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# China and the SDR: Financial Liberalization through the Back Door

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We analyze the motives for China's campaign to secure the addition of its currency, the renminbi, to the basket of currencies comprising the International Monetary Fund's Special Drawing Rights. Our argument is that the campaign to add the renminbi to the SDR basket was not just a vanity project; it was a strategy used by the advocates of financial liberalization in China to force the pace of reform. It was also a strategy with significant risks.

*Keywords*: China; renminbi; Special Drawing Rights.

## 1. Introduction

On October 1, 2016 China's currency, the renminbi, was added to the basket making up the International Monetary Fund's Special Drawing Rights. The event was widely hailed as historic, especially in China. It symbolized, it was said, China's emergence as a significant stakeholder in the global monetary and financial system. It was viewed as an important step in modernizing the international system to meet the needs of the 21st century. It was seen as

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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 put it.[1]

Others of 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 in the SDR basket was, for Chinese officialdom, essentially a vanity project.

In this paper, we seek to recover the motives behind China's SDR campaign. Our argument is that the campaign to add the renminbi to the SDR basket was not just a vanity project; it was a strategy used by the advocates of financial liberalization in China to force the pace of reform. It was also a strategy to which significant risks were attached. 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. That in turn required the relaxation of China's heretofore comprehensive capital controls.[2] Moreover, 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.

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. Not all such episodes ended happily. The domestic reforms needed for the sustainability of those external measures do not

[1] As quoted in Reuters (2016).
[2] Relaxation is not necessarily synonymous with elimination; see footnote 6 and the further discussion in Sec. 4.

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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 in this case can be volatile capital movements with destabilizing financial consequences.

This was 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. But 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 preceding and seeking 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.[3] State-owned enterprises and regional governments worried about loss of concessionary access to finance.[4] Exporters were not all enamored 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 the 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

[3] 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 Garcia-Herrero *et al.* (2009) and Wildau (2015).

[4] See the discussion in Steinberg (2015).

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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 in Chinese officials' approach management of those changes. Furthermore, 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 we seek to do starting in Sec. 2.

Second, our focus in this paper is on the views and motives of the Chinese authorities and not also those of IMF officials and policymakers 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 await the opening of the IMF archives for calendar year 2015.[5] Nor is it our goal here to provide a positive assessment of whether the renminbi in fact met the criterion of being freely usable for cross-border transactions, or a normative assessment of whether the IMF and its shareholders were wise to deem it so in 2015.[6] These are interesting and important questions as well, but they are not our focus.

[5] Transcripts of the deliberations of the IMF Executive Board, for example, are available with a lag of five years.

[6] 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, in a Q&A on the 2015 SDR decision, noted that when sterling and the yen were first deemed freely usable both the UK 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 may be the appropriate basis for comparison.

## 2. China and the SDR

As just noted, China's views of the SDR have a long history. Statements by the country's directors in the IMF Executive Board, where the SDR is regularly discussed, provide a window onto that history. Thus, we can use those statements, as summarized in transcripts of meetings of the Board, to trace the evolution of official Chinese views.[7]

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.[8] China itself did not need foreign finance, given a 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.[9] 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.[10] If the interventions of Chinese directors were relatively brief, they returned repeatedly to this theme.

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 now added skepticism

[7] We discuss the criteria adopted by the IMF to determine whether a currency is freely usable in Sec. 4. Whether the IMF's 2015 decision accorded with those criteria is perhaps a question better left to legal scholars than economists.

[8] The inaugural comments from a Chinese 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, Chinese Director 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. 17/12/80 afternoon session, p. 5. In January 1981 Director Zhang argued that a new allocation was warranted, a sentiment, he observed, was shared by most other speakers in the Board. Zhang (CH), 21/1/81, pp. 24–25.

[9] 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. Wang (CH), 1/8/83, p. 20.

[10] In a sense, then, China saw the SDR then in a similar manner to how it sees the Asian Infrastructure Bank now, as a way of providing investible resources to poor countries and at the same time deepening political links with countries supportive of the resource transfer, not least China itself.



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about the dollar, warning of the fragility of a dollar-based international monetary system in this, a period when the dollar had appreciated sharply but now showed signs of reversing direction.[11] Compared to the preceding period, China's interventions in the Board were increasingly assertive and detailed.[12]

Thus, China's interest in and advocacy of reform of the international monetary system are not new; they 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 toward the SDR. By the 1990s Chinese officials appear to have grown disenchanted by the fact that there had been no agreement on a new SDR allocation.[13] In addition, the country's quota and voting rights in the IMF were not increased to a degree commensurate with its rising share of global trade and GDP.[14] The Asian crisis of 1997–1998 then caused countries in the region, including China, to grow disenchanted with the IMF more generally. To the extent that an expanded role for the SDR implied an expanded role for the IMF, this was 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 to resort to help from any such last-resort lender.[15] 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.

But once the Asian crisis receded, 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.[16] They reiterated the desirability of reforming the international monetary system to

[11] Wang (CH), 26/3/84, p. 36; Huang (CH), 25/3/86, p. 44; and Huang (CH), 31/1/86, p. 24.
[12] See for example Huang (CH), 31/1/86, p. 23; Huang (CH), 26/2/86 afternoon session, p. 10; Huang (CH), 25/3/86, p. 43.
[13] 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 Wei (CH) 19/4/93, pp. 24–25.
[14] An *ad hoc* increase in China's quota from 2.95% to 3% was finally agreed in 2001 in acknowledgment of this fact.
[15] 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).
[16] Wei (CH), 12/12/01, p. 40.

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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 policymakers to more precisely control the supply of international liquidity. The priorities of Chinese policymakers, 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.[17] 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.[18] 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.[19]

An essay by Governor Zhou Xiaochuan delivered in the wake of the global crisis that highlighted the limitations of the prevailing dollar-based global monetary and financial system then lent public prominence to these

[17] Thus, 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 Directors 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." Wang and Xu (CH), 23/11/05, p. 10.

[18] See Dooley *et al.* (2004).

[19] 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.

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arguments which the country's representatives in the Executive Board had been making for years (Zhou, 2009). 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"[20] 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. Essentially this was a 21st century successor to the Substitution Account rejected by the Board in 1980, again based on the idea that substituting SDRs for dollars would mitigate and eventually eliminate the risks associated with a depreciating greenback.[21]

Three months after Zhou's speech, 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.[22] 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.[23] In the event, China's system of capital controls was still sufficiently restrictive that the currency was again deemed not freely usable when that review was concluded in 2010.[24] All eyes looked forward, as a result, 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," as required by the Second Amendment to 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

[20] Zhou (2009), www.bis.org/review/r090402c.pdf (p. 2).
[21] On these earlier proposals for a substitution account, see Kenen (1981). The same author revisited the case in the early 2000s in Kenen (2010).
[22] He (CH), 26/6/09, p. 47.
[23] He and Wang (CH), 26/6/09, p. 25.
[24] See IMF (2010).

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.

## 3. Renminbi Internationalization

At the same time Governor 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 is both a spontaneous and directed phenomenon. In the 1980s and 1990s, and especially after it joined the World Trade Organization in 2001, China emerged as a major trading country.[25] Trade, together with tourism, provided multiple channels, some loosely regulated, through which foreigners could spontaneously acquire renminbi and through which 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 ASEAN countries. All 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 can be said to have been fully underway.

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 also in other foreign financial centers 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, to bring it onshore.[26] The pilot trade settlement scheme was extended to additional cities and provinces and then to essentially all Chinese companies, regions and foreign counterparties. The People's

[25] China overtook the United States as the single largest trading nation in 2013.
[26] A discussion of these steps is in Eichengreen and Kawai (2015).



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Table 1. Offshore RMB clearing banks (updated to October 2018).

| 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, UK | 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, US | Bank of China | September, 2016 |
| New York, US | J.P. Morgan Chase Bank, N.A. | February, 2018 |

*Data source*: PBOC.

Bank of China designated one of the Big 4 Chinese banks as official renminbi clearing bank for a succession of foreign financial centers, 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 (see Table 2).[27]

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

[27]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.

Table 2. Central bank swap lines with PBOC (updated to October 2018).

| Bank | Date | Amount | Duration |
|---|---|---|---|
| Bank of Korea | 2009.4.20 | 180 (billion CNY)/38 (trillion KRW) | 3 years |
| | 2011.10.26 | 360 (billion CNY)/64 (trillion KRW) | |
| | 2014.10.11 | 360 (billion CNY)/64 (trillion KRW) | |
| Hong Kong Monetary Authority | 2009.1.20 | 200 (billion CNY)/227 (billion HKD) | 3 years |
| | 2011.11.22 | 400 (billion CNY)/490 (billion HKD) | |
| | 2014.11.22 | 400 (billion CNY)/505 (billion HKD) | |
| | 2017.11.22 | 400 (billion CNY)/470 (billion HKD) | |
| Bank Negara Malaysia | 2009.2.8 | 80 (billion CNY)/40 (billion MYR) | 3 years |
| | 2012.2.8 | 180 (billion CNY)/90 (billion MYR) | |
| | 2015.4.17 | 180 (billion CNY)/90 (billion MYR) | |
| | 2018.8.20 | 180 (billion CNY)/110 (billion MYR) | |
| National Bank of the Republic of Belarus | 2009.3.11 | 20 (billion CNY)/8 (trillion BYN) | 3 years |
| | 2015.5.10 | 7 (billion CNY)/16 (trillion BYN) | |
| Bank Indonesia | 2009.3.23 | 100 (billion CNY)/175 (trillion IDR) | 3 years |
| | 2013.10.1 | 100 (billion CNY)/175 (trillion IDR) | |
| Central Bank of Argentina | 2009.4.2 | 70 (billion CNY)/38 (billion ARS) | 3 years |
| | 2014.7.18 | 70 (billion CNY)/90 (billion ARS) | |
| | 2017.7.18 | 70 (billion CNY)/155 (billion ARS) | |
| Central Bank of Iceland | 2010.6.9 | 3.5 (billion CNY)/66 (billion ISK) | 3 years |
| | 2013.9.11 | 3.5 (billion CNY)/66 (billion ISK) | |
| | 2016.12.21 | 3.5 (billion CNY)/66 (billion ISK) | |
| Monetary Authority of Singapore | 2010.7.23 | 150 (billion CNY)/30 (billion SGD) | 3 years |
| | 2013.3.7 | 300 (billion CNY)/60 (billion SGD) | |
| | 2016.3.7 | 300 (billion CNY)/64 (billion SGD) | |
| Reserve Bank of New Zealand | 2011.4.18 | 25 (billion CNY)/5 (billion NZD) | 3 years |
| | 2014.4.25 | 25 (billion CNY)/5 (billion NZD) | |
| | 2017.5.19 | 25 (billion CNY)/5 (billion NZD) | |
| Central Bank of the Republic of Uzbekistan | 2011.4.19 | 0.7 (billion CNY)/167 (billion UZS) | 3 years |
| Bank of Mongolia | 2011.5.6 | 5 (billion CNY)/1 (trillion MNT) | 3 years |
| | 2012.3.20 | 10 (billion CNY)/2 (trillion MNT) | |
| | 2014.8.21 | 15 (billion CNY)/4.5 (trillion MNT) | |
| | 2017.7.6 | 15 (billion CNY)/5.4 (trillion MNT) | |
| National Bank of Kazakhstan | 2011.6.13 | 7 (billion CNY)/150 (billion KZT) | 3 years |
| | 2014.12.14 | 7 (billion CNY)/200 (billion KZT) | |
| Bank of Thailand | 2011.12.22 | 70 (billion CNY)/320 (billion THB) | 3 years |
| | 2014.12.22 | 70 (billion CNY)/370 (billion THB) | |
| State Bank of Pakistan | 2011.12.23 | 10 (billion CNY)/140 (billion PKR) | 3 years |
| | 2014.12.23 | 10 (billion CNY)/165 (billion PKR) | |
| | 2018.5.24 | 20 (billion CNY)/351 (billion PKR) | |



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Table 2. (*Continued*)

| Bank | Date | Amount | Duration |
|---|---|---|---|
| Central Bank of the United Arab Emirates | 2012.1.17<br>2015.12.14 | 35 (billion CNY)/20 (billion AED)<br>35 (billion CNY)/20 (billion AED) | 3 years |
| Central Bank of the Republic of Turkey | 2012.2.21<br>2015.9.26 | 10 (billion CNY)/3 (billion TRY)<br>12 (billion CNY)/5 (billion TRY) | 3 years |
| Reserve Bank of Australia | 2012.3.22<br>2015.3.30 | 200 (billion CNY)/30 (billion AUD)<br>200 (billion CNY)/40 (billion AUD) | 3 years |
| National Bank of Ukraine | 2012.6.26<br>2015.5.15 | 15 (billion CNY)/19 (billion UAH)<br>15 (billion CNY)/54 (billion UAH) | 3 years |
| Banco Central do Brasil | 2013.3.26 | 190 (billion CNY)/60 (billion BRL) | 3 years |
| Bank of England | 2013.6.22<br>2015.10.20 | 200 (billion CNY)/20 (billion GBP)<br>350 (billion CNY)/35 (billion GBP) | 3 years |
| National Bank of Hungary | 2013.9.9<br>2016.9.12 | 10 (billion CNY)/375 (billion HUF)<br>10 (billion CNY)/416 (billion HUF) | 3 years |
| Bank of Albania | 2013.9.12 | 2 (billion CNY)/35.8 (billion ALL) | 3 years |
| ECB | 2013.10.8<br>2016.9.27 | 350 (billion CNY)/45 (billion EUR)<br>350 (billion CNY)/45 (billion EUR) | 3 years |
| Swiss National Bank | 2014.7.21<br>2017.7.21 | 150 (billion CNY)/21 (billion CHF)<br>150 (billion CNY)/21 (billion CHF) | 3 years |
| Central Bank of Sri Lanka | 2014.9.16 | 10 (billion CNY)/225 (billion LKR) | 3 years |
| Central Bank of Russian Federation | 2014.10.13 | 150 (billion CNY)/815 (billion RUB) | 3 years |
| Qatar Central Bank | 2014.11.3 | 35 (billion CNY)/20.8 (billion QAR) | 3 years |
| Bank of Canada | 2014.11.8 | 200 (billion CNY)/30 (billion CAD) | 3 years |
| Centrale Bank van Suriname | 2015.3.18 | 1 (billion CNY)/0.52 (billion SRD) | 3 years |
| Central Bank of Armenia | 2015.3.25 | 1 (billion CNY)/77 (billion AMD) | 3 years |
| South African Reserve Bank | 2015.4.10 | 30 (billion CNY)/54 (billion ZAR) | 3 years |
| Banco Central de Chile | 2015.5.25 | 22 (billion CNY)/2.2 (trillion CLP) | 3 years |
| National Bank of Tajikistan | 2015.9.3 | 3 (billion CNY)/3 (billion TJS) | 3 years |
| Bank Al-Maghrib | 2016.5.11 | 10 (billion CNY)/15 (billion MAD) | 3 years |
| National Bank of Serbia | 2016.6.17 | 1.5 (billion CNY)/27 (billion RSD) | 3 years |
| Central Bank of Egypt | 2016.12.6 | 18 (billion CNY)/47 (billion EGP) | 3 years |
| Total | | 3,753.7 (billion CNY) | |

*Data source*: PBOC.

other provinces were opened to foreign direct investment 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

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their local brokers and clearinghouses.[28] 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.[29] First, there was the convenience value for Chinese banks and firms of wider international use of their currency and 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.[30] 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.[31]

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 U.S. dollar, might be more symmetrical, operate more smoothly, and not be subject to the global imbalances of the "revived Bretton Wood System."

Fourth, there were arguments of prestige, that a first-class power should have a first-class international currency, just like 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

[28] 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.

[29] What follows synthesizes our own previous work on this subject (e.g., Eichengreen and Kawai, 2015) and that of other scholars such as Lau (2012), Huang *et al.* (2015) and Yu (2015).

[30] 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).

[31] 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).

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did Chinese officials evidently see including the currency in the basket as an important aspect of the renminbi-internationalization push?[32] 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 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."[33]

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."[34] Or, as one of the rating agencies put it, "Fitch does 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."[35]

## 4. Reverse Pressure

A fifth and key rationale for renminbi internationalization, we will argue, 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 around the exact same time, the

[32] Evidently, since they were actively lobbying for the currency's inclusion in the SDR basket at the same time they were prominently mounting their renminbi-internationalization push.
[33] The quote is by "a BMI Research team," cited in Holodny (2016). See also the second half of the statement by the PBOC itself, heralding the IMF's decision, in the first paragraph of this paper.
[34] Cited in Adinolfi (2015). Governments have exposure to SDRs, but this is not exposure that they typically hedge.
[35] As quoted in Allen (2015).

middle of the first decade of the 21st century, 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 earlier. 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.

If these things were not done, the implication followed, 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



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

It is at this point where renminbi internationalization connects up 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 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 buy-sell spreads in the foreign exchange market.[36]

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.[37] Logically, this meant that qualifying the country's currency for inclusion in the SDR basket was a priority goal by 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).[38] To put it another way, the SDR was the impatient reformers' "Trojan horse."[39]

Zhou Xiaochuan, long-time governor of the People's Bank of China, 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.

[36] Those criteria were then clarified and adopted by the IMF Executive Board in a decision in 2000.

[37] Note our use of the word "relax" rather than alternatives like "dismantle" or "eliminate." As footnote 6 reminds the reader, capital-account convertibility (the absence of all capital controls) has not always been a prerequisite historically for a determination of free usability.

[38] To the extent that Chinese officials and their public valued the prestige attached to their currency's inclusion in the SDR basket (to the extent they 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 the PBOC's statement on the day the IMF decision was announced (quoted in the first paragraph of this paper).

[39] As in Wildau and Mitchell (2016).

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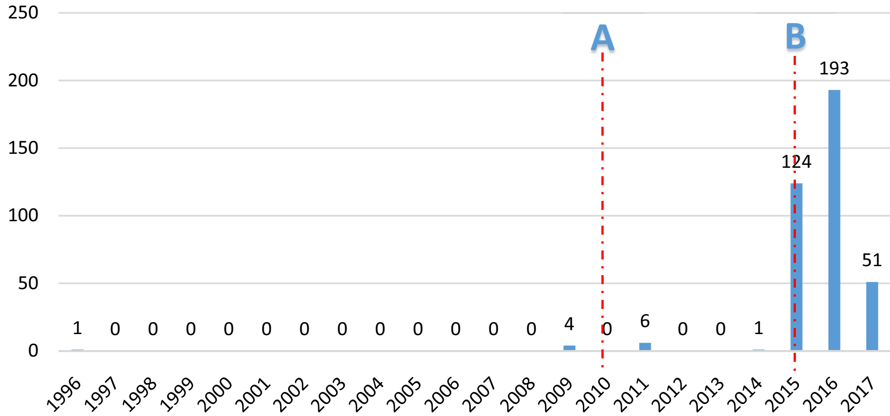


Fig. 1. Number of mentions of SDR on Chinese central government website (per year, 1996–2017).
*Note*: A: 2010 Review for SDR's basket composition, which aroused official discussion in China.
B: 2015 Review for SDR's basket composition.
*Sources*: Central Government of the People's Republic of China website (www.gov.cn) and authors' calculations.

In 2009, as noted earlier, 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 Fig. 1 shows. Nor did Zhou's essay draw a link between a more prominent role for the SDR and domestic financial reforms. But in a subsequent speech posted to the PBOC website (Zhou, 2017), these links appear explicitly. To limit systematic financial risks, Zhou began, it is essential to "accelerate financial sector's reform and opening up" (authors' translation). Zhou then continued "[I]nternationalization of the RMB and the two-way opening up of the financial sector have promoted the continuous improvement of the financial system."[40]

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, whose title can be translated as "The Journey towards the SDR's Inclusion of the Renminbi" (PBOC, 2017). This was essentially an elaboration of Governor Zhou's previously-stated views. As the central point is put there, the addition of the renminbi to the SDR basket "can be considered as a milestone, which is not only the result

[40]Inclusion of the renminbi in the SDR basket, he observed in addition, served to strengthen China's role in international financial governance.

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of reform and openness in the past 39 years, but also an important driving force for China's further reform and opening up."

In a concurrent interview (*Caijing*, 2017 — in English, "Finance and Economics Magazine"), intended for foreign as well as domestic consumption, Zhou referred in addition 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 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." The possibility of adding the renminbi to the SDR basket can be understood as one of those opportunities.

## 5. 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 1% of the China's total foreign trade in the second quarter of 2010, renminbi trade settlement ballooned almost 17-fold by the mid-2013, reaching 16.5% of China's total trade.[41] See Fig. 2. That explosive growth slowed subsequently, to 41% in 2014 and 10% in 2015.

[41] Admittedly, 80% of these trade settlements were with Hong Kong, however, raising some questions about the generality of use of the RMB in trade settlement with China.


Fig. 2. Renminbi trade settlement (2009–2017) in billion yuan.
*Data source*: PBOC.

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Banks in Hong Kong, China had been allowed to open renminbi accounts as early as 2004, but it was 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 earlier. From some US$9.2 billion at the end of 2009 (representing 1% of total deposits in Hong Kong), renminbi deposits surged to US$47.3 billion by the end of 2010 (5.4% of total deposits), US$93 billion (9.5%) by the end of 2011, and US$96 billion (about 9%) by the end of 2012. The rate of increase slowed starting in 2012, but this reflected less any diminished attractiveness of the currency than investors in Hong Kong shifting away from renminbi deposits into other renminbi-denominated financial assets (Fig. 3). Consistent with this interpretation, the value of renminbi deposits in Hong Kong resumed its rise subsequently, reaching US$124.6 billion, or about 11% of total deposits, at the end of October 2013.

Although the authorities continued to regulate inward and outward foreign direct investment, the controls in question were progressively relaxed. The approval process for the use of renminbi funds for outward FDI by Chinese enterprises and 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 creation of a Renminbi FDI scheme

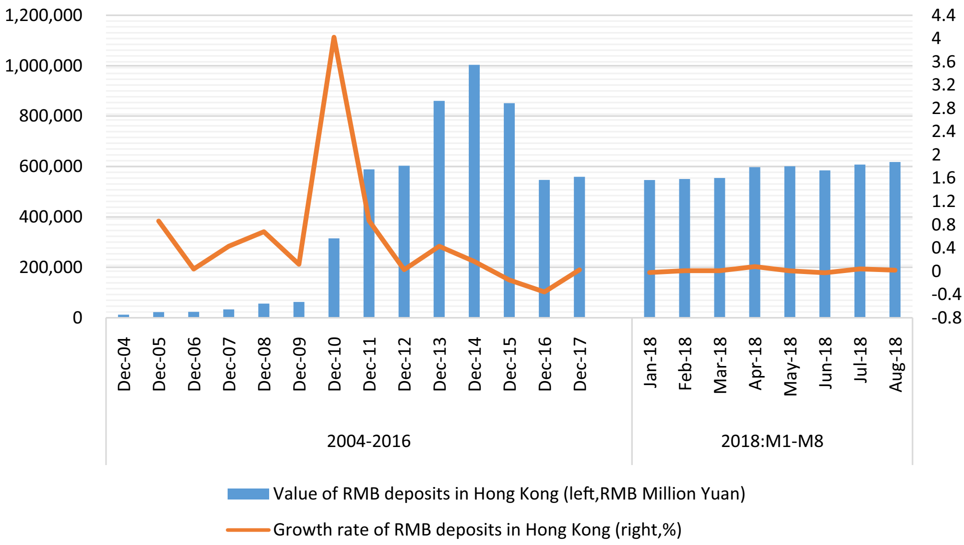


Fig. 3. RMB deposits in Hong Kong (2009–2018).

*Note*: The data is accumulated value by the end of each given period.
*Source*: Hong Kong Monetary Authority.

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the following October. In 2012–2014, renminbi-denominated and settled FDI accounted for about a 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 Fig. 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 US$0.9 billion in 2010 to US$4.6 billion in 2011 and US$7.1 billion in 2012. Between the first quarter of 2010 and first quarter of 2015, the global share of international debt securities denominated in renminbi rose by a factor of six. Renminbi bonds were issued first and foremost 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 Society for Worldwide

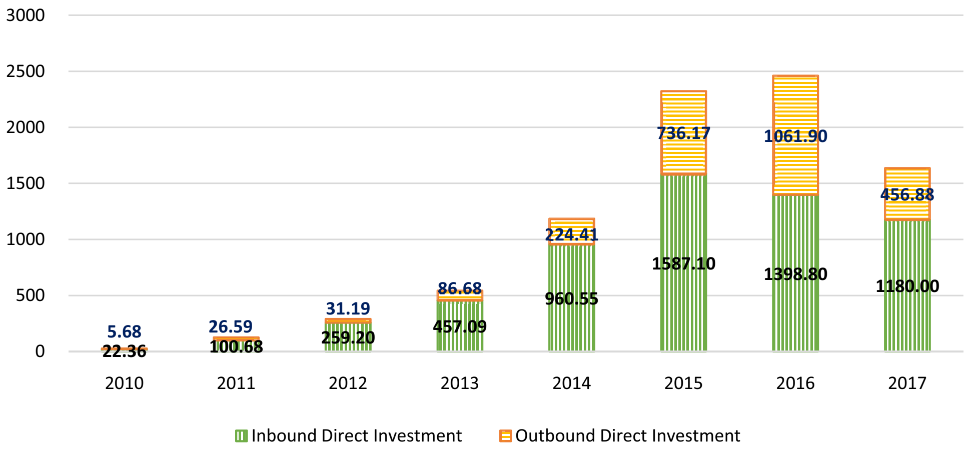


Fig. 4. Renminbi-settled foreign direct investment (2010–2017), billion yuan.
*Data source*: PBOC.


Fig. 5. Dim sum bonds issued in Hong Kong (2009–2017).
*Note*: Due to data availability, 2017 data only cover the first 11 months.
*Data source*: Hong Kong Monetary Authority.



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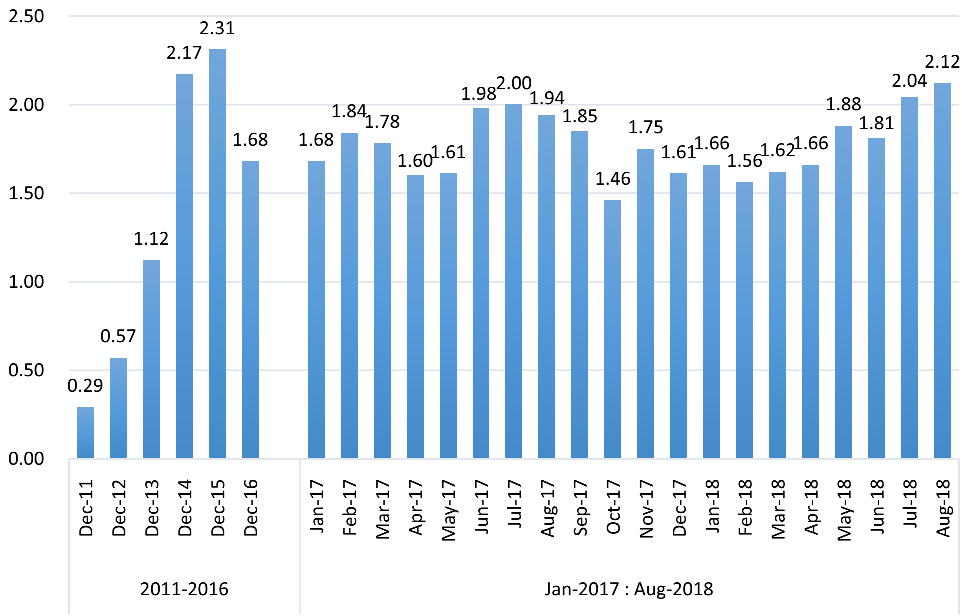


Fig. 6. RMB's share as payment currency (%).

*Note*: Customer initiated and institutional payments. Based on value.
*Data source*: SWIFT, updated to August 2018.

Interbank Financial Telecommunication (Swift), which can be taken as a summary measure of the use of the currency in cross-border transactions.

All this was cited as evidence of progress, although there was room for disagreement over exactly how much. The renminbi still accounted for just 2.17% 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 1%.[42] 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. Still, if assessments differed, the consensus was that the rate of change was indicative of 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% in the year ending in June 2015 and then quickly giving

[42]See Chatterjee and Armstrong (2014). The IMF did not at this time distinguish renminbi reserves in its COFER data base.



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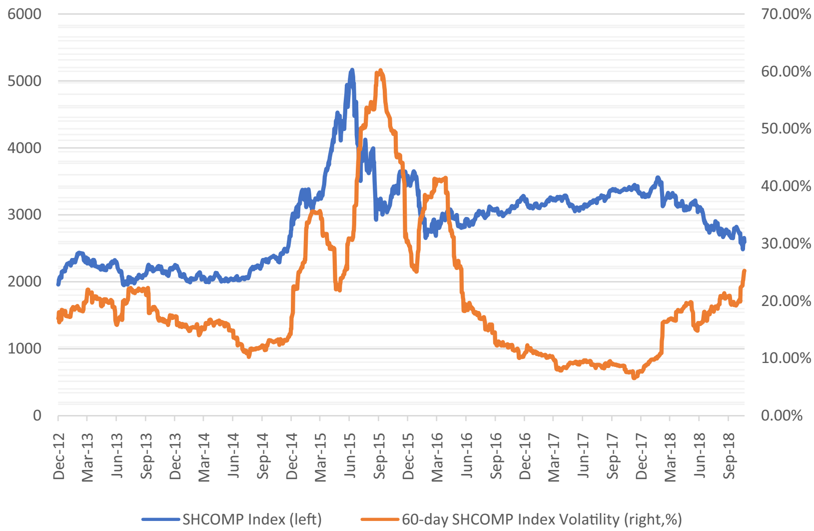


Fig. 7. China's stock prices and volatility (2012/12/01–2018/10/24).
*Data source*: Bloomberg.

back its gains. Market volatility rose relative to earlier years, with share valuations falling by as much as 10% in a day (see Fig. 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 US$1 trillion of reserves in 2015–2016, fully a quarter of the reserves with which it entered the period (see Fig. 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 7% target (see Fig. 9). This liquidity had the predictable effect of fueling 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.



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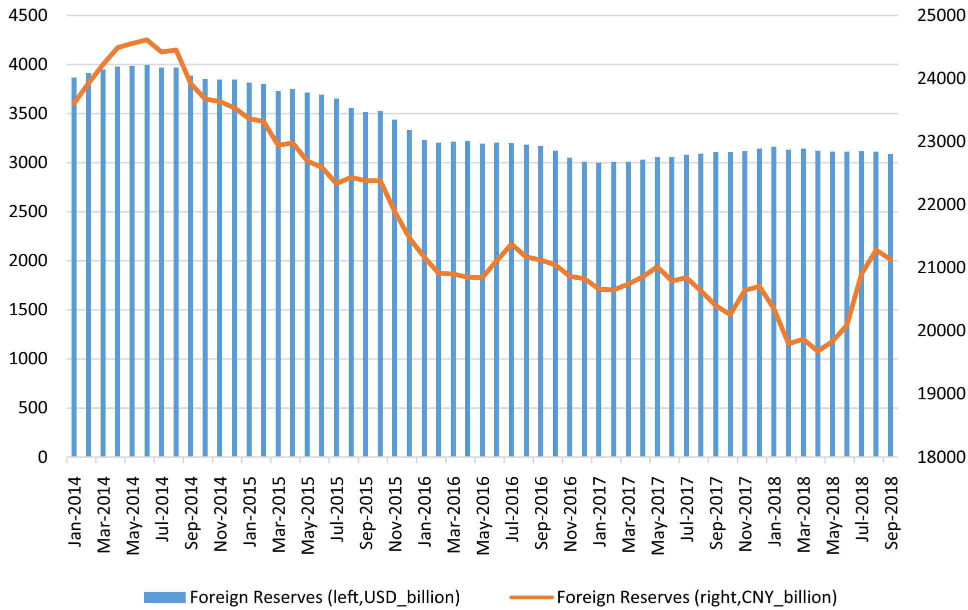


Fig. 8. PBOC foreign reserves (2014–2018, monthly).

*Source*: PBOC.

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So this story can be told, as in the last paragraph, without reference to international factors. That said, it can be plausibly argued that these unstable dynamics were accentuated by the external liberalization undertaken in the preceding period. So 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 clearinghouses 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 US$4 trillion of foreign reserves could continue to intervene at a rate of US$100 billion a

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Table 3. RMB 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 |
| | 1,740 | |

*Data sources*: People's Bank of China. Updated to 10/23/2018.

month to support the exchange rate — and if it could not, what would happen next.[43] These additional factors accentuating the crisis were all related to the prior liberalization of China's capital account.[44]

Finally, there was the reform of the exchange rate mechanism announced on August 11, 2015, designed to make the renminbi more heavily market determined. Whereas previously the PBOC had set the midpoint for the +/− 2% daily trading band, 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

[43] China does not 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 US$900 billion in the 10 months ending in November 2015.

[44] 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 what the advocates of "reverse pressure" sought to apply it.

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closing price. (Table 4 shows how this measure was related to the ongoing process of exchange rate reform). This step 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 Fig. 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 of 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% 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 150 yuan overseas on behalf of their clients for every 100 yuan repatriated to China. They ordered banks and financial institutions

Table 4. Changes in China's exchange rate regime.

| Date | Events |
|---|---|
| April 1, 2011 | Renminbi (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 it 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 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 New Zealand dollar is officially launched in China's interbank foreign exchange market to facilitate the formation of direct exchange rate of RMB against New Zealand dollar. |

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Table 4. (*Continued*)

| Date | Events |
|---|---|
| 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. |
| 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. |
| August 3, 2018 | Recently, due to factors such as trade frictions and changes in international exchange markets, there have been some signs of procyclical fluctuations in the foreign exchange market. In order to prevent macro financial risks, promote the stable operation of financial institutions, and strengthen macro-prudential management, the People's Bank of China decided to adjust the foreign exchange risk reserve ratio of forward sales from 0 to 20% from August 6, 2018. |
| August 24, 2018 | Most of the middle price quotation lines have adjusted the "counter-cyclical factor". It is expected that the "counter-cyclical factor" will maintain a basically stable and positive effect on the RMB exchange rate at a reasonable and balanced level. |

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

to investigate possible over-invoicing of imports. They required banks to report all cross-border cash transfers of more than 50,000 yuan, down from 200,000 yuan previously. They cracked down on individuals using other people's quota for foreign currency purchases and on purchases by residents of insurance products in Hong Kong (see Table 5).

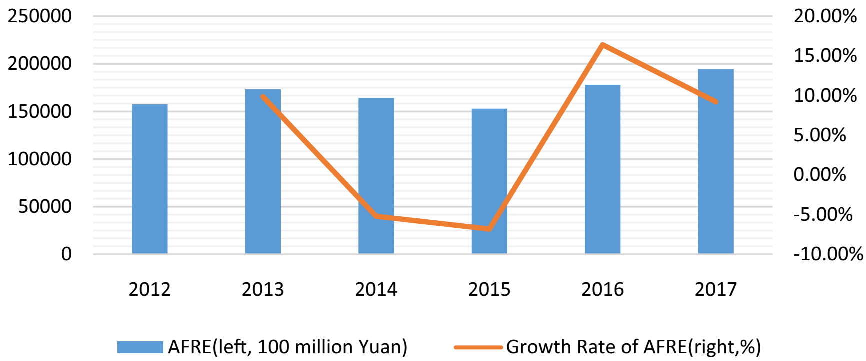


Fig. 9. Total social financing.

*Source*: PBOC.

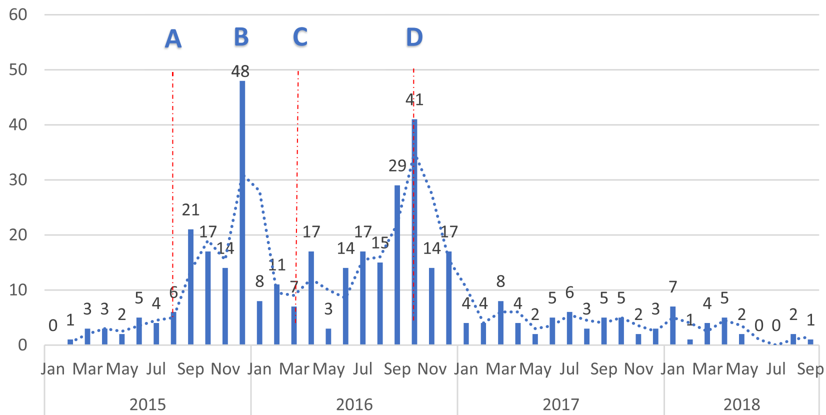


Fig. 10. Number of mentions of SDR on Chinese central government website (by month, 2015–2018).

*Note*: A: August 11, 2015: PBOC conducted the 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.
*Sources*: Chinese central government website and authors' calculation.*
*The vertical 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.

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 US$1 billion to a single overseas real-estate transaction, and which scrutinized all large (greater than



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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, 2017). |
| 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, 2017). |
| 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 Donald Trump's visit, China relaxes foreign share-holding-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. |

*Notes*: *See http://wuhan.pbc.gov.cn/wuhan/2929354/3228579/index.html; ** see www.pbc.gov.cn/zhengwugongkai/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

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US$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 while restricting 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.[45] Renminbi deposits in Hong Kong fell by 30% between their peak in December 2014 and the end of 2015.[46] Use of the currency in global bond markets was a quarter

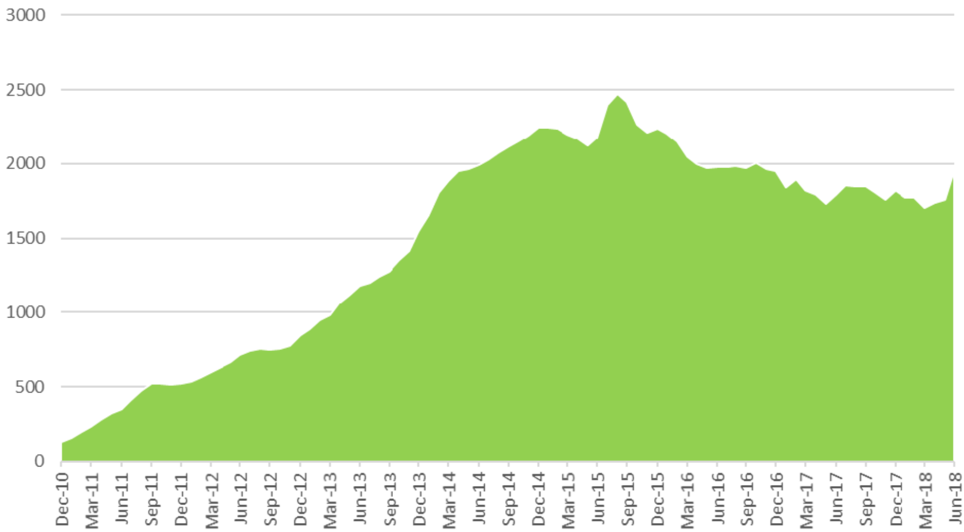


Fig. 11. Standard Chartered renminbi globalization index (12/2010–07/2018).

*Note*: Renminbi Globalization Index (RGI) tracks four components with weights inversely proportional to their variance (CNY deposits; trade settlement and other international payments; "Dim Sum" bonds and certificates of deposit issued; foreign exchange turnover — all from an offshore perspective and denominated in renminbi) in several economies (Hong Kong, Singapore, Taiwan, the United States, the United Kingdom, South Korea, France).

*Sources*: Standard Chartered, updated to July 2018.

[45] 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.

[46] By early 2017, they were down fully 45.5% from their 2014 peak (Lockett, 2017).



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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% 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% drop in renminbi-denominated letters of credit in the first half of 2017. Figure 11 illustrates the reversal.

Commentators continue to see fostering wider international use of the renminbi as one of goals of Chinese economic and financial policy. They point to China's Belt and Road Initiative and its support for the Asian Infrastructure Investment Bank as additional reasons to expect use of the renminbi by other countries.[47] But they more freely acknowledge that the renminbi has a considerable distance to go before it qualifies as a leading international

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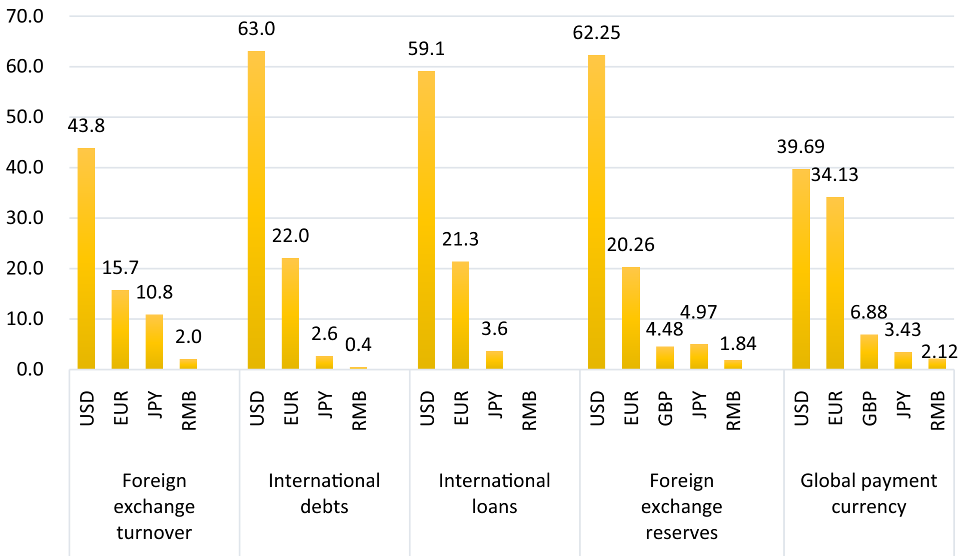


Fig. 12. Role of the renminbi and other currencies in the international monetary system (%).
*Notes*: (1) Foreign exchange turnover data are from the BIS Triennual survey, updated to April 2016.
(2) International debts and loans data are both from ECB's annual review, updated to the fourth quarter, 2016. Debts data values are narrow measure values at constant exchange rates, while loans data values are all cross-border values at constant exchange rates.
(3) Foreign exchange reserves data are from IMF's COFER, representing the shares of respective currencies in the total allocated reserves, updated to the second quarter, 2018.
(4) Global payment currency data are from SWIFT, representing the share of respective currency as an international payments currency, updated to August 2018.
*Sources*: Bank for International Settlements (BIS), European Central Bank (ECB), IMF's COFER, SWIFT.

[47] See e.g., Teague (2017) and Swift (2017).

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currency (a point that emerges clearly from Fig. 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.[48]

## 6. Implications

Starting in 2009, Chinese officials advanced two visions for reform of the international monetary and financial system. One centered on an enhanced role for the IMF's Special Drawing Rights. 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, means of payment and 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 and thereby advancing its international role?

The interest of Chinese officials in reform of the international monetary system is sincere, as we have shown through our review of Chinese interventions in the IMF Executive Board over more than three decades. But their consistent priority has been domestic financial development and reform. One motivation for renminbi internationalization and for 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

[48] Again the reference is to Zhou (2017).

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 has come to be known as the "reverse pressure" strategy for reform.

But this strategy has risks. It may be critically important for domestic financial reform to follow external liberalization in short order, but nothing guarantees that this will be the case. 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 Conference on Finance, President Xi emphasized the importance of systemic stability and financial regulation. The words "risk" and "regulation" appear 31 and 28 times, respectively, in the report of the conference. On the sidelines of People's Congress, in October 2017, Governor Zhou issued a stark warning of risks to financial stability, warning that China faced a possible "Minsky moment."[49] In his widely noted November 11, 2017 speech, Zhou touched on renminbi internationalization and the currency's inclusion in the SDR basket but emphasized the importance of "prevent[ing] systemic financial risks. In contrast to earlier interventions, he acknowledged that "opening up [could] induce high frequency risks."[50]

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.

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[49] See Wildau (2017).
[50] Ibid.



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