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The Internationalization of the RMB, Capital Market Openness,
and Financial Reforms in China

Authors' List

Joshua Aizenman, USC and the NBER

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Joshua Aizenman

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This paper provides an overview of Chinese financial and trade integration in recent decades, and the challenges facing China in the coming years. China had been a prime example of export-led growth, benefiting from learning by doing, and by adopting foreign know-how, supported by a complex industrial policy. While the resultant growth has been spectacular, it comes with hidden but growing costs and distortions. The Chinese export-led growth path has been challenged by its own success, and the Global Financial Crisis forced China toward rebalancing, which is a work in progress. Reflecting on the internationalization of the CNY, one expects the rapid accelerating of the commercial internationalization of the CNY. In contrast, there are no clear-cut reasons to rush with the full CNY financial internationalization: The gains from CNY financial internationalization are overrated.

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This paper overviews the Chinese financial and trade integration in recent decades. We start by evaluating the history of Chinese growth-cum-financial policies, arguing that the export-led growth of China was a highly successful policy, as has been vividly illustrated by the unprecedented catching up of Chinese size with the U.S. [either in current dollar or adjusted for PPP]. Yet, the remarkable success of this process sowed its end, and the need for China to rebalance its economy. Looking forward, we point out the logic of sequencing financial reforms. While one expects the rapid acceleration of commercial internationalization of the CNY, and the growing use of CNY in the sphere of Chinese commercial and outward FDI transactions, there are no clear-cut reasons to rush with the full CNY internationalization. Chances are that the gains from a rapid CNY financial internationalization are overrated, and ignoring the downsides of this process would be to Chinese (and probably global) peril.

1. The Buoyant 2000s

China has been a prime example of export-led growth, benefiting from learning by doing, and by adopting foreign know-how, supported by a complex industrial policy. This policy has been characterized by controlled openness, and internal financial repression. The financial repression has taxed the saving interest rate, allowing prime borrowers, including the Chinese state-owned enterprise (SOE), elastic access to cheap and sustainable funding. FDI has been welcome, subject to China's rules of the game. These rules leveraged the carrot of Chinese market size and cheap labor, inducing the foreign investor to operate in China in joint venture partnership with Chinese producers (Holmes et al. 2013). The outcome has been rapid learning by doing and transfer of know-how and the rapid climb of China on the ladder of industrial sophistication, challenging foreign producers in the Chinese and third-country markets down the road.¹

¹ Holmes et al. (2013) credited this policy with high welfare gains for China (at about 4.5% per year in annual consumption), and welfare losses to the U.S. and the EU when compared with the alternative case, in which technology transfer is not a precondition to investing in China. Pula and Santabárbara (2011) found that China has gained quality relative to other competitors since 1995, indicating that China is climbing up the quality ladder. The relatively high and

Arguably, a modern version of mercantilism has been at work (Aizenman and Lee 2007, 2008). The rapid growth and the growing trade and current account surpluses as a fraction of the GDP has occurred in tandem with massive hoarding of international reserves (IR) combined with massive sterilization of expending trade surpluses and financial inflows. These policies aimed at delaying and slowing the real appreciation associated with successful rapid growth. While the resultant growth has been spectacular, it comes with hidden, but growing, costs and distortions. Figure 1, in the top panel, provides diamond chart snapshots of Chinese generalized trilemma configuration: Financial integration (leftward from the diamond's center), Monetary independence (vertically upward from the diamond's center), Exchange rate stability (rightward from the diamond's center), and IR/GDP (vertically downward from the diamond's center). The first three scales are capturing Mundell's open economy trilemma configurations, normalized between 0 and 1 (Aizenman, Chinn, and Ito 2010). The IR/GDP aims at capturing the growing use of international reserves to buffer against financial instability. The chart exhibits the remarkable stability of the Chinese exchange rate during the 1990s and the 2000s, buffered by rapid increases in IR/GDP, while maintaining controlled financial integration and monetary independence. Figure 1 also puts Chinese experience in the context of the average experience of emerging Asia [excluding China] and emerging Latin America during the same decades (the middle and the lower panel, respectively). The charts validate the greater focus of Chinese experience on exchange rate stability and IR hoarding, while overall maintaining limited financial integration relative to other emerging markets.

In the run-up to the financial crisis, the world economy was characterized by enormous current-account imbalances (Figure 2). China's surplus alone was 0.7% of world GDP in 2008, while the United States had a deficit of more than 1% of world GDP that year. The current account balances of the world's surplus countries (e.g., China, Germany, Japan, oil exporters) exceeded 2.5% of global GDP in 2008, co-funding the current-account balances of the world's deficit countries, mostly the United States, non-Asian emerging markets, and the Euro area excluding Germany.

In the early 2000s, some suggested large imbalances could be sustained for the foreseeable future. Dooley, Folkerts-Landau, and Garber (2003, 2005 and 2009) argued an Asian

improving quality of China's exports may be explained by the increasing role of global production networks in China.

periphery, primarily China, could pursue a development strategy of export-led growth supported by undervalued exchange rates and capital controls for many years. Large current-account surpluses and official capital outflows in the form of accumulated reserve asset claims on the United States would characterize the Asian periphery for perhaps a decade or more. Moreover, the strategy was a “win” for the center (e.g., the United States) as well, since virtually unlimited demand for its financial assets would allow it to run large current-account deficits, living beyond its means for years.

At some point, the Asian periphery would grow sufficiently to graduate to the center. It would then undertake financial liberalization and adopt greater exchange-rate flexibility. But when that happened, another set of developing countries would step forward to become the new periphery, pursuing the same export-led growth strategy against the center as had China and the Asian periphery, and before them, post-war Europe and Japan. As a result, global imbalances, with the periphery running large current-account surpluses and the center large current-account deficits, would be a regular feature of the international monetary system for years to come. Dooley et al. (2005) provided an asset-market interpretation of the win-win view of global imbalances: U.S. deficits supplied international collateral to poorer countries on the periphery eager to undertake capital formation; the collateral freed them from a reliance on inefficient domestic financial markets.²

The modern mercantilist view, embraced by Aizenman and Lee (2007, 2008) and others, provided a less sanguine interpretation for the persistent global imbalances that emerged in the 2000s. While Aizenman and Lee (2007) confirmed that the hoarding of international reserves that accompanied current-account surpluses was dominated by a precautionary motive prior to 2001, a finding consistent with Aizenman and Marion’s (2003) earlier interpretations, there appeared to be a regime change afterward. Aizenman and Lee (2008) pointed to the growing importance of monetary mercantilism as the main reason for the regime change. Accordingly, following the Asian crisis of 1997-8, which mitigated Chinese competitiveness in the late 1990s, and the Chinese accession to the WTO in early 2000s, China intensified its drive toward export-led growth. Like earlier mercantilist efforts to expand export markets and accumulate gold described by Adam Smith (1776), after the year 2000, countries such as China started pushing

² Caballero, Farhi, and Gourinchas (2008), Ju and Wei (2010) and others explored this interpretation in models with FDI and global imbalances.

exports to promote growth, racking up current-account surpluses and growing stockpiles of international reserves. The numbers were impressive. On the eve of the financial crisis, China's real GDP growth had reached about 14% (Fig. 3), its current-account surplus had grown to 10% of GDP, and its international reserves had reached almost 45% of GDP prior to the crisis, peaking at about 50% in 2010 (Fig. 3). However, unlike Dooley's et al. (2003, 2005) win-win view of global imbalances buffered by international reserve hoarding, Aizenman and Lee (2008) noted that modern mercantilism could lead to unintended adverse consequences, such as competitive hoarding. This concern is in line with the findings of Cheung and Qian (2009) and Aizenman et al. (2014) supporting regional rivalry in hoarding international reserves.

The view that large East-West global imbalances could be sustained for a long period was not shared by everyone. Eichengreen (2007) and Feldstein (2008), for example, argued the Asian periphery was not monolithic; some member of the periphery might abandon fixed exchange rates against the dollar sooner than later, either willingly or in response to speculative pressures, thereby reducing East-West global imbalances. Obstfeld and Rogoff (2005) also saw large imbalances as unsustainable, and worried whether they would unwind gradually or abruptly. Alfaro, Kalemli-Ozcan, and Volosovych (2011) observed that global imbalances where poorer countries financed richer ones were driven mainly by government decisions and official capital flows, since private funds tended to move in the opposite direction, attracted by higher growth rates in poorer countries. They raised concerns about the global efficiency and sustainability of these trends.

Aizenman and Sun (2010) also raised doubts that large global imbalances could be sustainable. They argued that with China growing at triple the rate of the United States, the U.S. current-account deficits needed to absorb China's surpluses in coming years, in the absence of other big countries willing to run large deficits, would be unrealistically high and hence self-limiting in the not-too-distant future.

2. The Global Financial Crisis and China's Adjustment

The global financial crisis of the late 2000s put an abrupt end to the happy-go-lucky attitude to U.S. and Chinese imbalances. In the U.S., the private sector was forced to de-leverage and reduced its demand for imports. Other crisis-hit developed countries also cut back on imports. As China experienced weaker export demand, it took seriously the IMF's call for more

reliance on domestic spending to sustain growth. It began promoting greater domestic consumption and investment with the help of a domestic credit boom. It also pursued fiscal stimulus and allowed its real exchange rate to appreciate (Fig. 4). It attempted to diversify its holdings of dollar-denominated reserve assets by creating a sovereign wealth fund and encouraging outward foreign direct investment.

Standard macroeconomic models can account for the reduction in global imbalances in the immediate aftermath of a financial crisis. Financial frictions and household de-leveraging reduce import demand as well as aggregate demand in crisis-hit countries, reducing their current-account deficits. If weak demand impacts many countries, there are few to take up the slack. Countries with large current-account surpluses, such as China, faced collapsing demand for their exports and experienced declining current-account surpluses. Policies that stimulate domestic demand to make up for the export shortfall can reduce current-account surpluses even more. In Aizenman, Jinjarak, and Marion (2013), we explore panel regressions as a way to highlight important correlations between current-account balances and economic variables, both before and after the financial crisis. The results indicate a structural change post-crisis. The decline in China's reserve stockpile post-crisis is shown to be driven by a new wave of outward foreign direct investment (FDI) into developed economies as China seeks higher-yielding real foreign assets. These developments suggest that China's smaller current-account surpluses and more moderate reserve accumulation may become a longer-term norm as lower global growth forces China to rely more on domestic demand to expand its economy, and as the high cost of holding international reserves pushes China to place even more emphasis on outward FDI.

We assembled panel data on current-account balances and other economic variables for a group of developed and developing countries over the period 1980–2012. The estimation draws on the empirical framework in Chinn and Prasad (2003) and Gruber and Kamin (2007). The specification also includes the U.S. demand variable (measured by the U.S. current-account deficit as a percent of GDP) used in Aizenman and Jinjarak (2009) to capture the notion that the U.S. acted as a “demander of last resort” for the exports of China and other countries, enabling them to run big current-account surpluses over part of the sample period.

The estimates confirm that a structural change has taken place post-crisis. After the onset of the financial crisis, the United States no longer plays such an important role as “demander of last resort” for the exports of other countries. Its private and public sectors have had to undergo

substantial adjustments, making them less able to absorb the world's exports. The U.S. private sector has had to de-leverage in response to the negative wealth effects of declining real estate and portfolio valuations. These private and public sector adjustments post-crisis have required the U.S. to retreat from its role as “demander of last resort” for the world's exports.

Prior to the financial crisis, the current accounts of surplus countries are positively and significantly associated with the increase in international reserves, trade, and the increase in the U.S. current-account deficit. After the financial crisis, the first two correlations are insignificant and the correlation with U.S. demand reverses sign; it is now negative and significant. The role of the U.S. as a “demander of last resort” is different after 2006.

The GFC vividly illustrated the limits of the export-led growth; the Chinese export-led growth path has been challenged by its own success. The spectacular growth of China in the 2000s was unprecedented for a large economy—the U.S./China market size in current U.S. dollars dropped from 8 in 2000, to about 2 in 2010 [Fig. 5]. *The Economist* projected in 2014 that by 2022, China's size in current U.S. dollars would exceed that of the U.S. As China approaches the U.S. size, its ability to keep export-led growth was diminished substantially by the lackluster growth of the U.S. and the Eurozone, inducing lower growth of China, and promoting it to embark on internal rebalancing.

3. Internal Rebalancing: Challenges and Opportunities

While China's growth has been spectacular, it comes with hidden, but growing, costs and distortions. The GFC and the need to rebalance the growth strategy, and the greater recognition of the demographic transitions facing leading countries in general and China in particular, put to the fore China's greater exposure to tail risks. We review in this section several manifestations of these risks.

Chinese financial repression has resulted in the taxing of private saving, transferring them via the state banking system and other means to the SOE. Subsidizing the cost of SOE capital helped in facilitating fast Chinese growth in the earlier decades of the takeoff, yet it comes with the cost of the SOE's overinvestment bias, inducing faster diminishing marginal productivity of the SOE, and resulting in growing quasi-public contingent liabilities.

The other side of financial repression has been the fragmentation of financial intermediation, where small private firms are not served adequately by the official banks, but by shadow banking. The drawback is that the small and medium private sector, which over time provides brighter future growth prospects than the SOE, faces much higher real interest rates and greater rollover risks. The outcome has been growing productivity gaps in favor of the private repressed firms (Lardy (2008), Song et al. (2014)).

Another cost of Chinese policies may be the collateral damage of mercantilism, the rapid rise of costly hoarding international reserves in times of running large current account surpluses, as reflected in Fig. 3. According to the State Administration of Foreign Exchange (SAFE), China's external financial assets at the end of 2013 were about U.S. \$6 trillion, of which international reserves were about 2/3 (U.S. \$3.9 trillion), the outbound direct investment (ODI) about 10%, securities investment about 4%, and other investment at about 20%. The country's external liability position was U.S. \$4 trillion, out of which FDI in China was \$2.35 trillion, 60% of total liability. The investment in securities and other aspects took up 10% and 30%, respectively. Therefore, China's net external financial assets in 2013 was about U.S. \$2 trillion.³ Yet, the real net return on these assets was, at best, close to zero, or even negative. This reflects two fundamental factors. The first is the low real return on Chinese international reserves (2/3 of its gross external assets), which in turn reflects both the low nominal interest rate on international reserves and the real exchange rate appreciation of China. The second is the high return on the inward FDI, about 60% of Chinese external liabilities. The low return on Chinese foreign assets is bad news, especially considering the rapid aging of China's population. This is in contrast to Japan, where the sizable return on Japan's foreign asset position helps in buffering the future income of its rapidly graying population.

The policy stance of China during and after the GFC may mitigate down the road the hidden costs of Chinese financial repression. First, China embarked on diversifying its holdings of dollar IR by channeling surpluses into a sovereign wealth fund (SWF) and encouraging

³ Source: State Administration of Foreign Exchange (SAFE) information.
<http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20140407000063&cid=1203> [accessed May 5, 2013].

outward foreign direct investment in tangible assets, offering much higher expected returns.⁴ The outcome has been growing FDI in the resource sectors and infrastructure services globally, especially in underserved developing countries and emerging markets in Africa and Latin America. In a way, China joined the trend of other EMs, as detected in Aizenman and Pasricha (2013), noting that EMs eased outflows of capital more in response to higher stock price appreciation, higher appreciation pressures in the exchange market, higher IR/GDP, and higher REER volatility.

The GFC and its aftermath also induced rapid Chinese internal balancing, reducing the scope of future hoarding. Since the crisis, China's current-account surplus fell from 10% of GDP (2007) to 2.3% in 2012, 2% in 2013. The drop in 2009 alone was the largest recorded in the last 30 years. This has happened in tandem with a drop in U.S. deficits. The U.S. current-account deficit was about 6% of U.S. GDP in 2006; it fell to 2.7% in 2009 and 2.8% in 2012. China's smaller current-account surpluses, a more moderate IR stance, and allowing faster real appreciation may become a new normal, as lower global growth forces China to rely more on domestic demand, while the high cost of holding IR and the secular rise in real wages in China pushes China to place even more emphasis on outward FDI (Aizenman, Jinjarak, Marion 2013).

These developments are in line with Feenstra and Hong (2010), who raised questions about the efficacy and sustainability of export-led growth in China as the way to increase future employment. They calculated that export growth over the period of fast growth during 2000–2005 could explain the entire increase in China's employment over that period, but comparable employment gains could have been achieved by growing domestic demand.

Channeling IR into foreign equity, SWF investment, and outward FDI supported by targeted loans and swap lines may be part of Chinese rebalancing, aiming at securing a higher rate of return on its net foreign asset position. Arguably, it may also signal the switch from export-led growth strategy to outward FDI (Ramasamy et al. 2012) and export of infrastructure projects and services, possibly bundled with exporting Chinese finance, Chinese labor services,

⁴ WSJ, December 19, 2013 BEIJING— “Beijing will ease the approval process for all but the largest Chinese investments in overseas companies and projects, a major relaxation of regulatory oversight that analysts say is aimed at encouraging Chinese firms to expand abroad.”

and high-end capital goods.⁵ This outward FDI drive has been part of a more comprehensive Chinese effort to promote the internationalization of the RMB (CNY), the focus of the next section.

4. The Internationalization of the RMB

Over the past five years, China has strongly intensified its efforts to internationalize the RMB. This agenda has been one of the main aspects of the country's economic policy, as expressed in the 12th Five-Year Plan (2011-2015). The plan supports the expansion of the cross-border use of RMB and the gradual realization of capital account convertibility. The plan also supports the development of HK as a major offshore RMB market. The internationalization process was put into effect through several channels. After the financial crisis in 2008, China embarked on large bilateral currency swap agreements with other countries, such as Argentina, Belarus, Iceland, New Zealand, Turkey, United Arab Emirates, and others (Table 1). This has been done in tandem with the unprecedented provisions of swap lines among the OECD countries, and the more selective provision of four swap lines by the U.S. FED to selected emerging markets (Table 1).

Comparing the bilateral swap lines offered by the U.S. FED and the PBOC reveals key differences. Most of the swap lines offered by China have been to developing and emerging market countries, whereas most of the bilateral swap lines offered by the U.S. FED and the ECB are between the OECD countries, and four emerging markets: Brazil, South Korea, Mexico, and Singapore. Aizenman and Pasricha (2010) pointed out that the selection criteria explaining the

⁵ ChinaDaily USA reported in December 22, 2014: "A leading Chinese railway company said on Dec 15 that it had won a 1.7 billion yuan (\$274 million) contract from the government of Argentina. The train-maker said it has been supplying trains and other rail products to Argentina since 2006. In 2013, it won two orders worth about \$1 billion together from the country to supply inter-city trains. It is just another win for the Chinese firm. In November, the company signed China's largest single overseas construction deal with Nigeria, a deal valued at \$12 billion. Despite the scrapping of bidding in early November for a \$3.75 billion project by the Mexican government, the Chinese company has shown its interest in bidding again. Chinese railway manufacturers have been stretching their muscle overseas with Chinese Premier Li Keqiang often promoting "high-speed railway diplomacy" during overseas trips."

U.S. FED supply of bilateral swap lines to emerging markets were close financial and trade ties, a high degree of financial openness, and a relatively good sovereign credit history. Chances are that similar factors account for Chinese supply of RMB bilateral swap lines to a growing list of developing and emerging markets, as has been vividly illustrated by Garcia-Herrero and Xia (2015).⁶ This strategy blends very well with the trade internationalization of the RMB in the context of the broader outward FDI strategy of China, and is in line with the channeling of Chinese net foreign asset position into outward FDI-cum-credit strategy.

Other pillars of the internationalization of the RMB include, since 2009, a pilot program that allows RMB settlement of trade with foreign partners, limited initially to five cities (Shanghai, Guangzhou, Shenzhen, Zhuhai, and Dongghuan), and to the trade of Chinese residents with Hong Kong, Macao, and ASEAN countries. This established the first legal framework for using RMB to settle current account transactions. From six provinces in 2010, it was expanded to 20 provinces and cities in mainland China and geographically extended to trade with the rest of the world. Since October 2010, offshore entities were allowed to open nonresident RMB bank settlement accounts (NRAs) with onshore banks and use these accounts (NRAs) for lawful cross-border RMB business (Formichella and Toti 2013).

While it may be premature to provide a comprehensive assessment of the internationalization drive, it has already delivered a rapid increase in trade/credit RMB internationalization, the use of RMB in trade and investment settlement, and in trade credit. The CNY is used in about one-third of China's external trade settlement. At the end of 2014, CNY SWIFT share was about 2.1% of global volume, with the U.S. dollar at 44% [followed by the Euro with 28%, the sterling with 8 % and the Japanese yen with 2.7 per cent]. One expects the settlement share of the CNY will keep increasing rapidly, as there is ample room for further

⁶ Garcia-Herrero and Xia (2015) concluded that the choice of countries signing an RMB-denominated bilateral swap agreement with China was predominantly by “gravity motifs”: country size and distance from China, as well the trade motif in terms of both exports to China and the existence of an FTA with China. Institutional soundness also matters, since countries with better government and less corruption are more likely to sign an RMB-denominated bilateral swap agreement.

internationalization of the use of the RMB in trade settlements.⁷ The rapid trade internationalization of the RMB, however, does not imply the desirability or the necessity of the RMB financial internationalization, a process that would require much deeper financial liberalization. We turn now to look more closely at what past experience may suggest about the liberalization process.

An ideal global currency supporting commercial and financial transactions may have the following virtues: liquid, safe, and convertible subject to low transaction costs, supported by liquid and deep global bond markets, and supplied in “sufficient quantity”. Supplying the global currency also entails the provision of a global public good, granting the suppliers the benefit of the “exorbitant privilege.” At times of global peril, the public good is manifested by willingness to provide global insurance at a “reasonable cost.” (Gourinchas and Rey 2005, 2007; Jeanne 2012). As of 2015, the CNY has not yet met yet these conditions. The CNY remains mostly non-convertible, lacking a vibrant and deep global bond market.

Should China rush the CNY’s financial internationalization process? There is no clear reason to rush, as the economic gains from CNY internationalization may be overrated. Chances are that China’s financial integration will keep increasing over time. A major force inducing the weakening of financial controls has been trade misinvoicing, which has been commonly used for overcoming capital control, forcing over time deeper financial integration. Yet, this is not a reason to move much faster toward full convertibility without dealing with domestic sources of future financial instability, inducing underfunded liabilities, weakening balance sheets of exposed banks, financial repression, and the like. Reducing the financial repression would reduce vulnerabilities associated with greater convertibility. Past experience suggests that financial internationalization before dealing with domestic financial distortions increases the exposure to financial crises. Frequently, these crises reduce growth sharply (see Korea 1997-8, Japan 1990s, Eurozone 2010s).

The economic gains from upgrading the CNY into a global currency competing with the U.S. dollar and the euro are there, but the size of these gains does not match the risk of moving

⁷ Ito and Chinn (2013) found that the share of the RMB in export invoicing should have been higher than the actually observed share of less than 10%. Their model predicted that the share of RMB invoicing for the PRC’s exports would rise to above 25% in 2015 and above 30% in 2018.

too fast: estimates range from 1% GDP (Gourinchas and Rey 2005) to a much lower fraction. The U.S. Treasury may borrow cheaply because of demand from official reserve managers, but these gains are broadly shared with Australia, Canada and the like through the portfolio balance effect: lower U.S. yields spread across global bond markets (Genberg et al. 2005; Bauer and Neely 2014; Rogers et al. 2014). There are also costs, including the loss of monetary autonomy and financial stability, associated with greater and more volatile demand for CNY bonds. An international currency also makes a country more susceptible to external monetary shocks. In times of peril, the supplier of the international currency may be induced to provide global insurance. Even if other countries merely anchor to RMB, this limits the ability of China to manage its exchange rate. Furthermore, the gains from capital mobility and capital account convertibility to the real economy are overrated. Economic theory does not predict large benefits from external financing; some models predict potential large costs. The empirical evidence fails to show consistent sizable effects (Gourinchas and Jeanne 2006).

Useful future steps that would increase over time the feasibility of smoother financial liberalization include reducing financial repression, reforming the banking system, and reducing the preferential treatment of SOE. Improving the funding of the small and medium size private firms would help, as well as allowing the Chinese corporate sector controlled access to external borrowing, and greater outward FDI. The odds for a smoother transition are higher with gradual sequencing than with a cold-turkey financial liberalization. Chances are that the calls in China for faster CNY internationalization have also an internal political economy dimension.⁸ While moving faster on domestic financial reforms remains an essential and necessary step toward the financial internationalization of the CNY, moving too fast comes with its own moral hazard costs, as has been vividly illustrated by past financial crises (Hellmann et al. 2000, Frankel 2012).

⁸ For example, “Expert: Concerns on capital flows overdone; China Daily,” June 24, 2014 reported “He Fan, a researcher at the Chinese Academy of Social Sciences, said that the interesting question is: Since China's capital account is already undergoing de facto opening-up, ‘why do the authorities bother to commit to further opening-up?’ His guess is that the central bank is seeking to reform the current regulatory system by deepening capital account liberalization. He said the way to address the ‘clumsy’ and ‘inefficient’ approval system is to improve exposure to the global monetary system.”

5. Looking Forward

Prior to the global financial crisis, observers noted the possibility of converging toward a multi-polar global currencies structure. A possible tri-polar configuration would include the U.S. dollar, dominating the U.S. sphere of influence in the Americas; the euro, dominating the EU sphere of influence; and the CNY-anchored system, dominating eastern Asia. In principle, a multi-polar configuration is less stable than a unipolar stable configuration, yet it may be more stable than an unstable unipolar configuration; a multi-polar system may better fit the underlying forces shaping the global redistribution of power. Paradoxically, the GFC vividly illustrated both the susceptibility of the global economy to instability propagated from the U.S., and the remaining dominance of the U.S. dollar as “a safe haven” at times of global turbulence. While the wish of China to internalize the CNY is understandable, the speed of the converging toward multiple reserve world currencies would be endogenously determined.

The CNY and the Euro are yet to pass the test of a viable global currency buffered by liquid global bond markets in these currencies. The U.S. dollar is a mixed bag; it is blessed with the most liquid global bond market, yet the U.S. was the epicenter of the 2008-9 crisis, the source of global instability. However, once the crisis took place, the U.S. provided important global insurance services: bailing out Fannie Mae, Freddie Mac, and AIG in ways that shielded global players from the brunt of the crisis. The speed of moving toward the multi-polar configuration will be determined by China’s ability to navigate its internal balancing, increasing its financial liberalization without a deep crisis, and by the Eurozone’s ability to manage properly an exit from the present crisis, possibly moving toward the formation of a deep euro bond market. The transition may be slower if the U.S. deals properly with its fiscal and monetary overhang. Chances are that this process would be time-consuming, exposing the global economy to more turbulence, but this is a volatility that the world economy has been learning to live with.

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Figure 1: Extended Trilemma configurations, China, Emerging Asia [ex-China], and Emerging LATAM. Source: --Aizenman, Chinn and Ito http://web.pdx.edu/~ito/trilemma_indexes.htm

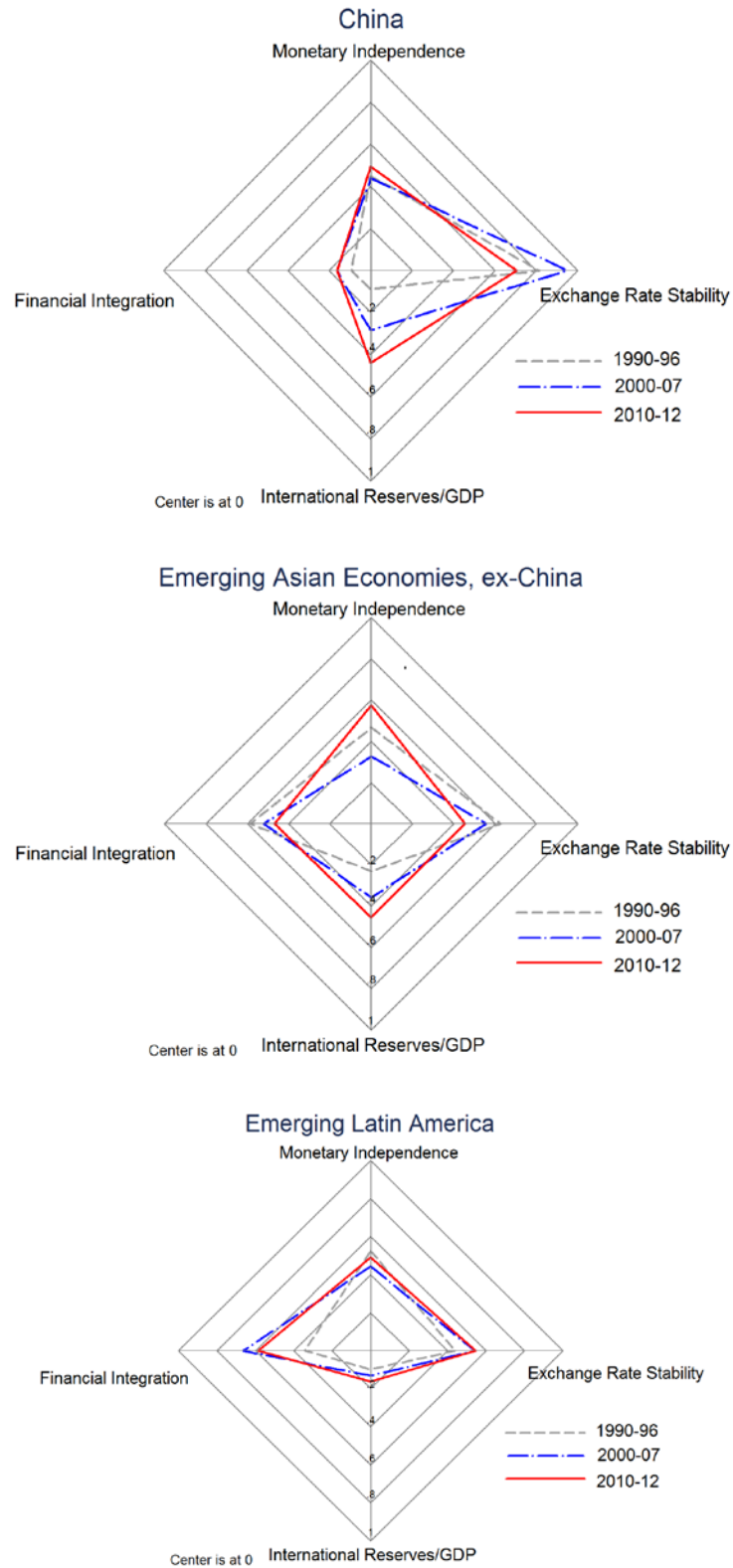
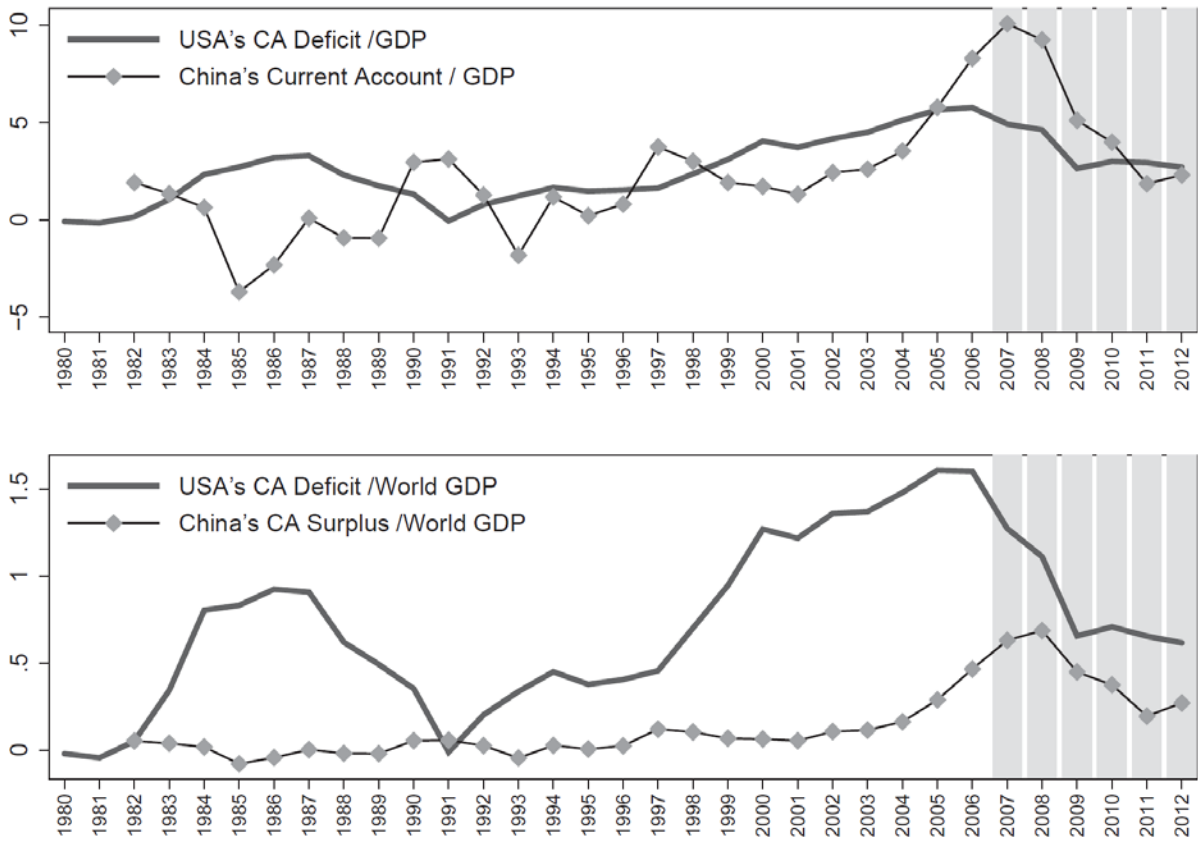
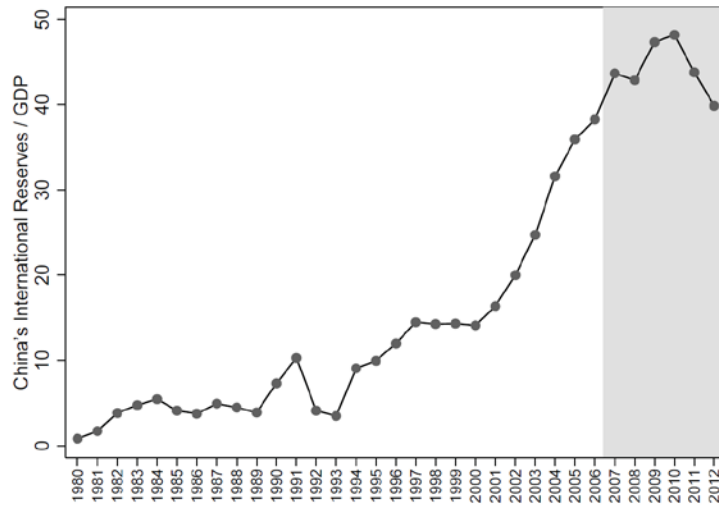


Figure 2: The dynamic duo: China's and USA's current accounts

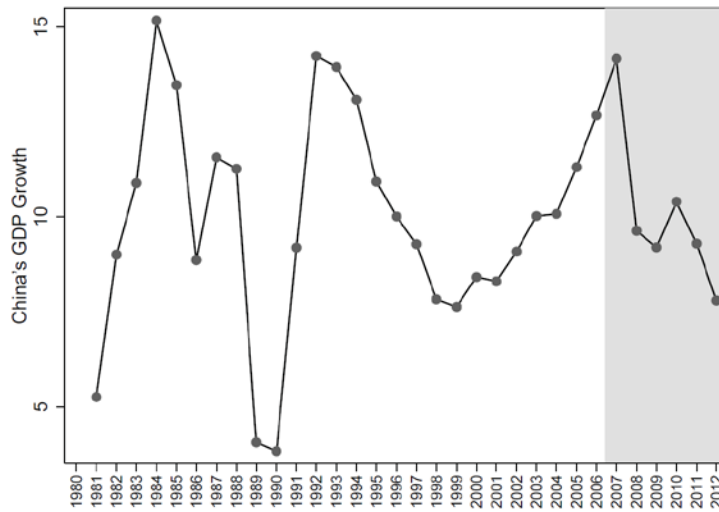


Source and further details: Aizenman, Jinjarak and Marion (2013)

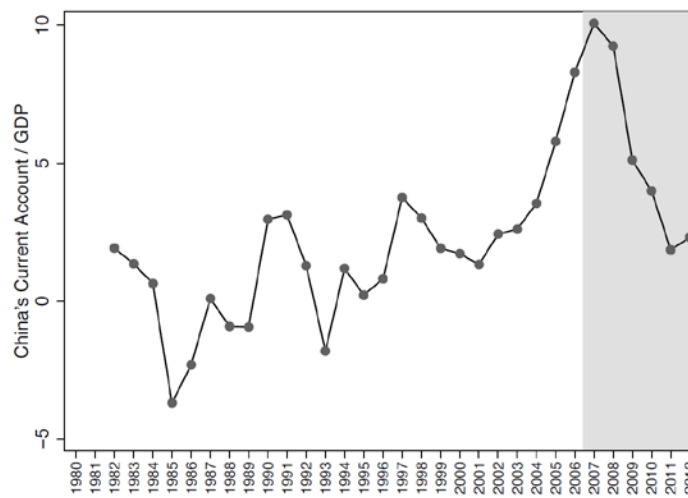
Figure 3: Chinese IR/GDP, GDP



IR/GDP



GDP Growth



Current account/GDP

Figure 4: RMB's nominal and real, 2000 – 2014. Inflation-adjusted trade-weighted exchange rates relative to its major trading partners have evolved over time (higher indexes reflects an appreciation of the external value of the renminbi). Sources: *Financial Times*

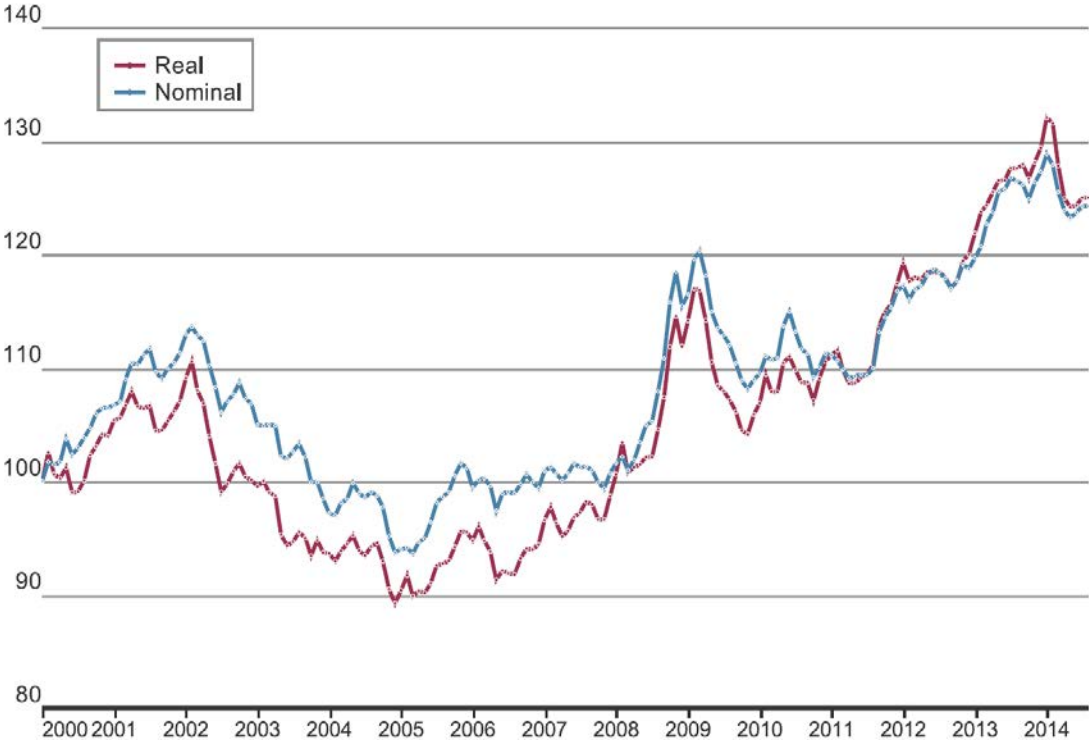


Figure 5: USA versus China's relative size. 1981-2012

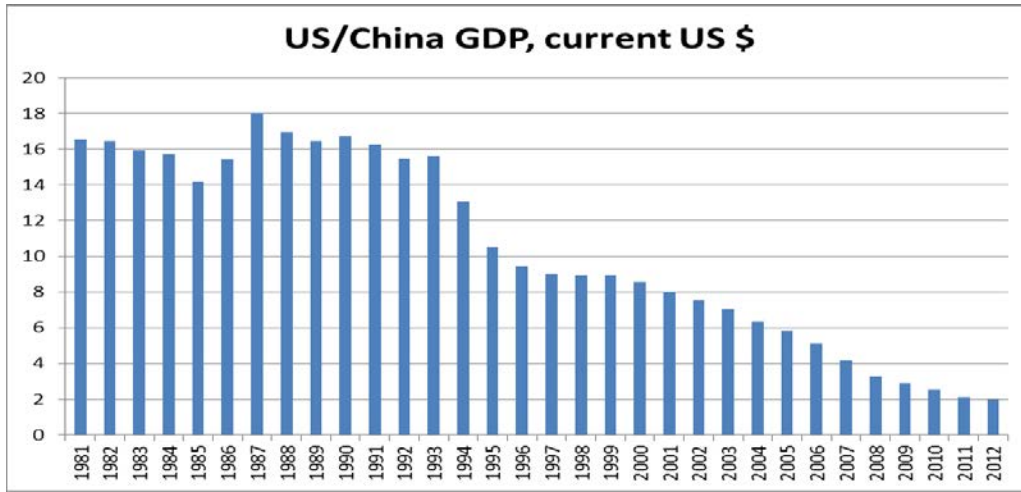


Figure 6: The Economist (2014) projections of USA and China's size [current US \$]

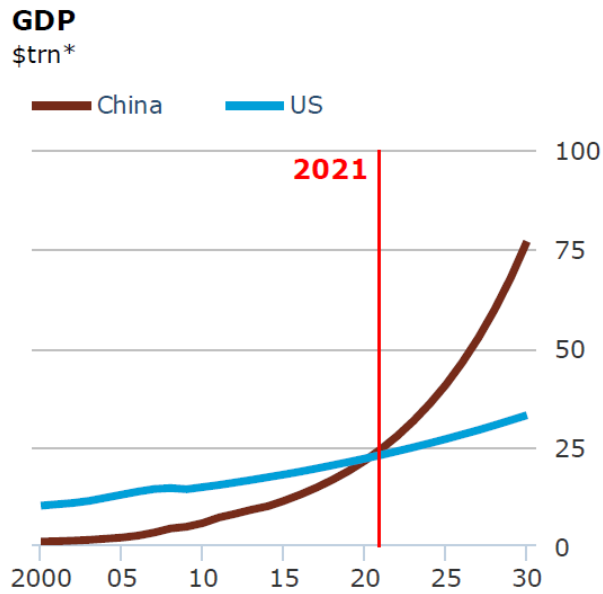


Table 1 Swap lines provided by US FED (billion USD), ECB (billion Euro), and PBOC (billion Yuan), 12/2007 – 10/2014. Source: Aizenman, Jinjarak and Park (2011), updated 2014.

ds_code	wb_code	Country	FED_USD	ECB_EURO	PBC_CNY
AL	ALB	Albania			2
AG	ARG	Argentina			70
AU	AUS	Australia	30		200
BR	BRA	Brazil	30		190
BY	BLR	Belarus			20
CN	CAN	Canada	30, standing	standing	
DK	DNK	Denmark	15	15	
EC	ECB	ECB	300, standing		350
HK	HKG	Hong Kong			400
HN	HUN	Hungary		5	10
IC	ISL	Iceland		1.5	3.5
ID	IDN	Indonesia			100
JP	JPN	Japan	120, standing	standing	20
KZ	KAZ	Kazakhstan			7
KO	KOR	Korea	30		360
MX	MEX	Mexico	30		
MY	MYS	Malaysia			180
MG	MNG	Mongolia			10
NW	NOR	Norway	15		
NZ	NZL	New Zealand	15		25
PK	PAK	Pakistan			10
PO	POL	Poland		10	
SD	SWE	Sweden	30		
SP	SIN	Singapore	30		300
SW	CHE	Switzerland	60, standing	standing	
TH	THA	Thailand			70
TK	TUR	Turkey			1.6
UR	UKR	Ukraine			15
UA	UAE	United Arab Emirates			35
UK	GBR	United Kingdom	100, standing	standing	200
UZ	UZB	Uzbekistan			0.7

