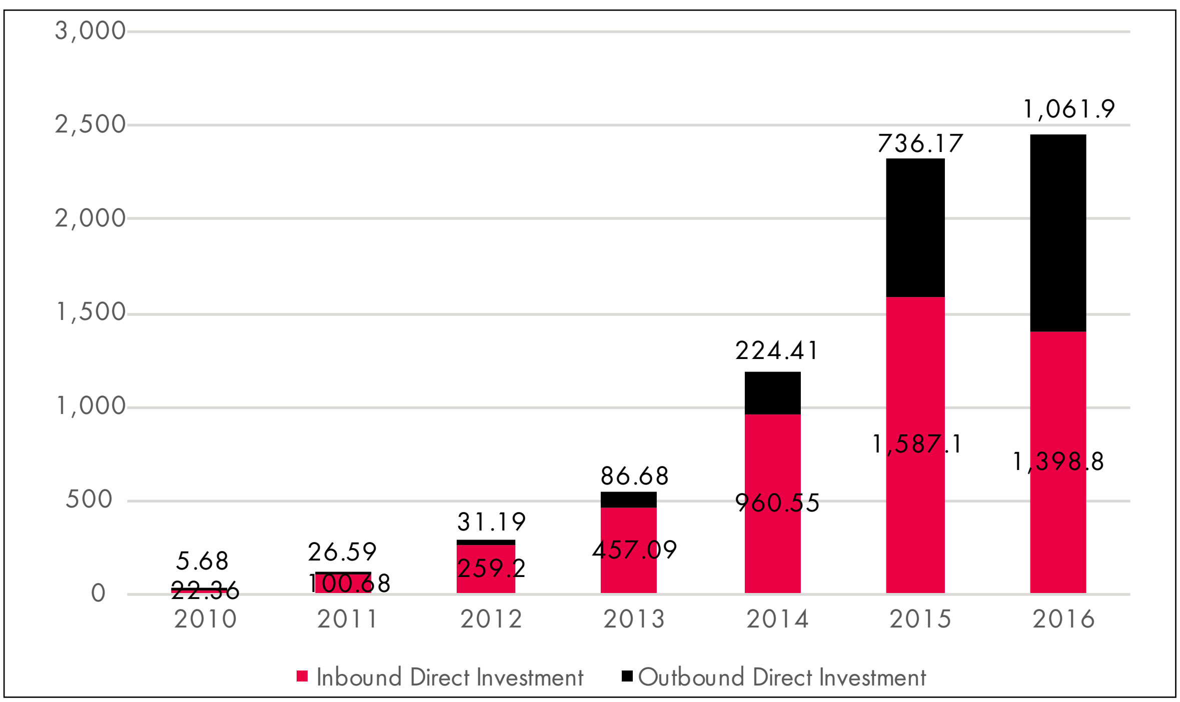
Figure 3: Renminbi Deposits in Hong Kong (2009–2017)



Data source: Hong Kong Monetary Authority.

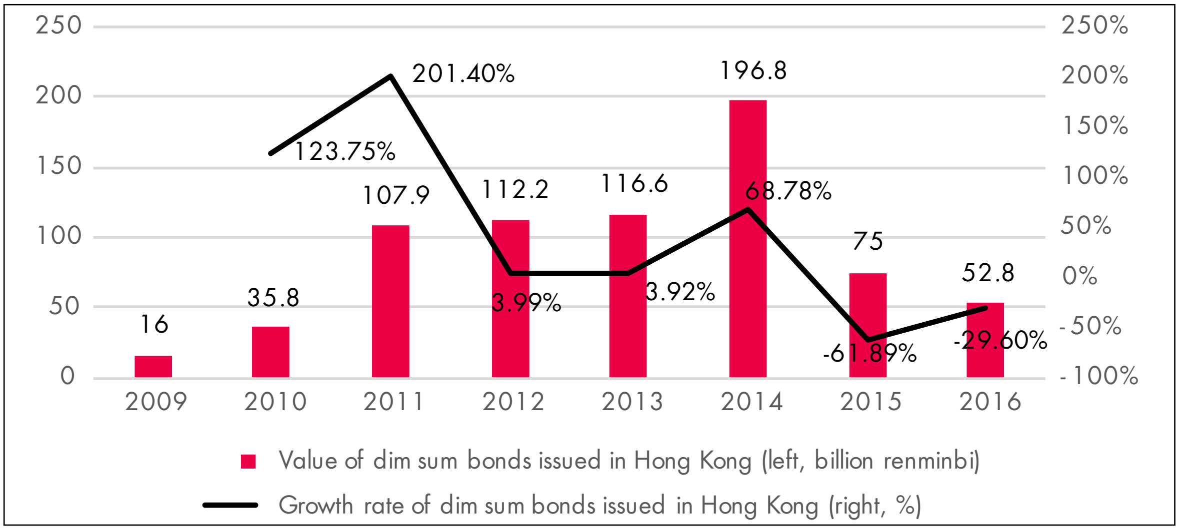
Note: The data is accumulated value by the end of each given period. Data for 2017 is updated to November 2017; all other years are updated to December.

Figure 4: Renminbi-Settled FDI (2009–2016) in Billion Yuan



Data source: PBoC.

Figure 5: Dim Sum Bonds Issued in Hong Kong (2009–2016)



Data source: Hong Kong Monetary Authority.

Note: Due to data availability, 2017 data only covers the first eight months.

predominately by financial institutions but also by other enterprises, and these placements were made by firms from the mainland, Hong Kong and the rest of the world alike. Figure 5 shows how the growth of the dim sum market has been decelerating over time, as other avenues for renminbi-denominated bond issuance have opened up.

The result was a very considerable expansion in the use of the renminbi in cross-border settlements of all kinds. Figure 6 shows the growth since 2011 of bank-based renminbi payments as recorded by SWIFT (Society for Worldwide Interbank Financial Telecommunication), which can be taken as a summary measure of the use of the currency in cross-border transactions.

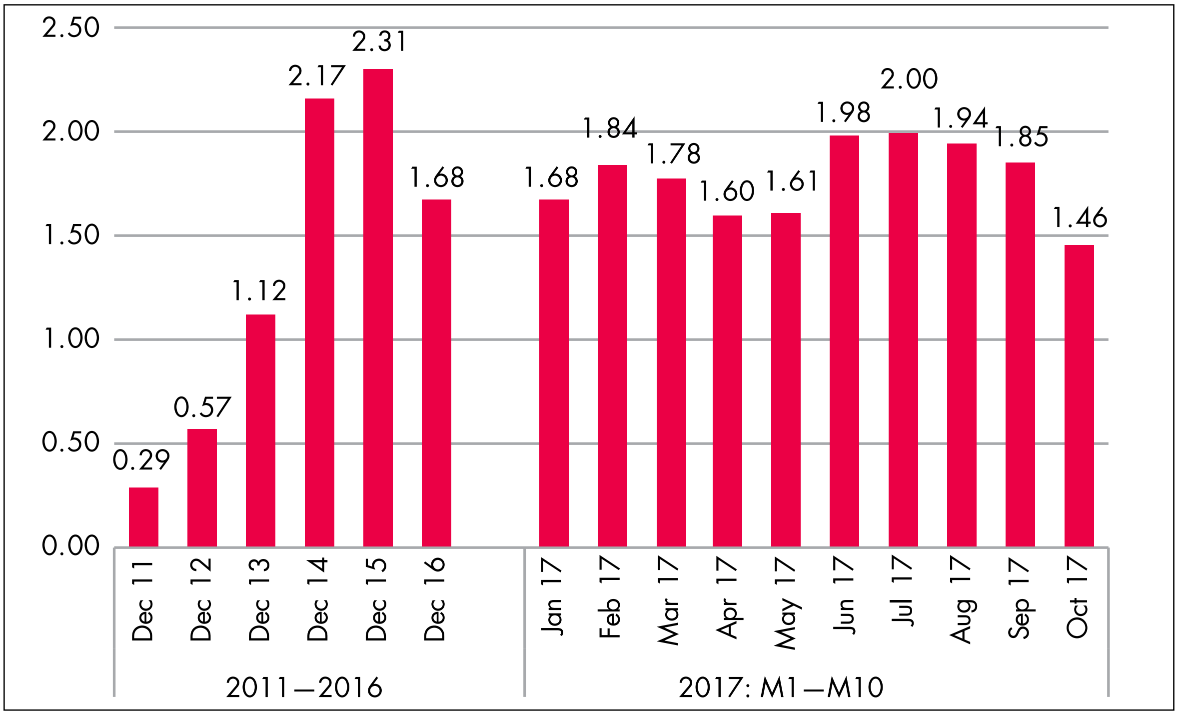
These developments were cited as evidence of progress, although there was room for disagreement over exactly how great. The renminbi accounted for just 2.17 percent of global payments at the end of 2014. Although more than 50 central banks had reportedly added the currency to their reserve portfolios by the end of that year, the renminbi's share of global reserves was still thought to be only on the order of one percent.[37] The issuance of renminbi-denominated bonds, even at its peak in 2014, was still small by the standards of China's overall cross-border investment transactions. The renminbi's international use may have risen like a rocket, but the starting point some five years earlier had been extremely low. Nonetheless, differing assessments aside, the consensus was that the rate of change indicated significant progress.

That progress was then interrupted in 2015 by instability on Chinese financial markets. The Shanghai Stock Exchange went on a roller coaster, rising by 150 percent in the year ending in June 2015 and then quickly giving back its gains. Market volatility rose relative to earlier years, with share valuations falling by as much as 10 percent in a day. (See Figure 7.) This volatility continued into early 2016. The country experienced persistent capital outflows, and the PBoC was forced to intervene to support the exchange rate, expending a cumulative $1 trillion of reserves in 2015-2016, fully one-quarter of the reserves with which it entered the period. (See Figure 8.)

Was this turbulence connected to the external financial liberalization undertaken in preceding years? The gyrations of the stock market had multiple causes, to be sure, not all of which were related to external financial liberalization. The authorities had pumped large amounts of liquidity into the financial system in an effort to keep GDP growth close to its official seven percent target. (See Figure 9.) This liquidity had the predictable

37 See Chatterjee and Armstrong (2014). The IMF did not at this time distinguish renminbi reserves in its Currency Composition of Official Foreign Exchange Reserves (COFER) database.

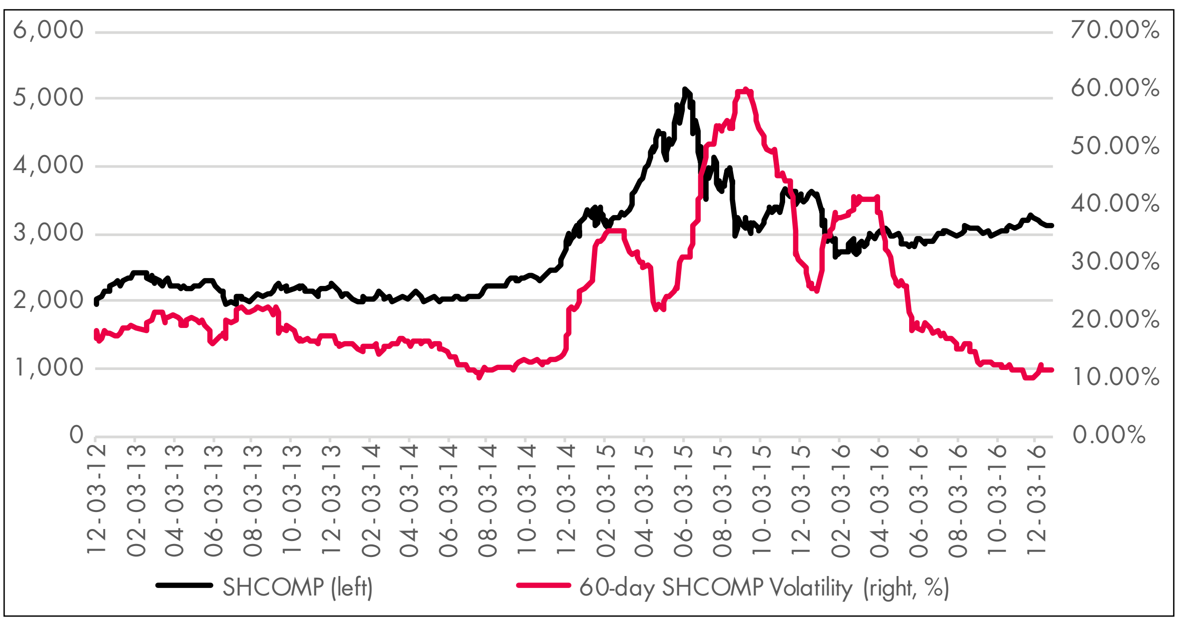
Figure 6: Renminbi's Share as Payment Currency (%)



Data source: SWIFT, updated to October 2017.

Note: Customer-initiated and institutional payments. Based on value.

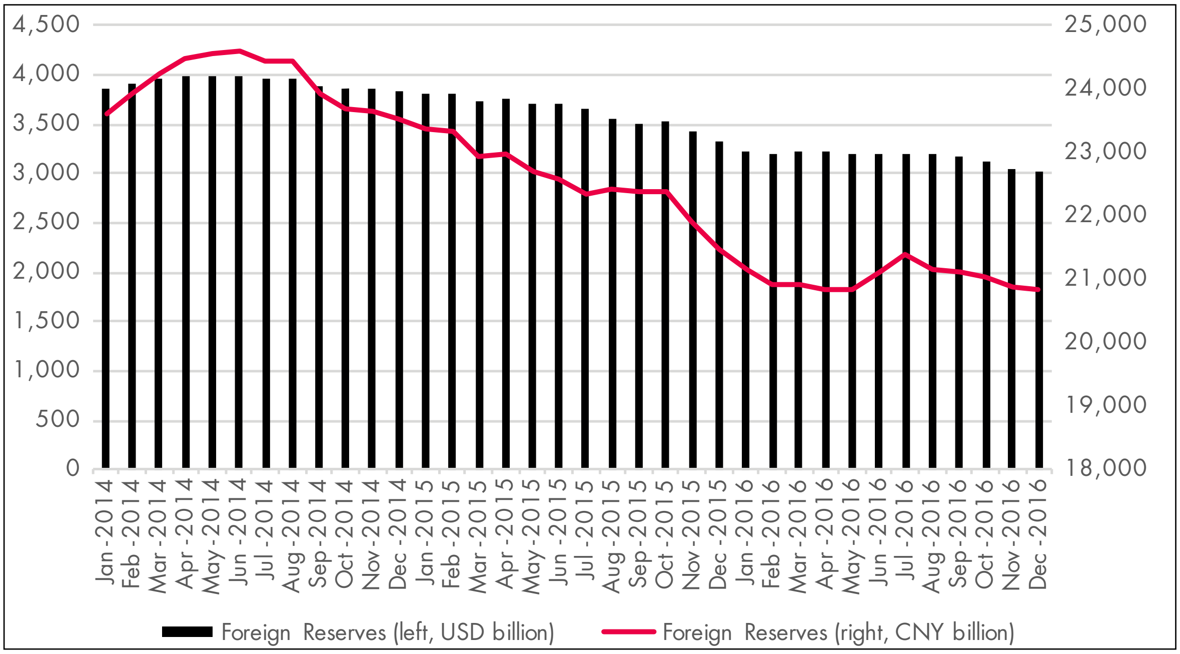
Figure 7: China's Stock Prices and Volatility



Data source: Bloomberg.

Note: SHCOMP = Shanghai Composite Index.

Figure 8: PBoC Foreign Reserves (2014–2016, monthly)



Source: PBoC.

effect of fuelling speculative investments in property and financial markets. Efforts to then clamp down on excesses in the real estate sector caused property prices in second-tier cities to fall, leading investors to plow their savings into the stock market. Politicians and regulators encouraged retail investors to open brokerage accounts and participate in the market using borrowed money, in pursuit of Xi Jinping's "Chinese dream." When worries then developed in 2015 that Chinese economic growth was slowing, the market went into reverse. As prices began to fall, investors who had purchased shares on margin were forced to liquidate their positions, causing prices to fall further.

So, this story can be told without reference to international factors. That said, these unstable dynamics were accentuated by the external liberalization undertaken in the preceding period. As long as the market was rising, qualified foreign institutional investors could purchase shares on Chinese markets on their clients' behalf, adding to the demands of domestic investors. (For a list of these initiatives, see Table 3.) They could contribute to margin lending by Chinese financial institutions through their participation on the Chinese interbank bond market. Retail investors in Hong Kong could use their local brokers and clearing houses to invest in Shenzhen and Shanghai.

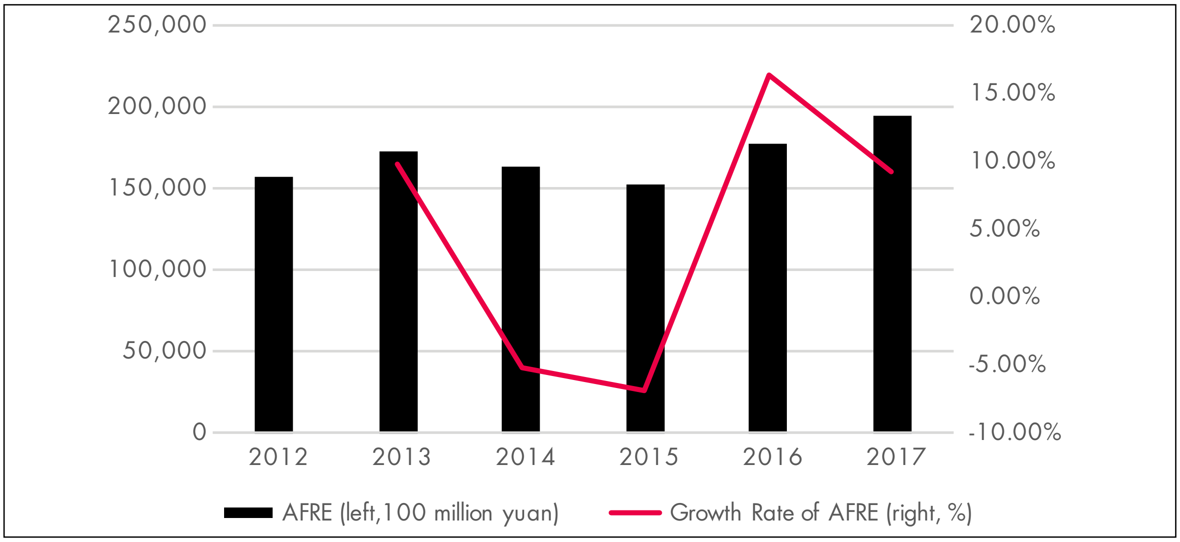
Moreover, when the market tanked, foreign investors, like residents, now had the option of liquidating their domestic holdings and transferring their balances abroad. When the PBoC responded to the drop in the market by cutting interest rates, creating expectations of renminbi weakness, the incentive for capital flight was reinforced. It was strengthened further when questions were raised about whether even a central bank with \$4 trillion of foreign reserves could continue to intervene at a rate of \$100 billion a month to support the exchange rate — and if it couldn't, what would happen next.[38] These additional factors accentuating the crisis were all related to the prior liberalization of China's capital account.[39]

Finally, there was the reform of the exchange rate mechanism announced on August 11, 2015,

38 China doesn't publish figures on net capital outflows, but these can be inferred from the current account balance and the change in foreign reserves (when the latter are adjusted for valuation effects); one estimate suggests that capital outflows approached \$900 billion in the 10 months ending in November of 2015.

39 In principle, it is possible to argue that had China moved even faster to eliminate restrictions on cross-border financial transactions in the earlier period, the authorities would have been forced to rein in liquidity creation earlier, owing to the threat of capital flight, and such large excesses in property and asset markets would not have been allowed to build up. We see no willingness or ability to move faster, which is precisely why the advocates of "reverse pressure" sought to apply it.

Figure 9: Total Social Financing (AFRE)



Source: PBoC.

Note: AFRE = aggregate financing to the real economy.

Table 3: Renminbi Qualified Foreign Institutional Investors

Country (or Region)	Amount (billion yuan)	Date
Hong Kong, China	20	August 2011
	50	April 2012
	200	November 2012
	230	July 2017
United Kingdom	80	October 2013
Singapore	100	October 2013
France	80	March 2014
South Korea	120	July 2014
Germany	80	July 2014
Qatar	30	November 2014
Canada	50	November 2014
Australia	50	November 2014
Switzerland	50	January 2015
Luxembourg	50	April 2015
Chile	50	May 2015
Hungary	50	June 2015
Malaysia	50	November 2015
United Arab Emirates	50	November 2015
Thailand	50	November 2015
United States	250	June 2016
Ireland	50	December 2016
Total	1,740	

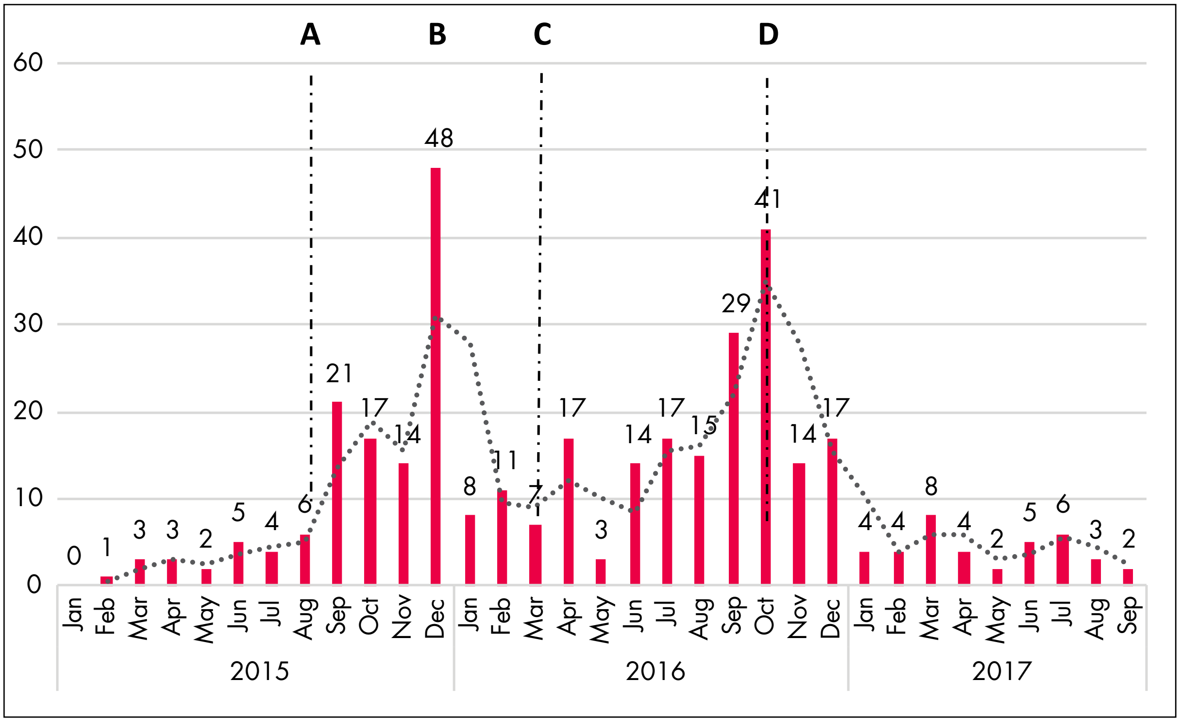
Data source: PBoC. Updated to September 2017.

Table 4: Changes in China's Exchange Rate Regime

Date	Events
April 1, 2011	RMB foreign exchange options trading is officially launched to provide more exchange rate hedging instruments for enterprises and banks.
April 16, 2012	The volatility range of RMB interbank spot exchange rate against the US dollar is enlarged from 0.5 percent to one percent.
April 16, 2012	Enterprises and individuals are allowed to retain their foreign exchange income rather than having to sell them to authorized bank for dealing in foreign exchange.
May 29, 2012	Under the authorization of the PBoC, China Foreign Exchange Trade System (CFETS) announced that China will improve the trading mode of RMB against the Japanese yen in the interbank foreign exchange market and develop the direct trading of RMB against the yen.
April 9, 2013	Under the authorization of the PBoC, CFETS announced that China will improve the trading mode of RMB against the Australian dollar in the interbank foreign exchange market and develop the direct trading of RMB against Australian dollar based on the market principle.
March 17, 2014	The volatility range of RMB interbank spot exchange rate against US dollar was enlarged from one percent to two percent.
March 18, 2014	The direct trading of RMB against the New Zealand dollar is officially launched in China's interbank foreign exchange market to facilitate the formation of direct exchange rate of RMB against the New Zealand dollar.
June 18, 2014	Under the authorization of the PBoC, CFETS announced that the direct trading of RMB against the Great Britain pound is officially launched in China's interbank foreign exchange market.
July 2, 2014	PBoC abolished the intervention to dollar's bid-ask spread of banks against customers, and allowed banks to price the dollar based on the supply and demand in the market, which aimed to make the RMB exchange rate more flexible.
September 29, 2014	The direct trading of RMB against the euro is officially launched in China's interbank foreign exchange market.
August 11, 2015	PBoC reformed the exchange rate regime to liberalize RMB exchange rate through improving the mechanism for determining the central parity of RMB exchange rate.
August 30, 2015	The IMF decided to add RMB into the SDR basket.
October 1, 2016	The Chinese RMB was officially included in the SDR.
December 11, 2016	CFETS released officially the CFETS RMB Index to improve the market mechanism for determining RMB exchange rate.
May 26, 2017	PBoC announced that the countercyclical adjustment factor would be introduced to the mechanism for determining the central parity of RMB exchange rate, which triggered a second wave of RMB appreciation in this year.
January 9, 2018	PBoC responded to Chinese business news about the suspension of usage of the countercyclical adjustment factor, and announced that the countercyclical adjustment factor could be set freely by the quoting banks.

Data sources: PBoC, State Administration of Foreign Exchange, CFETS, Sina Finance.

Figure 10: Number of Mentions of SDR on the Chinese Central Government Website (by month, 2015–2017)



Sources: Chinese Central Government website and authors' calculation.*

Notes: **A**: August 11, 2015, PBoC conducted reform of exchange rate regime to liberalize RMB exchange rate. **B**: November 30, 2015: IMF decided to add RMB into the SDR basket. **C:** March 17, 2016: China's *13th Five-Year Plan* (Central Committee of the Communist Party of China 2016) was issued formally. **D**: October 1, 2016: Chinese RMB was officially included in the SDR.

*The black dashed line is a two-period moving average, which is used to eliminate artificial fluctuations due to, *inter alia*, delayed issuance of news articles or policy documents.

designed to make the renminbi more heavily market determined. Whereas previously the PBoC had set the midpoint for the daily trading band of plus or minus two percent, it now moved to a system where the midpoint of the next day's exchange rate trading band was based on the previous day's closing price. (Table 4 shows how this measure was related to the ongoing process of exchange rate reform.) This was portrayed as another step in the direction of making the currency freely usable, with an eye toward satisfying the prerequisites for inclusion in the SDR. But the rationale was not clearly communicated to the markets. As Figure 10 shows, the SDR issue was not heavily promoted by the authorities in August. Investors took the announcement as an indication of balance-of-payments weakness and the difficulty the PBoC was experiencing in supporting the exchange rate. The market reaction was strongly negative, and capital outflows intensified.

The Chinese authorities responded to this volatility by reaffirming that domestic financial stability, and not currency internationalization, was their first priority. They imposed a 20 percent reserve requirement on financial institutions trading foreign exchange forwards. They required banks in Shanghai to balance renminbi outflows with inflows, whereas previously, banks had been allowed to remit RMB150 overseas on behalf of their clients for every RMB100 repatriated to China. They ordered banks and financial institutions to investigate possible over-invoicing of imports. They required banks to report all cross-border cash transfers of more than RMB50,000, down from RMB200,000 previously. They cracked down on individuals using other people's quotas for foreign currency purchases and on purchases by residents of insurance products in Hong Kong. (See Table 5.)

These measures were then supplemented in the second half of 2016 by new restrictions on large corporate investments abroad, which prohibited state-owned enterprises from devoting more than $1 billion to a single overseas real estate

Table 5: Changes in China's Capital Control Regime

Date	Events
October 2013	Removal of commercial credits inflow and outflow restrictions (Fernández et al. 2016).
May 22, 2014	Free Trade Account system is established at China (Shanghai) Pilot Free Trade Zone, which facilitated the cross-border finance, investment and currencies exchange.
July 14, 2015	Chinese inter-bank bond markets and inter-bank foreign exchange markets are opened to foreign sovereign institutions (central banks, international financial institutions and sovereign wealth funds) (PBoC 2015).
October 8, 2015	CIPS (Phase I) goes live. Cross-Border Interbank Payment System (CIPS) offers clearing and settlement services for its participants' in cross-border RMB payments and trade.
January 25, 2016	According to PBoC's new policy, foreign banks become subject to the normal required reserves policy when making renminbi deposit at their domestic agent banks, which increased required reserves. This policy aimed at suppressing the shorting in renminbi, and reverse the expectation for RMB devaluation (PBoC 2016).
January 1, 2017	According to PBoC's policy, individuals are required to provide a declaration including purpose and expected time of usage when purchasing foreign currencies. And this policy did not allow individuals to buy houses abroad, invest on securities or other unopened items.*
July 1, 2017	PBoC adjusts the declaration standard for cash transactions from 200,000 yuan to 50,000 yuan, and required that financial intermediaries should submit reports of block trade.**
October 11, 2017	After President Trump's visit, China relaxes foreign shareholding-ratio restrictions for Chinese banks and financial asset management companies, and increases the foreign investment share in companies involved in securities, funds management and futures.***
March 1, 2018	According to the Sensitive Industries Catalogue for Outbound Investment issued by the Chinese National Development and Reform Commission (2018), outbound investments in industries of weapons and military supplies, development and utilization of cross-border water resources, news media and other previously limited industries (including real estate, hotel, film cities, entertainment firms, sports clubs and private equity companies without real business projects) will be limited and regulated from March 1, 2018.

Source: Authors.

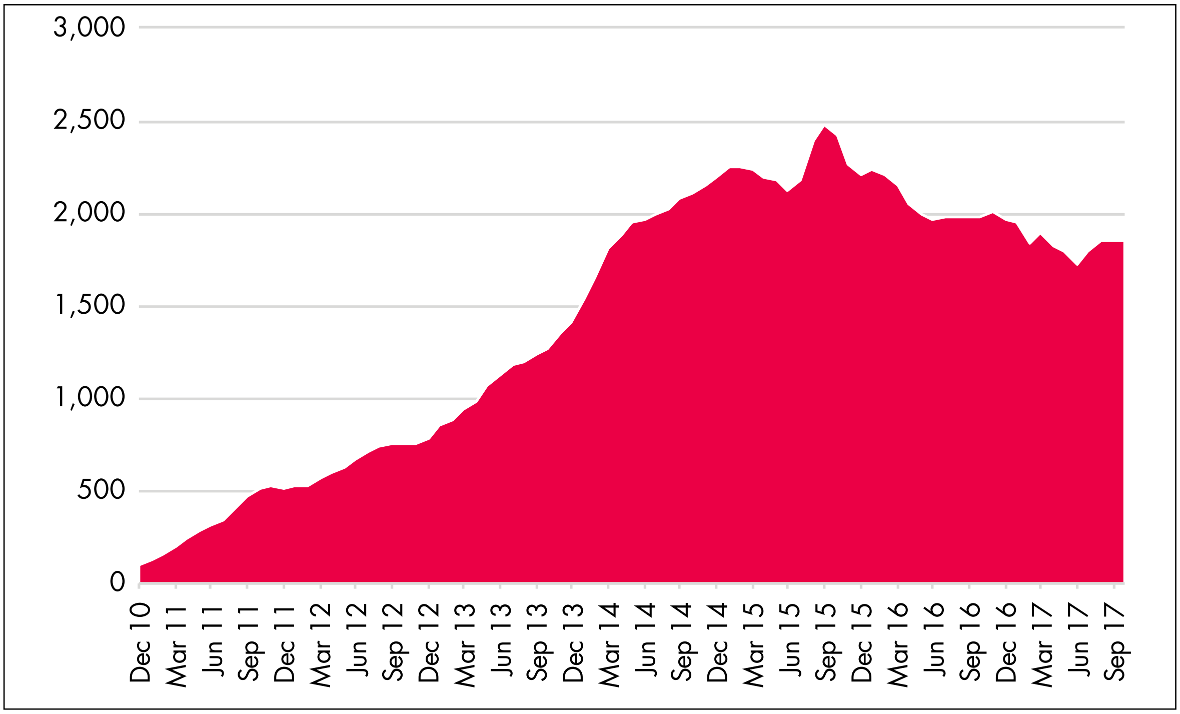
Notes: *See http://wuhan.pbc.gov.cn/wuhan/2929354/3228579/index.html; **see www.pbc.gov.cnzhengwugongkai/127924/128038/128109/3226224/index.html; ***see news briefing for U.S.-China heads' meeting organized by China's Information Office of the State Council, www.gov.cn/xinwen/2017-11/10/content_5238617.htm#1.

transaction, and which scrutinized all large (greater than $10 billion) corporate acquisitions, as well as acquisitions outside the investor's core business. The State Administration of Foreign Exchange and the National Development and Reform Commission then banned certain categories of foreign investment outright, and restricted others. Other financial reforms were not rolled back — the authorities continued to strengthen regulation of trust companies, shadow banks and the formal banking system — but the presumption that this process would be accompanied, even forced, by progressive liberalization of capital account transactions was suspended for the time being.

As a result of tighter controls, the growth of international usage of the currency slowed and, along some dimensions, shifted into reverse.[40] Renminbi deposits in Hong Kong fell by 30 percent between their peak in December 2014 and the end

40 Another factor contributing to reversal of the process was diminished expectations that the renminbi would continue to appreciate against other currencies on the back of strong Chinese economic growth.

Figure 11: Standard Chartered Renminbi Globalisation Index (December 2010–October 2017)



Data source: Standard Chartered, updated to October 2017.
Note: The Renminbi Globalisation Index tracks four components with weights inversely proportional to their variance (onshore or CNY deposits; trade settlement and other international payments; dim sum bonds and certificates of deposit issued; and foreign exchange turnover — all from an offshore perspective and denominated in renminbi) in several countries (Hong Kong, Singapore, Taiwan, the United States, the United Kingdom, Korea and France).

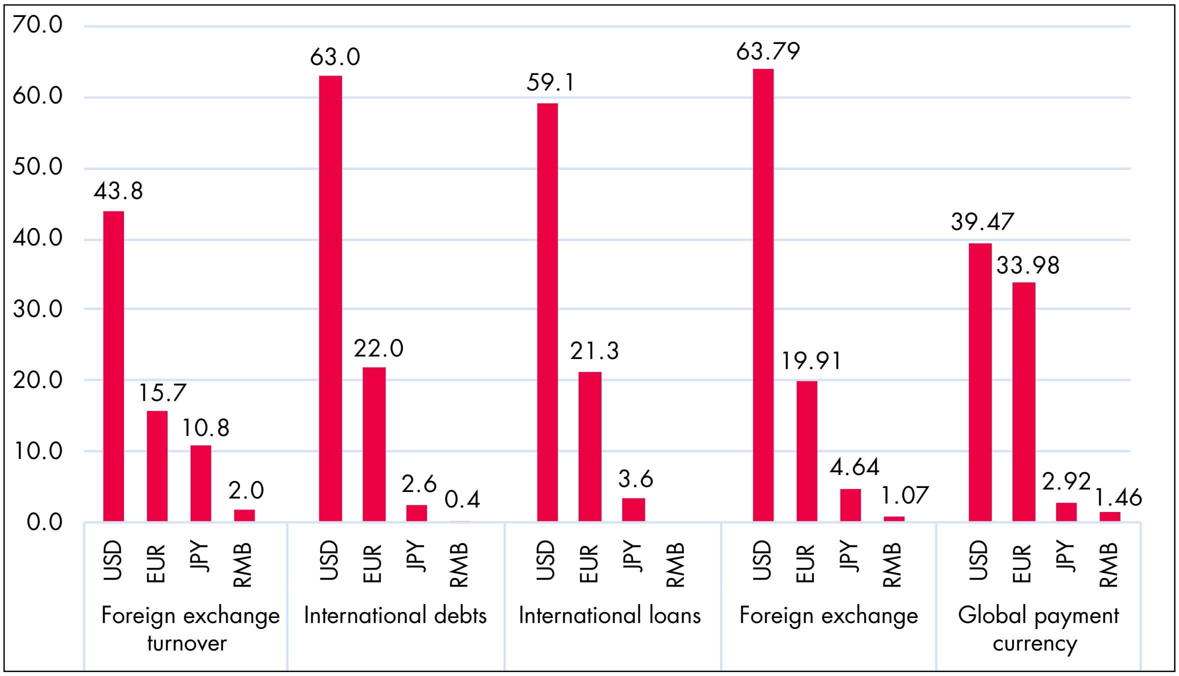
of 2015.[41] Use of the currency in global bond markets was one-quarter lower by the end of 2015 than at its 2014 peak. The share of China's own trade settled in renminbi shrank from 26 to 16 percent over the course of 2016. Whereas use of the renminbi in global payments rose strongly in 2014 and 2015, much of that increase was eliminated in the year following. SWIFT then reported a 40 percent drop in renminbi-denominated letters of credit in the first half of 2017. Figure 11, Standard Chartered Bank's summary index of renminbi globalization, illustrates the reversal.

Commentators continue to see fostering wider international use of the renminbi as one of the goals of Chinese economic and financial policy. They point to China's One Belt, One Road Initiative and its support for the Asian Infrastructure Investment Bank as additional reasons to expect use of the renminbi by other countries.[42] But they more freely acknowledge that the renminbi has a considerable distance to go before it qualifies as a leading international currency (a point that emerges clearly in Figure 12). They more readily acknowledge the dangers of proceeding with external liberalization in advance of domestic reform and of using currency internationalization as a lever with which to ratchet up the pressure for internal reform. Indicative of these facts, even Governor Zhou, when looking toward retirement, emphasized potential threats to domestic financial stability as a key challenge for Chinese policy makers (Zhou 2017).

41 By early 2017 they were down fully 45.5 percent from their 2014 peak (Lockett 2017).

42 See, for example, Teague (2017) and SWIFT (2017).

Figure 12: Role of the Renminbi and Other Currencies in the International Monetary System (%)



Data sources: Bank for International Settlements (BIS), European Central Bank, IMF's COFER, SWIFT.

Notes: 1. Foreign exchange turnover data are from the BIS Triennual survey, updated to April 2016. 2. International debt and loans data are both from the European Central Bank's annual review, updated to the fourth quarter, 2016. Debt data values are narrow measure values at constant exchange rates, while loan values are all cross-border values at constant exchange rates. 3. Foreign exchange reserves data is from IMF's COFER, representing the share of a currency in the total allocated reserves. 4. Global payment currency data is from SWIFT, representing the share of a currency as an international payments currency.

Implications

Starting in 2009, Chinese officials advanced two visions for reform of the international monetary and financial system. One centred on an enhanced role for the SDR. The other envisaged a system in which the renminbi would play a global role, comparable to that of the dollar, as a unit of account, a means of payment and a store of value for cross-border transactions.

Are these competing ideas, and if so, does Chinese officialdom really see the SDR or the renminbi as the future of the international monetary system? Do Chinese officials see an internationalized renminbi added to the SDR basket as a prerequisite for broadening the appeal of the latter and therefore for reforming the international monetary system in more SDR-centric directions? Or, do they see recognition of the renminbi as freely usable and its addition to the SDR basket as cementing the renminbi's status as a first-class international currency, thereby advancing its international role?

The interest of Chinese officials in reform of the international monetary system is sincere, as this paper's review of Chinese interventions in the IMF executive board over more than three decades shows. But their consistent priority has been domestic financial development and reform. One motivation for internationalizing the renminbi and attempting to satisfy the preconditions for SDR inclusion has therefore been to intensify the pressure for that domestic reform. Promoting wider international use of the renminbi presupposes relaxing controls on cross-border financial transactions, which in turn makes it more urgent to strengthen and develop domestic financial markets and institutions. Qualifying for inclusion in the SDR basket requires an IMF determination that the currency is freely usable, which similarly requires relaxing controls and makes domestic financial reforms more urgent. Thus, one strategy pursued by the promoters of domestic financial reform has been to encourage both renminbi internationalization and the pursuit of free-usability status in order to ratchet up the pressure for reform. This approach has come to be known as the "reverse pressure" strategy for reform.

This strategy, however, has risks. It may be critically important for domestic financial reform to follow external liberalization in short order, but nothing guarantees that it will happen. Reform is complex, and influential interests resist its implementation. Fears of a growth slowdown or poorly communicated changes in the exchange rate regime may intervene before the process is complete, with destabilizing consequences. When this sequence of events unfolded in 2015-2016, the Chinese authorities responded by tightening controls and restoring a more sustainable balance between external financial liberalization and domestic financial reform.

The implication is that the case for domestic financial reform should be made on its merits, and that a pro-reform coalition must be built at home. This appears to be what is happening in China in the wake of the events of 2015-2016. At the recently concluded Fifth National Financial Work Conference (July 14-15, 2017), President Xi emphasized the importance of systemic stability and financial regulation. The words "risk" and "regulation" appear 31 and 28 times, respectively, in the news release of the conference.[43] On the sidelines of the Nineteenth National Congress of the Communist Party of China in October 2017, Governor Zhou issued a stark warning of risks to financial stability, warning that China faced a possible "Minsky moment" (Wildau 2017). In his widely noted article of November 4, 2017, Zhou touched on renminbi internationalization and the currency's inclusion in the SDR basket, but he emphasized the importance of "prevent[ing] systemic financial risks. In contrast to earlier interventions, he acknowledged that "opening up [could] induce high frequency risks" (Zhou 2017).

Evidently, Chinese leaders are now addressing the issue of financial stability head-on, rather than hoping that, if they open the country's external accounts, the need for domestic reform will be recognized and domestic sources of resistance will be magically overcome.

43 Available at http://politics.people.com.cn/n1/2017/0715/c1024-29407430.html.

Authors' Note

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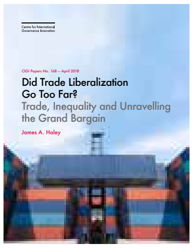

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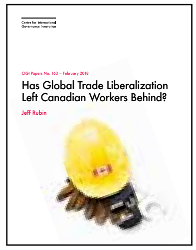

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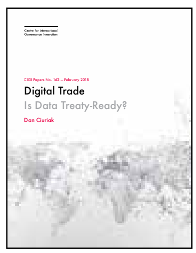

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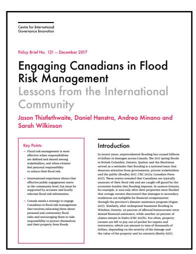
The knowledge-based and data-driven economy represents a new stage in the evolution of the economy, with transformative impacts on how goods and services are developed, produced, traded across borders, distributed and consumed. Data is the essential capital of this new economic age, as it enables the development of artificial intelligence, which drives the transformation of how technology transforms. This paper argues that data is not treaty-ready and draws the conclusion that Canada, which has much at stake in claiming a role in the data-driven economy, should be cautious about entering into international commitments, the implications of which are as yet unclear.



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