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<pt>China: capital flight or renminbi internationalization?

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<ab>During 2014–2016, many analysts have claimed the occurrence of a capital flight in China due to the reduction of the country's foreign reserves by over US\$800 billion. This paper aims therefore to answer the question: did China really undergo a capital flight in this period? Its methodology includes a detailed analysis of the Chinese external stocks and flows between 2014 and 2016, and an examination of the currency hierarchy and the international usage of the renminbi (RMB). The authors conclude: the fall in the foreign reserves that occurred in China in 2015–2016 was partially due to (i) a strategy of the Chinese government to diversify its international assets; and (ii) Chinese residents (private entities) increasing their foreign-asset holdings. Besides that, there did indeed occur a capital flight in China in 2015–2016, mostly due to a reduction of the non-resident deposits and loans, but these outflows were partially in RMB. Due to that core difference, the effects on the domestic economy are much lower. Furthermore, it may contribute to the internationalization of the RMB.

<kw>**Keywords:** China, international reserves, renminbi internationalization, currency hierarchy, capital flight

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<a>1<em>INTRODUCTION

Chinese economic performance in the last 40 years is completely astonishing. During

this period, the average gross domestic product (GDP) growth was almost 10 percent

per year. China is now the second-largest economy in the world – first if we consider

the purchasing power parity (PPP) – and the most important nation in the world for

international trade.

Despite this impressive trajectory, some internal and external imbalances have emerged. Among them, many authors and market practitioners have recently claimed that China encountered a capital flight problem (for example, Gunter 2017; Bloomberg 2016; Kärnfelt 2017). Even Chinese authorities tried to calm market sentiments, when the deputy director of the State Administration of Foreign Exchange (SAFE), Wang Xiaoyu, emphasized in a press conference that the capital outflows which occurred in 2015 were not caused by 'panic' and could not be considered a capital flight (Chen 2015).

There was indeed an important decline in the Chinese international reserves in 2015 and 2016 – over US\$800 billion – but it is still curious to talk about a capital flight in a country that has international reserves of more than US\$3 trillion.

As such, this paper aims to answer the question: did China really undergo a capital flight between 2014 and 2016? In order to answer this question, we claim that the mere analysis of foreign reserves is insufficient. For this reason, beyond the investigation of this conjunctural episode, the methodology of this paper includes a detailed analysis of two structural movements that lie underneath the surface: (i) the changes in the Chinese external financial stocks and flows; and (ii) the process of renminbi (RMB) internationalization. Our research resources consist of databases and reports from the People's Bank of China (PBOC) and the SAFE – some of them exclusively published in Mandarin.

Our contribution is twofold: first, we provide an alternative explanation for the decrease in China's external reserves during the 2014–2016 period, thus clarifying an important economic episode of the second-largest economy in the world. McCauley and Shu (2016) have already opposed the prevalent narrative that the decline in China's

foreign reserves was a result of a massive Chinese assets sell-off, yet the authors do not account for the process of RMB internationalization as an explanatory factor as we do. Beyond accounting for a new element, we also incorporate the 'conflicted virtue' approach (McKinnon and Schnabl 2009) to explain why some Chinese private entities decided to relocate their portfolios.

Our second contribution is to advance the theoretical understanding of the *capital flight* concept<sup>1</sup> and its macroeconomic effects. In general, the term indicates a massive and sudden withdrawal of financial resources<sup>2</sup> from a country through legal channels due to a fear of capital losses (see for instance Cuddington 1986; Deppler and Williamson 1987; Pastor Jr 1990). It is broadly recognized that capital flight can lead to economic complications such as external liquidity shortage and/or exchange-rate crises, especially when it hits peripheral countries. Yet the literature does not differentiate between local and foreign currency capital outflows. By including this aspect in our analysis, we demonstrate that a supposed capital flight event can have its effects mitigated if it happens – at least partially – in domestic currency.

Following this Introduction, the paper has three more sections. Section 2 presents an analysis of the Chinese external flows and stocks in the period 2014–2016; Section 3 discusses the international monetary system (IMS) hierarchy and the usage of the RMB; concluding the paper in Section 4, we present some final remarks.

<sup>&</sup>lt;sup>1</sup> In some contexts, the term 'capital flight' referred to as the illicit outflows of resources (for example, Kar and Freitas 2012). Although China may have experienced this kind of capital flight from 2014 to 2016, as the increased volume of net errors and omissions in the balance of payments indicates (Prasad 2016), this phenomenon is not the key element in explaining the episode.

<sup>&</sup>lt;sup>2</sup> Normally due to a 'heard behavior' à la Keynes (1936 [1964]).

#### <a>2<em>CHINESE EXTERNAL FLOWS AND STOCKS (2014–2016)

Numerous articles – either academic ones or in the media – have pointed to the occurrence of a supposed capital flight in China during the recent period (for example, Lee et al. 2016; Kärnfelt 2017; Gunter 2017). The large decline in China's international reserves indeed deserves attention because it constitutes a reversal in the strong upward trend that has been going on since the 1990s. Figure 1 reveals that after ten years of increasing, Chinese foreign reserves reached an impressive amount of almost US\$4 trillion in 2014. This apex was followed by a quick decline and, two years later, this amount had been reduced by almost US\$1 trillion.

#### <Place Figure 1 about here>

To understand that, it is initially important to grasp how Chinese reserves are allocated and managed. According to the PBOC, by December 2016, 97 percent of the foreign reserves were securities held by the Chinese central bank or government agencies. In 2014, 58 percent of Chinese international reserves were allocated in US\$denominated assets (SAFE 2018). The SAFE, under the administration of the PBOC, is responsible for managing these reserves.

As Feng (2007) has pointed out, Chinese authorities give more priority to a liquid position then to asset profitability.<sup>3</sup> Nonetheless, there was never a consensus on how to optimize the Chinese foreign reserves' management. Many scholars and authorities called attention to the risks and costs of having such large and dollar-dependent foreign reserves. In fact, China pays a very high premium for choosing a

<sup>&</sup>lt;sup>3</sup> For discussions regarding the costs and benefits of holding liquid international reserves, see Becker et al. (2010), IMF (2011), Dabla-Norris et al. (2011), and Calvo et al. (2012).

liquid position. Firstly, the accumulation of reserves may result in enormous increases in the means of payment in the Chinese economy. To accommodate it, the PBOC needs to sterilize this excess liquidity.<sup>4</sup>

According to SAFE (2015), in 2014 Chinese external liabilities income payments totaled US\$242.9 billion and external assets income receipts totaled US\$183.1 billion; the net investment income recorded, therefore, a deficit of US\$59.9 billion. This happened even though China has a net positive international investment position – that is, external assets are larger than external liabilities. These results occurred because the asset-yield rates are persistently lower than the liability-yield rates (Figure 2).

## <Place Figure 2 about here>

Added to that, China's foreign reserves had a smaller return if compared with other types of external assets, such as outward foreign direct investments (ODFIs). From 2005 to 2014, Chinese ODFIs' returns were on average around 6 percent per year (Figure 3). During 2006–2014, Chinese international reserves yielded an average of 3.68 percent annually (SAFE 2018). Unquestionably, this constitutes a good reason for the reallocation of China's external assets. Gao and Wang (2018, p. 8) state that 'China is no longer satisfied with keeping money as foreign reserve and getting returns from US treasury bonds.'

<Place Figure 3 about here>

<sup>&</sup>lt;sup>4</sup> Since 2003 the PBOC has been using, on a much larger scale, the issuance of central-bank bills (PBOC bills). In the period 2003–2010, it managed to sterilize about 80 percent of the total released – CN¥16 trillion – through the PBOC bills (Feng 2011).

In fact, over the past 20 years China has been diversifying and decentralizing its foreign reserves. If, in 1995, 21 percent of these reserves were concentrated in non-US\$-denominated assets, this proportion increased to 42 percent in 2014. In this same year, the analogous share for the world's foreign reserves accounted for 35 percent of the total, indicating that the Chinese foreign reserves are more diversified than the global average (SAFE 2018).

More recently, the incentives for changing the management of foreign reserves became clearer. In *Qiushi*, which is the Communist Party's main theoretical journal, the Vice-President of the PBOC and Director of SAFE, Gongsheng Pan, emphasized that the foreign reserves should serve the country's opening-up strategy, such as the Belt and Road and Going Global initiatives (Pan 2017). Furthermore, the Director also affirmed that China's reserves should serve investments in the real economy and help economic growth. The same ideas are present in the SAFE annual report:

<quotation>

*Optimizing diversified use of foreign exchange reserves to serve national strategies.* The SAFE enhanced coordination and adhered to market-oriented operations through equity, bonds and funds. In discharging its responsibilities as an investor, the SAFE focused on supporting the 'Belt and Road' Initiative and international industrial capacity cooperation to serve enterprises going global and promote economic prosperity and social development in China. (SAFE 2016, p. 71, emphasis added)

</quotation>

It is, therefore, evident that the SAFE is concerned about improving foreignreserve management, meaning a diversification of the assets, but also a reduction in the reserves level. In 2011 the President of the PBOC, Zhou Xiaochuan, had already affirmed that the Chinese international reserves were in fact too high (Feng 2011). In the same vein, the SAFE states that 'with adequate foreign exchange reserves, China is sufficiently strong to withstand external shocks' (SAFE 2015, p. 71, emphasis added).

To contribute to this diversification process, there has been a transfer of funds to the Chinese Sovereign Funds and some bilateral or multilateral funds. According to the Sovereign Funds Wealth Institute, the four most important Chinese Sovereign Funds since 2016 have accumulated more than US\$2 trillion. The biggest one is the China Investment Corporation (CIC), administrated by the Ministry of Finance, whose total assets have increased from US\$652.7 billion in 2013 to US\$813.5 billion in 2016.<sup>5</sup> Aglietta (2013, p. 6) states that:

<quotation>

China Investment Corporation (CIC) get their resources from excess FX reserves. The stabilization function of the currency is done by the SAFE (foreign exchange department of PBOC). CIC has the mission to invest mainly abroad and to take risk in order to get higher return than a stabilization fund.

</quotation>

In association with that, the alteration in the composition of foreign assets is also due to the use of resources for some specific investment projects. We tracked that at least US\$45 billion were transferred from the Chinese foreign reserves to specific funds during the analysed period (Table 1).

<sup>&</sup>lt;sup>5</sup> The CIC was created in 2007 with US\$200 billion withdrawn from the foreign-exchange reserves (McKinnon and Schnabl 2009) and with the following mission: 'CIC is committed in diversifying China's foreign exchanges and seeking maximum returns for its shareholder within acceptable risk tolerance' (CIC 2013). From its creation to 2016, the CIC's portfolio annual average return was 4.76 percent (CIC 2016), higher than that of the international reserves administrated by the SAFE.

#### <Place Table 1 about here>

Table 1 shows the transfers for which there are transparent official data, but there are other initiatives that were probably capitalized (at least partially) with Chinese foreign reserves, such as the funds connected to Chinese policy banks<sup>6</sup> or the recently created multilateral banks,<sup>7</sup> allowing us to raise the hypothesis that the total amounts are much higher.

Within this strategy of optimizing the foreign reserves, there is also an effort towards foreign-exchange-holder diversification. According to Pan (2017), the changes in the Chinese foreign assets were actually a process of 'allocating foreign exchange to people' (*cang hui yu min*), in order to fulfill the residents' demand for outward investments or their need for paying foreign debts. SAFE (2015, p. 49) also indicates that 'changing external assets reflected the strategy of encouraging foreign exchange held by the private sector.' Evidence for that is the historically high proportion of private-sector foreign-asset holdings since 2013 (SAFE 2015).

Beyond understanding the Chinese government's attitude, we also need to comprehend the motivations of the private-sector agents on holding (or not holding) foreign-currency assets in their portfolios. Through the 'conflicted virtue' analysis, McKinnon and Schnabl (2009) help to elucidate this question. According to them, countries with high current-account surpluses ('virtuous') tend to accumulate foreign claims, but 'immature creditors' – such as China – are hardly able to have these claims

<sup>&</sup>lt;sup>6</sup> For instance, the China–LAC cooperation fund (中拉合作基金) was built in 2016 from the Export–Import Bank of China. The China–Africa Development Fund (中非发展基金) was created in 2015 from the China Development Bank. According to the funds' official websites, they received support from foreign reserves, however the specific amount is not indicated.

<sup>&</sup>lt;sup>7</sup> The New Development Bank (NDB) and the Asia Infrastructure Investment Bank (AIIB).

denominated in their national currencies. Hence, it creates a 'conflict', because the rest of the world puts pressure on this country to the appreciation of its currency (alleging this would rebalance its current account), but this appreciation would be harmful to the possessors of assets denominated in foreign currencies (since their liabilities are mostly in the national currency, this would create a currency mismatch). Hence, in contexts where the national currency is appreciating, the private sector has no incentive to invest in foreign assets and the central bank is somehow compelled to keep increasing the foreign reserves to avoid further (and excessive) appreciation of the national currency.

In China, since the reform of the exchange-rate regime in July 2005, the RMB initiated a long-lasting trend of appreciation. Since China is an 'immature creditor' (ibid.), the private sector had no incentive to invest in foreign assets – even if the regulation for outflows was gradually being relaxed – and the PBOC hugely increased its foreign-exchange reserves (Figure 4).

# <Place Figure 4 about here>

What is most interesting, however, is that the other direction of the relation presented by McKinnon and Schnabl (2009) is also true, as Figure 4 shows. In early 2014, the RMB appreciation tendency stagnates, and in August 2015<sup>8</sup> it initiates a clear depreciation movement until the beginning of 2017. Using the same reasoning, we may, therefore, posit that this devaluation process stimulated Chinese residents (private entities) to hold foreign-currency-denominated assets in their portfolios, contributing to a decrease in the PBOC's foreign-reserve level. It is not by chance that in 2016 it was

<sup>&</sup>lt;sup>8</sup> After the so-called '8.11' foreign-exchange management reform, which will be discussed below.

the first time the proportion of private-sector holdings in China's foreign assets was more than 50 percent (Pan 2017).

Within this framework, it is important to highlight that having an internationally accepted currency could mitigate the 'conflicted virtue' issue for China, since it would create the possibility for private agents to hold foreign assets denominated in RMB, avoiding a currency mismatch. Nevertheless, this is not a simple task, due to the huge asymmetries of the international monetary system.<sup>9</sup>

In sum, to understand the fall in Chinese foreign reserves, it is important to highlight the reasons why the Chinese authorities want to seek diversification of their external assets: (i) the realization of some specific investment projects (such as the Going Global and the Belt and Road initiatives); (ii) the increase in the profitability of the country's foreign assets, given the low profitability of international reserves; and (iii) a reversal in the net investment income, which records structural deficits – and is intrinsically related to item (ii).

Having in mind the discussions about the stimulus for external asset diversification in China, it is important to turn to the analysis of the Chinese external financial stocks and flows between December 2014 and 2016.

Table 2 presents China's international investment position, showing some interesting movements. First, the country's international reserves have been reduced by US\$801 billion from December 2014 to December 2016 (see line (*d*)). However, other Chinese external assets had a different trend: outward direct investments (ODIs) increased by US\$435 billion (*a*); portfolio investments increased by US\$103 billion (*b*), and other investments abroad increased by US\$287 billion (*c*). It means that this fall in

<sup>&</sup>lt;sup>9</sup> Whether China is becoming a mature creditor is a topic we will cover in Section 3.

reserves was more than offset since these other external assets increased by US\$824 billion in the same period. This allows us to think of the occurrence of a mere change in the composition of Chinese foreign assets. As a matter of fact, the total external assets are quite similar at the beginning and at the end of the time series (around US\$6.4 trillion).

# <Place Table 2 about here>

This partial analysis, which initially looks only at the external assets, allows us to say therefore that the statement of Prasad (2014) is still valid since he argued that there was no reason to worry about the rising capital outflow from China because that was consistent with the government's steps to liberalize outflows and the strategy of the non-government sector to diversify its savings into foreign investments. According to the author, these outflows 'may be a sign of a mature economy rather than a troubled one' (ibid., p. 257).

Turning the focus to the external liabilities in Table 2, foreign direct investment (FDI) rose by US\$267 billion (see line (*e*)) during the period, which suggests that China made more ODI than it received as FDI.<sup>10</sup> Figure 5 displays the external flows, showing that, after a long period with a preponderance of FDI, in 2016 for the first time it was surpassed by ODI.

# <Place Figure 5 about here>

<sup>&</sup>lt;sup>10</sup> With the caveat that changes in external assets and liabilities are caused not only by flows but also by price variations. Nevertheless, this hypothesis was confirmed by the analysis of the flows.

For the period 2014–2016, the main destinations of these ODIs were Europe (32.5 percent of the total), the USA (23 percent), and East Asia (13.4 percent), consolidating a change in relation to the previous decade, in which West Asia and Sub-Saharan Africa were the privileged regions. The main sectors were energy (24.5 percent of the total), real estate (12.7 percent), transport (10.9 percent), and technology (10.3 percent), reflecting also an important alteration if compared to previous years, in which energy and metals corresponded to 70–80 percent of the total. 36.8 percent may be framed in the Belt and Road Initiative, showing that this project is obviously important, but it does not include all Chinese ODIs, since the Going Global policy was prior. Finally, it is interesting to mention that only 22.8 percent represented green-field investments, all the rest being directed to mergers and acquisitions.<sup>11</sup>

These outcomes, and notably the increase in ODI are aligned with the new policy of the Chinese government contributing to the transformation of the country's international investment position. Therefore, either through flows or through the variation of the external stocks, it is clear that the net balance of direct investments in 2015 and 2016 is not relevant as a reason for the supposed capital flight in the Chinese economy.

Still looking at the external liabilities in Table 2, the stock of 'other investment' decreased by US\$455 billion (see line (g)). According to the SAFE, many Chinese entities opted for accelerating the repayment of external loans in order to avoid foreign-exchange risks, resulting in the payment of US\$167 billion (SAFE 2016). At the same time, the country increased its external assets in 'other investment.' To understand this movement, it is useful to analyse China's balance of payments. Table 3 shows that the

<sup>&</sup>lt;sup>11</sup> All data come from the authors' calculations, based on the database 'China Global Investment Tracker 2019.'

net result of 'other investment' had expressive negative values in the period 2014–2016 (one could include 2012 in this list) due to the net assets' increase in 2014 and 2016, as well as the liabilities' decrease in 2015.

## <Place Table 3 about here>

When the flows of 'other investment' are disaggregated (Table 3), we may notice that on the liabilities side, after a considerable inflow of funds in the form of 'loans' and 'currency and deposits' during the period 2007–2013 (mainly in 2010, 2011, and 2013), in 2015 there was an expressive outflow – which meant the reduction of external liabilities in this item. The outflow of US\$123 billion in this year in 'currency and deposits' may indeed be considered as a sign of a possible capital flight. Nevertheless, this needs also to be nuanced. Out of the total amount, US\$47.7 billion referred to deposits, meaning the volume of the reduction of deposits held by nonresidents in China (SAFE 2017).<sup>12</sup> The rest (US\$75.3 billion) corresponds to currency and, according to IMF guidelines, variations in the liabilities in this item concern operations in banknotes and coins in local currency (IMF 2010).<sup>13</sup> Hence the decrease in liabilities in this item means that RMB is being transferred from non-residents to residents – non-residents are thus buying US dollars to 'escape from the RMB' or they are simply buying goods and assets in China.

According to data provided by the PBOC, domestic RMB financial assets held by non-residents reached a peak of CN¥4593 billion in June 2015. This amount decreased by 34 percent by December 2016. From the CN¥1559 billion (nearly US\$220 billion) reduced in the period, 77 percent accounted for the diminishing in deposits (see

<sup>&</sup>lt;sup>12</sup> Data provided by China's Balance of Payments Report in Mandarin.

<sup>&</sup>lt;sup>13</sup> Whilst variations in the assets mean operations in banknotes and coins in a foreign currency.

Table 4). According to the IMI (International Monetary Institute) (2017), this is mainly due to: (i) the relaxation in August 2015 of the Chinese exchange-rate policy and the start of the devaluation of the RMB against the US dollar;<sup>14</sup> and (ii) uncertainties in the world economy, notably due to speculation around the possibility of an increase in basic interest rates in the US and later on to the beginning of the Trump government.

# <Place Table 4 about here>

Coming back to the BOP's 'other investment' (Table 3), on the assets side we notice an outflow of funds mainly from 2010 onwards in the form of 'loans,' 'currency and deposits,' and 'trade credit and advances' (mainly in the years 2012, 2014, and 2016), which meant the increase of the external assets in this item.

In short, we may notice that China is not only liquidating debts abroad denominated in foreign currency (for example, decreasing its liabilities), but it is also doing the same operations externally, as a lender (increasing its assets). This may indicate a new financial integration strategy of the Chinese economy.

Some important characteristics of this new financial integration strategy are clearly shown below:

## <quotation>

The major ways to distribute foreign exchange are to encourage holding of foreign exchange by the people and repayment of the debt ... . Foreign assets holdings were diversified among market participants instead of only by the government, whereas they were controlled by domestic entities. Meanwhile, other investment liabilities recorded net inflows of USD 50.2 billion, a drop in the growth rate by 77

<sup>&</sup>lt;sup>14</sup> Compared to what happens in peripheral countries, the devaluations were low, but by Chinese standards it was unusual. On 11 August 2015, the 2 percent devaluation was the highest in 20 years in China.

percent year on year, reflecting that domestic enterprises had accelerated their repayment of the USD debt. (SAFE 2015, p. 21)

</quotation>

In this sense, according to the SAFE (2015, p. 42), China's balance-of-payments (BP) status is importantly influenced by the 'other investment' account. The importance of this rubric is only recognized by looking to gross rather than net flows. Taking the year of 2014 as an example, 77 percent of capital and financial account inflows and 88 percent of its outflows are justified by 'other investment' variation. It is worth mentioning that due to both domestic and international uncertainties, China's 'other investment' has frequently alternated between surpluses and deficits (SAFE 2015).

Nevertheless, as Table 3 shows, between 2014 and 2016 the country had expressive values of outflows within the 'other investment' account. In a 2015 document, the SAFE considered that rising outward flows at that moment were a reflection of the 'changing expectations of domestic entities regarding the exchange rate, interest rate, and market environment, driving them to increase their allocation of assets in the international market' (ibid., p. 43).<sup>15</sup> Another alleged reason was that 'domestic banks reduced their external trade finance liabilities, such as letters of credit and payments by overseas banks to avoid risks' (ibid., p. 44). That trend probably persisted until 2016.

<sup>&</sup>lt;sup>15</sup> Many authors already suggested that RMB appreciation expectations support the offshore demand for this currency (Cheung and Miao 2014; Minikin and Lau 2013). Depending on these expectations, companies may choose onshore or offshore branches to conclude trade negotiations. Due to the regulated capital account, it is less likely that this behavior is echoed in the financial sector.

Finally, there is one more detail that it is worth mentioning. Table 3 shows that during the 2007–2016 period approximately US\$598 billion exited China in the item 'currency and deposits,' which means the constitution of a huge Chinese foreign asset in this item. However, there is a point that is quite important for the comprehension of these dynamics that is not being taken into account by the literature: the currency of these external flows and stocks. The SAFE (2016) shows for instance that China's banking sector in 2016 had US\$670.5 billion as external deposits and loans; out of that, US\$99.6 billion were in RMB. That is, a non-negligible part of the Chinese external flows and stocks are in their currency and these shares are increasing. The process of internationalization of the Chinese currency is therefore important for our research and this analysis is undertaken in the next section.

# <a>3<em>THE INTERNATIONAL MONETARY SYSTEM HIERARCHY AND THE USAGE OF THE CHINESE RMB

The IMS has always been asymmetric. As a matter of fact, most national currencies are unable to fulfill classical money functions for international transactions – that is, beyond the borders of the countries in which they are issued. On the other hand, some few national currencies are used for international economic operations.<sup>16</sup> The most used currency is the US dollar, followed by the euro, the pound sterling, the Japanese yen, the Swiss franc, and to a lesser extent the Canadian dollar and the Australian dollar. Not by chance, these are all currencies issued by core countries (Cohen 1998; De Conti and Prates 2018).

<sup>&</sup>lt;sup>16</sup> De Conti (2011) names the currencies that are used internationally as core currencies and those that are not able to fulfill the classical functions of money for international transactions as peripheral currencies.

The Chinese economy is already the second-largest in the world, but the international usage of its currency is far below its importance. Explaining the reasons for this divergence is beyond the scope of this paper, but we may highlight two important factors: (i) the usage of currencies is partially based on conventions that are not easily modified; and (ii) the Chinese financial account and the foreign-exchange market controls that for many years discouraged the international usage of the RMB.

Nonetheless, even though the international use of the RMB is not as high as other core currencies' use, it is rising, as the following figures demonstrate. For example, the survey conducted by the Bank for International Settlements (BIS) shows that, since 2007, the adoption of the RMB in global foreign-exchange markets has roughly doubled every three years (see Table 5).

# <Place Table 5 about here>

Added to that, many authors indicate that the role of the RMB as an exchangerate reference point increased in the East Asian region, especially after the 2008 global financial crisis (Subramanian and Kessler 2013; Tovar and Nor 2018; Chow 2014; Fratzscher and Mehl 2014; McCauley and Shu 2018).

The PBOC provided more detailed information about RMB cross-border flows. According to them, 25.2 percent of total cross-border payments and receipts between the Chinese mainland and overseas parties were settled in RMB in 2016. In that year, China accounted for a total of CN¥2.27 trillion in RMB net outflows, while receipts accounted for CN¥3.79 trillion, and payments CN¥6.06 trillion. Almost half of these RMB outflows were funneled through trade channels. As already acknowledged by other researchers, 'the expansion of the RMB payment deficit means that the RMB flowed overseas through the trade channel, which is conducive to expanding the offshore capital market and the offshore RMB business' (IMI 2017, p. 16).

These figures make clear that despite its still low position in the IMS hierarchy, the RMB is unquestionably increasing its role as an international currency. This is a consequence of the rising importance of China in the global economy, but that is not the whole story. According to De Conti and Prates (2018), besides economic and geopolitical power, one of the important determinants of the international usage of currencies is the political will, that is, the effort of the national state to stimulate the usage of its currency. History shows that the UK and the USA have frequently created strategies to foster or even impose the international usage of their currencies. The novelty is that after a long period in which the Chinese government was not supporting the international use of the RMB, it now – notably after the 2008 crisis – explicitly declares its intention to encourage it, and implements policies with this purpose.

It is evident that this political will cannot have concrete results if the international community does not see this currency as reliable – which is obviously related to the importance of the economy that backs a certain currency. Nevertheless, there are already some important signs showing increasing reliability of the RMB. The most important one came from the IMF, which included the RMB in the basket of currencies that compose the Special Drawing Rights (SDR).<sup>17</sup> For some analysts, this inclusion is only a 'symbolic gesture' (Bernanke 2015). Yet central bankers may evaluate their portfolio investments by taking into account, among other factors, the new composition of the SDR. In this sense, the IMF's decision may have an impact on

<sup>&</sup>lt;sup>17</sup> 'The weight of the RMB in the SDR basket is 10.92%, whereas the weights of the US dollar, the euro, the Japanese yen and the British pound are 41.73%, 30.93%, 8.33% and 8.09% respectively' (PBOC 2016, p. 43).

the role of the RMB as an official store of value. This seems to be the case for some central banks such as the European Central Bank (ECB), which invested an equivalent of  $\notin$ 500 million in October 2016 (ECB 2017). Currently, at least 60 monetary authorities hold RMB-denominated assets (PBOC 2017), and according to the IMF-COFER database, RMB -denominated holdings increased from 1.07 of total allocated reserves in 2016Q4 to 1.95 percent in 2019Q4.<sup>18</sup>

Coming back to the main topic of this paper, it is important to analyse whether the supposed capital flight that affected China during the 2014–2016 period is related somehow to the RMB internationalization process. We have already shown in Section 2 that, when scrutinizing the asset side of the Chinese IIP, there is nothing that points to the occurrence of a capital flight during that period. Instead, there was a changing in the configuration of Chinese foreign assets. Nonetheless, we also have identified that from the liability point of view, more specifically in the 'other investment' accounts, a small process of capital flight can be verified. Yet the novelty of this process is related to the currency denomination of these financial outflows.

This new phenomenon was already noticed by some new research and reports. For instance, the IMI (2017, p. 13) affirms that 'RMB has become the main currency that flows out of China's border.' The same was reported by Lee et al. (2016), quoting declarations from Goldman Sachs staff: 'a rising amount of capital is exiting the country in yuan rather than in dollars'; and the Australia and New Zealand Banking Group in Hong Kong: 'We have seen a structural change in China's capital outflows, with net outbound payments predominantly in yuan this year.'

<sup>&</sup>lt;sup>18</sup> Just behind the US dollar, the euro, the yen, and the pound sterling.

These perceptions can be validated by analysing data on PBOC reports. Table 6 displays the RMB-denominated cross-border transactions according to the balance-of-payments accounts. In 2014, only a small amount of RMB was transacted under the capital and financial account. By that time, key investment channels were not yet set up or were very recent,<sup>19</sup> and the transactions under that account were concentrated in FDIs. In 2015 and 2016, the amount under this account increased substantially, and the total RMB flows represented respectively CN¥4.86 trillion and CN¥4.62 trillion<sup>20</sup>).

<Place Table 6 about here>

Figure 6 corroborates the argument: the proportion of RMB-denominated crossborder payments and receipts are in a growing tendency, and it was especially significant during the 2014–2016 period.

<Place Figure 6 about here>

Among the transaction categories, the ODI was particularly outstanding. The growth of the Chinese ODIs – shown in Section 2 – is accompanied by equally impressive growth in the usage of RMB settlement. Until the last quarter of 2014, only a small portion of ODI was settled in RMB, but in 2015–2016 on average 70 percent of total ODI was settled in this currency (Figure 7).

<Place Figure 7 about here>

<sup>19</sup> The Hong Kong–Shanghai Stock Connect and the cross-border RMB cash pooling were inaugurated in 2014; the Hong Kong–Shenzhen stock Connect in 2016.

<sup>20</sup> Respectively, US\$749 billion and US\$665 billion (calculation using the end-of-period exchange rates).

Besides direct investments, credit markets are also an important pillar for the strengthening of the financial transaction functions of the RMB. Historically, overseas loans from the UK and the USA in their currencies have been important tools for the dissemination of the international usage of, respectively, the pound sterling and the US dollar (Sequetto 2019). Aware of that, the Chinese government is taking several steps to increase overseas loans in RMB. Using McKinnon and Schnabl (2009) nomenclature, they want to take advantage of their position as a creditor in the world economy to become a 'mature creditor.' This is not a trivial task, but many policies have been implemented with the will of gradually contributing to this qualitative change represented by the ability to provide overseas loans in RMB (and obviously to the strengthening of the international usage of the currency in all functions).

The first important measure was the establishment of offshore centers for the usage of the RMB, starting with Hong Kong in 2003 and Macau in 2004 (Minikin and Lau 2013). Nevertheless, the strategy was clearly deepened after the global financial crisis. In 2009, amidst declarations from the PBOC president Zhou Xiaochuan about the necessity of a more diversified IMS (Zhou 2009), China launched a 'Pilot Program of Renminbi Settlement of Cross-border Trade Transactions', aimed at allowing and regulating cross-border RMB transactions between Chinese banks and correspondent banking relations have rapidly increased – between 2012 and 2016 RMB correspondent banking accounts jumped from 3600 to 8800 (Accuity 2017). From 2012 onwards, 23 new offshore RMB centers were established all over the world, including very important financial centers (for example, London, New York, and Frankfurt), but also several other cities geographically distributed around the globe (from Budapest to Dubai, Johannesburg, and Buenos Aires). Very importantly, in almost all offshore centers

banks allowed to act as offshore RMB clearing centers are the four big Chinese banks (PBOC 2018). That is, the strategy for the internationalization of the RMB involves a simultaneous – and crucial – step related to the internationalization of the Chinese banks. As a consequence, the stock of Chinese financial institutions' ODI creating branches abroad has been roughly multiplied by 3.5 from 2011 to 2016, reaching in this last year almost CN¥1.4 trillion<sup>21</sup> according to data from the SAFE.

Additionally, in 2015 China launched its own cross-border payment system (CIPS), a financial infrastructure to improve the efficiency of RMB transactions overseas. At the same time, the PBOC is providing worldwide potential liquidity in RMB through various swap agreements – from 2008 onwards, bilateral swap agreements have been signed with 40 countries, summing up to more than CN¥3 trillion (PBOC 2018). Last, but not least, the Belt and Road Initiative may also be a very strategic way to increase the overseas loans in RMB since the credit for the infrastructure investments is provided by China and in most of the cases the resources are partially used to hire Chinese companies and/or buy Chinese goods.

In recent years, Chinese financial institutions have indeed expanded their overseas loans. Even though most of these loans are still denominated in US\$, loans denominated in RMB are equally increasing. This is especially true for the 2014–2016 period when RMB-denominated loans for overseas institutions increased by 133 percent – from CN¥189 billion in January 2014 to CN¥437 billion in December 2016<sup>22</sup> (Figure 8). According to Horn et al. (2019), most of the Chinese loans are provided for low-

<sup>&</sup>lt;sup>21</sup> Approximately US\$200 billion.

<sup>&</sup>lt;sup>22</sup> Approximately US\$62.4 billion in December 2016.

income, middle-income, and the so-called emerging countries;<sup>23</sup> in need of these resources (sometimes to avoid the conditionalities of the Western multilateral institutions' loans), these countries are more prone to accept loans in RMB. So far, these RMB loans are more related to commercial purposes, that is, non-residents using Chinese credit lines to import products from China.

### <Place Figure 8 about here>

Connecting, therefore, the analyses of Sections 2 and 3 – that is, changes in Chinese external stocks and the process of RMB internationalization – we come to a pivotal conclusion: that there is effectively a net outflow in China in the 'other investment' account in 2015–2016, but, peculiarly, that these outflows are partially (and in some rubrics increasingly) in RMB and this is something totally different from what has frequently happened in many peripheral countries throughout history – namely, a capital flight in US dollars (or other central currencies) that begets a lack of this currency (with harmful consequences over their economies). Moreover, these outflows in RMB may play a positive role in the process of internationalization of the Chinese currency. Even if the agent who takes these RMB out of China immediately sells them to an offshore financial institution – which will sell this RMB for instance to an importer of Chinese goods – it contributes to the enlargement of the international operations made in RMB.

Finally, this situation engenders an important trade-off for the Chinese government because it may create new regulations to avoid excessive outflows, but these measures will be counterproductive in the strategy of RMB internationalization.

<sup>&</sup>lt;sup>23</sup> Unlike the Chinese portfolio investments, which are mostly directed to Hong Kong and the USA (Horn et al. 2019).

Discussing the changes in the capital-account management to restrict capital outflows, the IMI (2017, p. 13) says that 'this is of great significance to China's macroeconomic and financial stability, but it is not conducive to the expansion of the international use of RMB in the short term.'

It thus means that China is already facing one of the important dilemmas related to the internationalization of a currency, the one between keeping strict controls over this currency or opening up its financial account in order to foster the international usage of this currency. Several authors (for example, Prasad 2014) foresaw that this would eventually happen and it is already the case.

Summing up, even if these capital outflows through the 'other investment' account were not integrally planned by the Chinese government, they contribute somehow to the strategy of RMB internationalization. Obviously, if they create huge volatility in the Chinese economy, this process will be harmful to the reliability of the currency in the eyes of the international community, but this is still not the case.

## <a>4<em>FINAL REMARKS

Several articles suggested the occurrence of a capital flight in China in 2015–2016. The large decline in China's international reserves has effectively attracted attention because it has meant a reversal in the strong upward trend since the 1990s. This paper shows however that the analysis of the phenomenon should not be undertaken superficially. First of all, an inspection that looks only to international reserves may be deceptive, requiring research over the whole set of external stocks and flows. Secondly, it is important to consider not only the flows themselves but the currency of these flows.

Based on these assumptions, this paper raises two main conclusions. The first conclusion is that the rapid fall in international reserves that occurred in China in 2015–

2016 was not only due to a withdrawal of international investors' assets from China or to the interventions of the PBOC at the foreign-exchange market to avoid an extreme devaluation of the RMB, but it was also due to a strategy of the Chinese government to diversify its international assets. In reality, Chinese international reserves were reduced by US\$801 billion in 2015–2016, but other Chinese external assets – 'Chinese direct investments', 'portfolio investments' and 'other investments abroad' – more than offset this fall, since they increased by US\$824 billion during the same period.

However, the analysis of the liability 'other investment' reveals a decline of US\$455 billion during this period. There we arrive at the second conclusion, that there was indeed a capital flight in China in 2015–2016 mostly due to a reduction of non-resident deposits and loans in China. This was probably caused by the devaluation of the RMB and the expectations regarding an increase in the Fed funds rate. Nevertheless, these outflows were partially in RMB and this constitutes a crucial difference in comparison to the capital flight that recurrently takes place in many peripheral countries through history, first of all because its effects over the domestic economy are much lower since there is no lack of US dollars and no exchange-rate crises. But secondly because it may paradoxically contribute to the internationalization of the RMB.

Summing up, China has indeed suffered a capital flight in 2015–2016, but it does not explain the total reduction in the country's international reserves during this period. As demonstrated in this paper, the decline in foreign-exchange reserves was also due to a voluntary diversification of the Chinese external assets, and part of the outflows was in RMB, reflecting (and deepening) the ongoing process of internationalization of the Chinese currency.

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