

## 1 Introduction

Since Deng Xiaoping, the then paramount leader of China, launched the “reforms and opening up” (*Gaige Kaifang*, 改革開放 in Chinese) policy in late 1978, the Chinese economy has advanced at a phenomenal rate. Between 1979 and 2020, the Chinese economy, in local currency real terms, grew 37-fold and delivered an average annual growth rate of 9%. Even though China has experienced uneven development patterns in different sectors – the progress in financial sectors, for example, is noticeably behind the manufacturing and trade sectors – it managed to transform its inefficient and almost autarkic economy into the second-largest economy and the largest trading nation of the world in less than four decades.<sup>1</sup> China’s economic performance over the last forty years is a tough act to follow.

In the process of building up its global economic eminence, China has periodically modified its foreign exchange policy and gradually increased the role of market forces in determining the value of its currency, the renminbi (RMB). Before the 1990s, the world did not pay much attention to China’s exchange rate policy and the RMB. The global community has put China’s exchange rate policy under scrutiny after observing that its trade surplus and holding of international reserves increased dramatically after its admission to the World Trade Organization (WTO) in 2001. There is extensive debate on the RMB valuation and the prognosis of the role of the RMB in the global monetary system.

China’s exchange rate policy reached a turning point when it stepped up its efforts to promote the international use of the RMB after the 2007–8 global financial crisis (GFC). Since then, the global economy has anxiously embraced the implications of a global RMB for the balance of power in the world financial market and the race for geopolitical supremacy. One salient accomplishment of China’s effort to globalize its currency is the inclusion of the RMB in the IMF’s Special Drawing Right (SDR) currency basket. On October 1, 2016, the RMB acquired official global reserve currency status and became the first developing country currency to join the SDR currency basket.<sup>2</sup>

The process of globalizing the RMB has not been smooth sailing, though. After a strong start in building up the RMB’s global currency status, the progress stalled for a few years after 2015 due to unexpected changes in China’s foreign exchange management, capital control measures, and geopolitical tensions that reduced the

<sup>1</sup> The United States is the largest economy. Based on purchasing power parity measures, China is the world’s largest economy.

<sup>2</sup> The IMF announced the inclusion of the RMB in the SDR basket in November 2015. The US dollar, the euro, the Japanese yen, and the British pound are the four incumbent SDR currencies.

appetite for RMB activity overseas. Despite its impressive economic heft – as the second-largest economy, the largest holder of international reserves, and the largest trading nation – the RMB plays a relatively minor role in the global market. For instance, in 2020 China accounted for 17% of world output and 13% of international trade. At the same time, the RMB accounted for less than 3% of global reserves, less than 5% of global foreign exchange trading, and less than 3% of world payment currency.

The RMB's path to becoming a full-fledged global currency depends on China's economic conditions, its ability to gain the trust of foreign investors and geopolitical powers, and the reactions of incumbent countries, including the United States. It is useful to take stock of China's efforts and assess the role of the RMB in the global market, which would shed light on the prospect of a global RMB currency. We do not mean to determine the factor underlying the underrepresentation of the RMB in the global financial system; instead, our discussion aims to provide a concise and balanced account and highlight the multitude of factors, including capital controls, policy uncertainty, and geopolitics, that affect a currency's global status. In Section 2 we recount China's evolving exchange rate policy in the post-reform era after recapitulating its economic and trade growth experiences. Section 3 reviews the debate on RMB misalignment and whether the RMB is overvalued or undervalued. Section 4 presents China's policies to promote the international use of the RMB and offshore RMB trading. Section 5 assesses the current global status of the Chinese currency. Section 6 discusses geopolitical development. Section 7 offers some concluding remarks.

## 2 Background

During its first three decades, the communist People's Republic of China was relatively isolated from the main global economy; it was proud of being “self-reliant” in building its economic and political structures. However, the Chinese economy was stuck at a low level of per capita gross domestic product (GDP) and was among the list of low-income countries. For instance, China's real per capita GDP ranked 115th in 1970.<sup>3</sup>

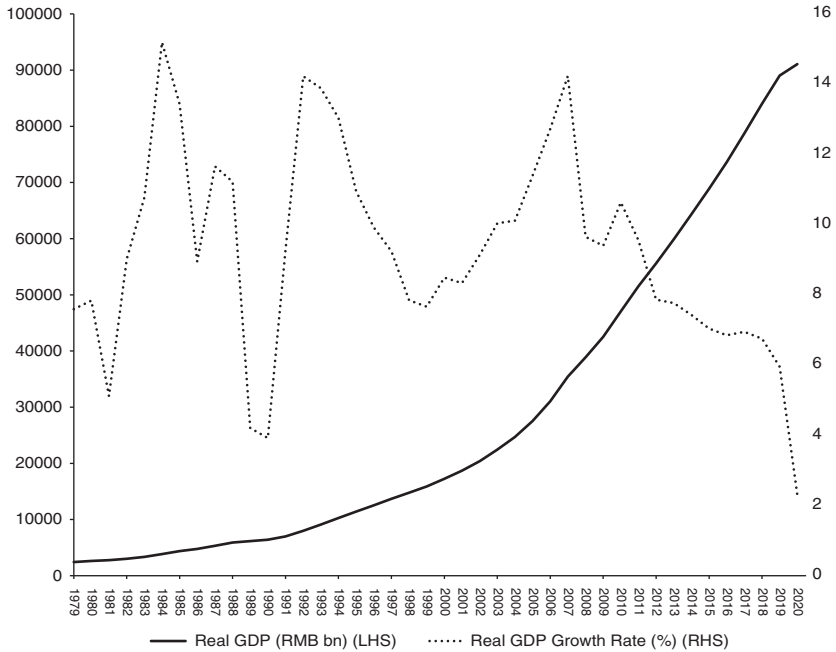
China's modern history of economic development reached a landmark when it officially endorsed the “reforms and opening up” policy directive in the 1978 National Party Congress.<sup>4</sup> Since then, China has pursued a gradualist approach

<sup>3</sup> World Bank data, via <http://knoema.com/WBWDIGDF2015Aug/world-development-indicators-wdi-august-2015>.

<sup>4</sup> The reform agenda advanced in the Third Plenum of the 11th National Congress of the Communist Party of China (December 22, 1978) advocated the so-called Four Modernizations – the modernization of agriculture, industry, science and technology, and the military. See, for example, Rosen (1999) and OECD (2005) for accounts of the open-door policy and its implications.

### The RMB in the Global Economy

3



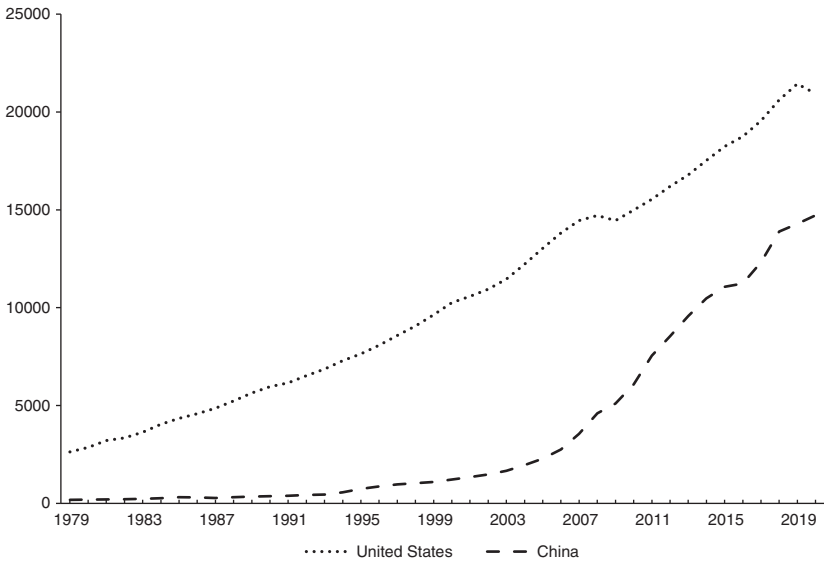
**Figure 1** China's real GDP and growth rate in local currency, 1979 to 2020  
**Note:** Data from the World Bank.

to opening up its economy. In the last few decades, it has transitioned from a lethargic, planned economy to a vibrant and growing one, and from a mostly closed economy to a significant player in the global market. The rest of this section highlights China's economic growth and trade integration, and recounts its evolving exchange rate policy.

## 2.1 Growth Powerhouse

Since 1979, China has experienced phenomenal growth, which is sometimes dubbed “the China economic miracle.” Figure 1 shows China's real GDP and growth in local currency from 1979 to 2020. Despite the apparent wild swing in the early years and the slow-down in recent years, the Chinese economy had an average annual growth rate of 9.22% and grew 37-fold in the local currency in real terms.<sup>5</sup> Sometimes China's economic miracle is compared with the strong

<sup>5</sup> On the reliability of official growth data, see Fernald, Hsu, and Spiegel (2015), Holz (2004), Klein and Ozmuur (2003), Koch-Weser (2013), and Rawski (2001, 2002). China has revised GDP growth rates with data from its National Economic Census. Based on the conducted censuses, China revised its growth rate upward by 16.8% in 2004, 4.4% in 2008, 3.4% in 2013, and 2.1% in 2018.



**Figure 2** China and the US GDP in current billions of US dollars, 1979 to 2020

**Note:** Data from the World Bank.

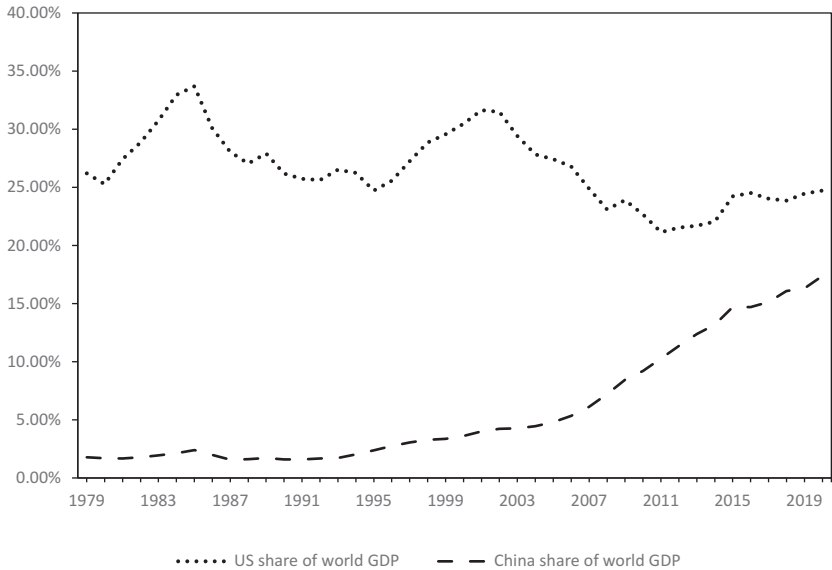
growth record of, say, Japan in the post–World War II period and the Four Little Dragons in the 1970s to early 1990s.<sup>6</sup>

Comparing the Chinese and US growth experiences in US dollar terms is quite revealing. China’s average annual growth rate was 11.69% between 1979 and 2020, 9.90% between 1979 and 2000, and 13.56% between 2001 and 2021. The corresponding US average annual growth rates are 5.23%, 6.72%, and 3.66%. The growth differential significantly narrows the gap between the sizes of the Chinese and US economies (Figure 2).

Figure 3 offers an alternative perspective on China’s strong economic performance: it depicts the shares of world GDP accounted for by China and the United States. In 1979, China accounted for less than 2% of the total world GDP. By 2020, it had surpassed the 17% mark and was in a position to challenge the United States’ 24.72%.

Despite starting at a low level in the 1970s, China’s “super-charged” economy in the last four decades makes it a main growth engine of the global economy. There are discussions on China overtaking the United States as the world’s largest economy as early as, say, 2030 (Economist, 2014; Pethokoukis,

<sup>6</sup> See, for example, Cheung, Chinn, and Fujii (2007a). Smith (2016) compares the Japanese and Chinese economies.



**Figure 3** Shares of world GDP: China versus the US, 1979 to 2020

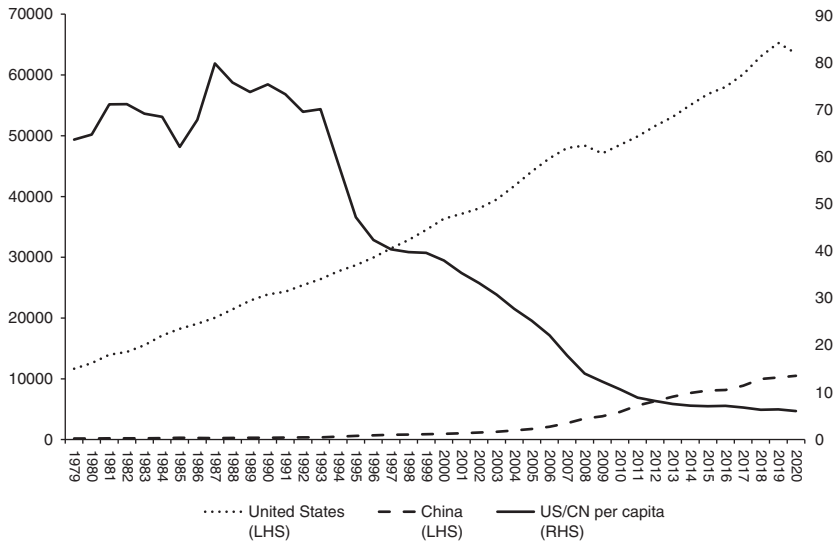
**Note:** Data from the World Bank.

2014; World Bank, 2013a). Indeed, when measured on the PPP-basis, in 2014 the Chinese economy overtook the United States to become the largest economy.<sup>7</sup> Despite the differing views on the relevance of market-based or PPP-based data, the prolonged high growth rate is an astonishing accomplishment for the Chinese authorities.

Mirroring its growth momentum, China's GDP per capita has delivered a strong performance since 1979 (Figure 4). In US dollar terms, China's output per capita shows an average annual growth rate of 10.69% between 1979 and 2020; its growth in the twenty-first century is higher than that of 1979–2020. China's growth rate compares favorably to the US average annual rate of 4.25 during the same period. The growth differential reduced the US to China GDP per capita ratio from a high of 63.45 in 1979 to 6.05 in 2020. China's per capita GDP has improved from less than 2% of the US figure in 1979 to 16.53% in 2020. Although China has caught up significantly, there is still room for improvement. China's per capita GDP in US dollar terms ranked 89th in 2020, according to World Bank data.<sup>8</sup> When the output is measured with PPP-based data, China's per

<sup>7</sup> Ruoen and Kai (1995) presented an early comparison of the Chinese and US GDP using PPP-based data. See World Bank (2013b) for further information about PPP data.

<sup>8</sup> [https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?most\\_recent\\_value\\_desc=true](https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?most_recent_value_desc=true).



**Figure 4** GDP per capita: China versus the United States, 1979 to 2020

**Note:** Data from the World Bank.

capita GDP in 2020 is 17,211 international PPP dollars, which is 27% of the US rate and ranks 95th worldwide.<sup>9</sup>

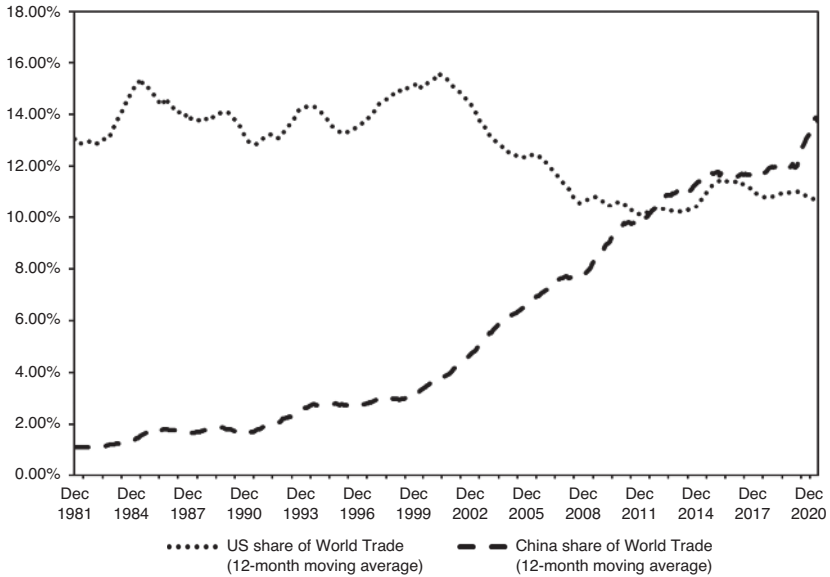
## 2.2 A Trade Titan

The 2013 news headline that China's total foreign trade (the sum of exports and imports) in 2012 surpassed the US total affirmed China's prominence in international trade. Before China overtook the United States, it had been the largest trading nation for more than six decades. China's fast expansion in international trade has been a significant driver of its phenomenal economic growth<sup>10</sup> and provided a strong base for designing the 2009 RMB internationalization policy based on cross-border trade settlement (see Section 4).

The early phase of the 1978 reform initiative focused on upgrading China's economy, and opening up has underpinned the expansion of its trade sector. China's accession to the WTO in December 2001, its success in attracting foreign direct investment that brought in the needed capital and technical know-how, and strategic positioning in the global production chain have provided additional catalysts to establish China's dominance in international trade.

<sup>9</sup> China's 1990 figure is 982 international PPP dollar which is 4.1% of the corresponding US figure; see [https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD?most\\_recent\\_value\\_desc=true](https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD?most_recent_value_desc=true).

<sup>10</sup> Benkovskis and Wörz (2015), for instance, show that even allowing for the value-added and other issues of measuring trade performance, China's gain in global trade is substantial.



**Figure 5** Shares of world trade: China versus the US, 1979 to 2020 (twelve-month average)

**Note:** Data on import CIF and export FOB in US dollars from the World Bank.

Figure 5 depicts the shares of global trade contributed by China and the United States between 1979 and 2020. The figure clearly shows that China's share has been increasing over time, while the US share has been declining since the beginning of the 2000s. Specifically, China's share of global trade was 1.10% in 1981, 3.63% in 2000, and 13.32% in 2020. The gain in share is noticeably more substantial after joining the WTO in 2001. On the other hand, the US share of global trade declined gradually from a high of more than 15% in 2000 to slightly more than 10% in 2020. China's gain in global trade share reflects its strong growth in total trade. Its foreign trade value multiplied 11 times between 1981 and 2000, and by an even more impressive 108 times between 1981 and 2020. The growth is much higher than the 7.43 times of the United States and the 8.98 times of the world between 1981 and 2020.

Between 1981 and 2020, China grew its imports by around 95 times and exports by 120 times. The growth was stronger again after joining the WTO in 2001. China has been the world's largest exporting country since overtaking Germany in 2009. On the import side, China was the second-largest importing country in 2020. The growth of exports outpaces that of imports, and the growth differential yields China's huge trade surplus over time. We will return to the differential growth in imports and exports in Section 3.

## 2.3 Exchange Rate Policy

China's official currency, the RMB, was introduced on December 1, 1948, before the official establishment of the People's Republic of China on October 1, 1949, and the yuan is its basic unit. Both political and economic considerations have guided China's exchange rate policy, though the relative weight of these two considerations has shifted over time. Before launching reforms in 1979, the policy was designed to support the central economic plan. Since 1979, the policy has gradually shifted toward economic factors and assigned market forces a more significant role in determining the RMB exchange rate. In this subsection, we offer a brief review of China's exchange rate policy after 1979.<sup>11</sup>

### *2.3.1 Early Phases: 1979 to 2004*

The initial phase of China's reform, masterminded by Deng Xiaoping, focused on revamping the manufacturing and trade sectors and improving productivity and efficiency. China tested an export-led growth strategy to rejuvenate the economy in the process of transforming its economy. To facilitate the export sector and manage foreign exchange reserves, China experimented with alternative mechanisms to determine the RMB's value. Between 1979 and 1993, China practiced a dual (or, in practice, multiple) exchange rate regime that allowed for different degrees of market forces in different sectors of the economy.<sup>12</sup>

China made a substantial policy change in January 1994 when it replaced the dual-rate arrangement characterized by the official rate and the swap market rate with a single exchange rate, which was set at the level of 1 US dollar to 8.7 Chinese yuan (CNY). Figure 6 shows the nominal and the (reversed) real RMB exchange rate against the US dollar. Initially, the unified single market rate relative to the official rate represented a devaluation of about 33%. Then, the RMB gradually appreciated to the level of CNY 8.28 per US dollar and remained around that level until mid-2005, when China moved to a different exchange rate arrangement. The close link between the RMB and US dollar is also illustrated by their effective exchange rates. The Bank for International Settlements (BIS) data indicate that the nominal effective exchange rates of the

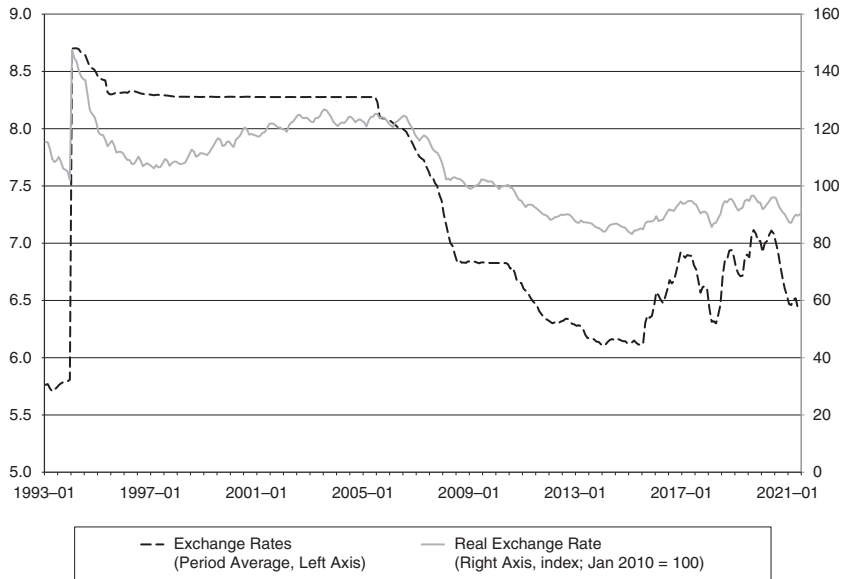
<sup>11</sup> Cheung, Chow, and Qin (2017), Liew and Wu (2007), Shi (1998), and Wu and Chen (2002) provide alternative accounts of the evolution of China's exchange rate policy. Miyashita (1966) discusses the early currency and financial systems.

<sup>12</sup> Huang and Wang (2004), Lin and Schramm (2003), and Xu (2000) review and assess China's exchange rate arrangements in the early stage of the reform period.



*The RMB in the Global Economy*

9



**Figure 6** The nominal and real (reversed) RMB exchange rates against the US dollar

**Note:** Data from IMF.

RMB and the US dollar had a correlation coefficient estimate of 0.99 between January 1994 and June 2005.<sup>13</sup>

Conceivably, a stable RMB exchange rate provides China with an economic environment conducive to developing its economy and its trade sector. Indeed, the stable RMB/US dollar exchange rate served China well: China's trade surplus, economic growth, and holding of international reserves started their remarkable expansion between 1994 and 2005.<sup>14</sup> However, the drastic devaluation and the subsequent de facto peg to the US dollar have become the source of contentious debate on China's exchange rate policy. The United States, in particular, bitterly complained that China was pursuing a deliberate undervaluation policy to gain unfair advantages in international trade.

### 2.3.2 Revamping the Fixing Mechanism

Amid soaring trade surplus and criticisms about the de facto peg, China, on July 21, 2005, instituted a different mechanism to determine the daily official

<sup>13</sup> During the same period, the correlation of the real effective exchange rates of the RMB and the US dollar is 0.77.

<sup>14</sup> Ding (1998) and Schnabl (2013) note the problems underlying China's multiple rate regimes and the benefits of a stable RMB.

RMB fixing. The China Foreign Exchange Trading System (CFETS), which is housed in Shanghai and falls under the direct jurisdiction of the People's Bank of China, is responsible for implementing the fixing mechanism. Specifically, China adopted a managed and regulated floating exchange rate regime based on market demand and supply, and with reference to a basket of currencies (People's Bank of China, 2005).

Compared with the bilateral exchange rate peg against the US dollar, the valuation against a currency basket provides a better measure of the overall strength of the RMB. Further, a stable currency basket exchange rate policy can free the RMB from tracking the US dollar and offer China a leeway to play down the role of the US dollar in formulating its exchange rate policy.

The revamped policy started with a 2% revaluation against the US dollar from 8.28 to 8.11 on July 21. Then, the RMB experienced a gradual appreciation until July 2008 (Figure 6). Ma and McCauley (2011) assert that the arrangement is effectively a crawling peg. When the 2007–8 GFC began, China switched to a de facto peg – the RMB exchange rate was closely managed around the level of CNY 6.83 per US dollar from July 2008 to June 2010 (People's Bank of China, 2010).

On June 19, 2010, China essentially reinstated the 2005 managed and regulated exchange rate regime. The announcement was taken as an affirmation of the established policy of managed floating rate arrangement. Again, the authorities gave no official information on the component currencies and their weights in the currency basket. Understandably, China has more leeway to manage the exchange rate by not disclosing the specifics of the currency basket. The reinstated policy was in force until August 2015, when China made another main change in its exchange rate policy.

Despite the declared currency basket policy, the observed RMB movement suggests that China mainly managed the RMB against the US dollar – or assigned a very large role to the US dollar in the currency basket (Frankel, 2006, 2009; Funke and Gronwald, 2008; Sun, 2010). After reinstating the currency basket arrangement in mid-2010, and before another policy change in August 2015, the correlation of the nominal effective exchange rates of the RMB and the US dollar was 0.87, and that of the real effective exchange rates was 0.76; both values indicate a high degree of association between the RMB and the US dollar.

Despite the close association, the RMB exhibited a higher degree of flexibility against the US dollar after the 2005 policy change (Figure 6). In addition to the exchange rate formation mechanism, China experimented with increasing RMB's flexibility. It widened the RMB daily trading band against the US dollar from an initial value of  $\pm 0.3\%$  around the daily fixing to  $\pm 0.5\%$  on May 21,