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China: capital flight or renminbi internationalization?

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Abstract:

Several articles have suggested the occurrence of a supposed capital flight in China. The large decline in China's international reserves effectively attracts attention because it means a reversal in the strong upward trend since the 1990s. Actually, this paper claims that analyses that only look to the international reserves may be deceptive. This paper aims therefore to answer the question: is China really undergoing a Capital flight? The hypothesis is that to answer this question we have to go beyond the mere analysis of the reserves, looking also to two other issues, that is, the changes in the compositions of Chinese external assets and the process of internationalization of the Chinese renminbi (RMB). The methodology of the paper includes hence a broader analysis of the Chinese external stocks and flows, studying their evolution between 2014- 16; and an analysis of the currency hierarchy and the international usage of the RMB. Based on these assumptions, this paper raises two main conclusions. The first one is that the impressive fall in the international reserves that occurred in China in 2015-16 was partially due to a strategy of the Chinese government to diversify its international assets. The second one is that there has indeed occurred a capital flight in China in 2015-16 mostly due to a reduction of the non-resident deposits and loans in China, but these outflows were mostly in RMB and this constitutes a crucial difference in comparison to the capital flight that has recurrently took place in many peripheral countries. First of all, because its effects over the domestic economy are much lower, since there is no lack of US dollar and no exchange rate crises. Secondly, because it may paradoxically contribute to the internationalization of the RMB.

Keywords: China; international reserves, Renminbi, currency hierarchy, capital flight.

1) Introduction

Chinese economic performance in the last 30 years is completely astonishing. The average Gross Domestic Product (GDP) growth reached over 10% in many years and China has already become the second largest economy in the world – the first one if we consider the purchasing power parity – and the most important country for the international trade. It is not true that the country was not touched by the global

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[2] The average growth has declined to a level around 7% a year, what is still quite high for the international standards. Moreover, one should not ignore that a deceleration of the economic growth

financial crises, but in comparison to other countries it was able to sustain a fast growth[2].

This impressive trajectory creates however some imbalances in Chinese economy. Zhang (2016) says for instance that China has to care about a rebalancing movement in two fronts: i) the internal one: in one hand, it should increase the share of consumption and decrease the share of investments in the GDP; in the other hand, increase the importance of the service sector in the GDP, decreasing the relative importance of industry; ii) the external one: decreasing the weight of net exports in the GDP, reinforcing an endogenous economic dynamism. Actually, the strategy of the Chinese government for the near future is totally aligned to this diagnostic.

Besides these macroeconomic concerns, China unquestionably has important regional imbalances, since the Western part of the country is much less developed than the Eastern part. Finally, some authors claim – and this is far from consensual – that China has also some financial imbalances, notably due to the recent – and quick – increase in the indebtedness of companies and households.

After all, in spite of the impressive performance of Chinese economy highlighted above, some analysts suggest the country is facing the risk of a huge crisis. The two most common "potential crisis" indicated by the literature are: i) a demand crises related to the overcapacity of the industrial sector; ii) a financial crises. Concerning the first possibility, it is true that China has currently high idle capacity in many sectors, specially amplified by the anti-cyclical policies held in 2009-10 to face the global financial crises, that massively increased the aggregate investment in the country[3]. Nevertheless, one may not forget that many Chinese companies are public (or mixed) and the ability of Chinese government to foster demand[4]. Regarding the second possibility, it is also important to notice that a public bank system tends to be much for resilient than a private one.

Beyond these catastrophist prognostics stating that China will face a huge crises in the near future, there has also been many authors claiming that in the last years Chinese economy is already facing a potentially important problem: a capital

[2] The average growth has declined to a level around 7% a year, what is still quite high for the international standards. Moreover, one should not ignore that a deceleration of the economic growth was already forecasted (even desired) by the Chinese government in order to allow the so-called "soft landing".

[3] See for instance European Chamber (2016).

[4] The "One Belt One Road" Initiative, for instance, is certainly related to the goal of occupying this idle capacity (among other goals, obviously).

flight (e.g. Gunter, 2017; Bloomberg, 2016b). There has been indeed a massive decline in their international reserves in the last three years, but it is still curious to talk about a capital flight in a country that has international reserves of more than US$ 3 trillion. This capital is escaping from what? Exchange rate risk? But it is rather a consensus that Chinese renminbi (henceforth RMB) is artificially undervalued, so if the exchange rate has any long term trend it is probably going in the direction of an appreciation, increasing the gains of its holders; it is true that in the recent period there had been some devaluation, but the volatility of the exchange rate in China is still very low, so for speculative gains it would be more reasonable to operate in other currencies/markets. Political risk? But even if it happens in a really gradual pace, China keeps the movement of opening-up its economy. In order to understand this supposed capital flight, wider researches are required.

This paper claims that analyses that only look to the international reserves may be deceptive. There are at least two very important (and related) movements that are going on and have to be considered too: i) a change in the composition of Chinese external stocks; ii) the efforts for the internationalization of the RMB. Maybe these movements do not explain the whole situation, but they may give at least a partial answer to the inquiries concerning the occurrence of a capital flight in China.

This paper aims therefore to answer the question: is China really undergoing a Capital flight? The hypothesis is that to answer this question we have to go beyond the mere analysis of the reserves, looking also to the two-abovementioned movements, that is, the changes in the compositions of Chinese external assets and the process of internationalization of the Chinese RMB. The methodology of the paper includes hence a broader analysis of the Chinese external stocks and flows, studying their evolution between December/2014-December/2016; and an analysis of the international usage of the RMB.

Besides this Introduction, the paper has four more sections. The second one presents some brief discussions regarding capital flows; the third one makes an analysis of the Chinese external flows and stocks in the period 2014-2016); the fourth one discusses the International Monetary System hierarchy and the usage of the Chinese RMB; concluding the paper, we present some final remarks.

2. Capital flows: some brief discussions

First of all, it is important to discuss the definition of capital flight, since the diverse uses of this concept may cause misunderstandings. In some contexts, capital flight is related to the illicit operations to take resources away from the country. It happens when travellers do not declare the money they are taking away of the country, but also through fraudulent financial operations. In some underdeveloped countries it may constitute an important problem – notably in those where a part of the population receives its salaries in US dollars.

Kar & Freitas (2012) points that this sort of capital flight may result in a lack of international currency that may engender an unnecessary growth in a country's foreign debt, and a net real capital transfer out of the country that undermines the tax base. In this sense "illicit inflows do not provide a benefit that offsets the initial loss of capital through outflows, as they cannot be taxed or used to boost productive capacity […] more likely to drive the underground economy than be invested in the official economy" (Kar & LeBlanc, 2013, p. 3).

Nevertheless, this is not the kind of capital flight that is important for this paper. The capital flight we are dealing with is not at all a crime, since it constitutes a capital exit through the institutional and legal channels. In this sense, when an individual household or enterprise takes money out of the country, it does not constitute a problem. It becomes a trouble when this withdraw movement is done by many households and enterprises, that is, when it constitutes a collective action and therefore a massive volume of outflows. It may be measured by the difference between the international inflows and outflows, that is, the net capital outflows.

Dornbusch (1990) suggests that a capital flight occurs when economic agents fear having losses related to an investment made in a certain country, as a consequence of political risk, financial repression, expected changes in the exchange rate or for tax considerations. In a similar manner, Gunter (2008) considers capital flight an outflow of resources from a country driven by an adversative alteration in the country's political, economic, or social situation. Both authors state therefore that the responsibility for the capital flights is related to the country that suffers it (any kind of "bad policy").

It is important to highlight however that this is not all a consensus. With a different view, many authors say that the determination of the capital flows are more related to the international liquidity cycles than to domestic reasons (Ocampo, 2001;

Flassbeck, 2002; Rey, 2015). It is true that sometimes the massive outflows may be related to domestic problems – either economic or political –, but empirical analyses show that in many circumstances the reversal of the capitals movements from inflow to outflow in peripheral countries may be rather related to changes in the monetary policy in the central countries (e.g. the United States)[5].

Whatever is its cause, Epstein (2005) asserts that a capital flight is related to the transfer of assets out of a country to escape ownership claims, as well as losses in returns or even in part of the principal. And the important point is that capital flights can have significant economic and social costs – mainly in peripheral countries –, since they may create a lack of US dollars and/or exchange rate crises. According to Epstein (2005), these costs may include sacrificed investments in infrastructure, in human capital, in social services and in plant and equipment. In his conclusions, the author states that rather than curbing capital flight, the financial liberalization tends to exacerbate it. Given the severe social costs and dislocations inflicted by capital flight upon the developing world, his prescriptions are in the direction of capital controls.

When it comes to China, the subject of capital flight is not new. Sicular (1998) wanted to investigate why China was at the same time facing expressive sums of inward foreign capital investment and outward capital flight, and one of the main explanations was the different treatment experienced by foreign and domestic investors. Kar & Freitas (2012) points that there has been an increase income inequality after the liberalization of the Chinese economy in the late 1970s and one possible consequence of that is that the richest people in China are trying to take their wealth abroad, creating some kind of capital flight.

Anyway, only recently the discussions of a supposed capital flight in China became more frequent. Gunter (2017) estimates that the capital flight from China since 1984 was US$ 3.2 trillion – i.e., nearly US$ 105 billion a year – and the pace has accelerated since 2005, reaching US$ 425 billion in 2014. According to the author, the favoured routes of these flights have changed during the analysed period. In the 1984-1999 period, the financial transactions were very important in such flight. In 1999 some capital controls have been imposed, resulting that capital flight by trade mis-invoicing[6] dominated for the next decade. From 2012 onwards, the capital flight

[5] The Volcker's policy in 1979 is one of the clearest examples, although there are many other recent examples related to the "quantitative easing" and the "tapering".
[6] This is the non-declaration of part of the value of exports.

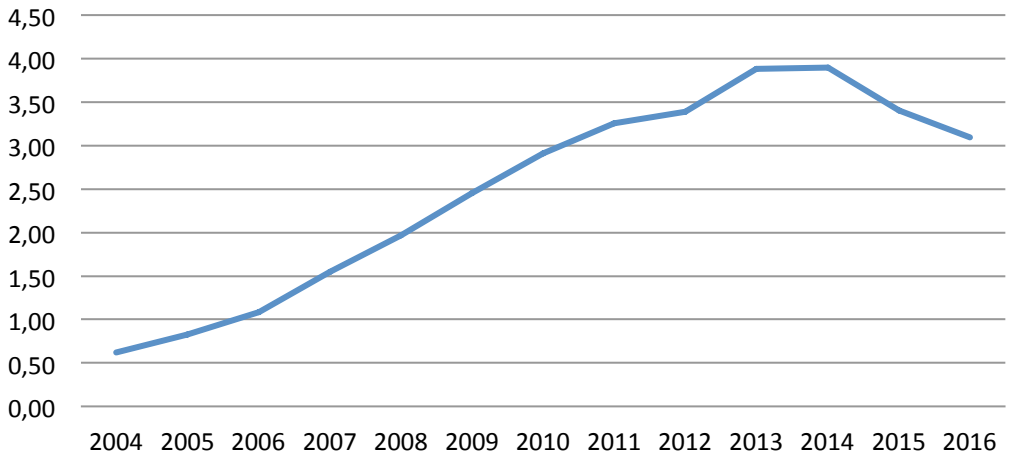
route was increasingly realized by private foreign banks borrowing from Chinese organizations and individuals. The author claims therefore that capital controls appear to have influence only in the preferred route of capital flight, leaving other possible routes open. According to him, there has also been a transformation in the motivations for the capital flight, varying from the investment transaction costs in China to the migration of the upper class and the effects of corruption and rising income inequality.

After this brief presentation of how different authors discuss the issue of capital flights, next section presents an analysis of the international reserves and the other external flows and stocks in China in the recent period.

3. 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[7]. The large decline in China's international reserves deserves attention because it constitutes a reversal in the strong upward trend that was going on since the 1990s. Figure 1 reveals that after ten years in which the international reserves were increasing, reaching the impressive amount of almost US$ 4 trillion in 2014, it faced a quick decline and two years later this amount had been reduced in almost US$ 1 trillion.

Figure 1: China: International Reserve Assets
US$ trillions (End of the year)



Source: State Administrator of Foreign Exchange. Authors' elaboration.

[7] One example is Bloomberg (2016).

Although the current level is still very high (around US$ 3 trillion), this massive reduction of the international reserves requires researches trying to understand it – and notably trying to realize if it constituted a capital flight or not. To start the analysis, it is important to have in mind that the foreign exchange market in China is kept under a tight control by the monetary authorities. In this sense, it is quite useful to read the Reports by the China's State Administration of Foreign Exchange (SAFE). According to SAFE (2015) in its "China's Balance of Payments Report", China's balance of payments (BOP) was projected to maintain a two-way fluctuation in the capital and financial account and a surplus in the current account. SAFE is therefore making some adaptations to what they name "the new normal" of BOP. In this sense, they declare they would actively promote foreign exchange market development and trade and investment facilitation, construct an external debt and capital flow management system in the context of macro prudential management, promote key reforms for capital account convertibility, and improve foreign reserve management with the aim of guarding the economy against shocks from cross-border capital flows.

It is therefore clear that SAFE was worried about improving the foreign reserve management. Even if it is not very explicit in how it would be done, one hypothesis this article raises is that this Chinese institution has deliberately chosen to diversify the country's external assets[8], that is, it has decided to reduce the level of international reserves. We can see this clue in two passages of the rapport. In the first one:

> Meanwhile, as the world's largest consumption market and with the implementation of the reforms and the opening-up of the domestic financial markets, China will continue to invite foreign capital flows, especially long-term foreign capital inflows. Finally, **with adequate foreign exchange reserves**, China is sufficiently strong to withstand external shocks. Meanwhile, as the Chinese economy becomes more open, cross-border capital can flow more conveniently and through more channels, which will require close monitoring of arbitrage cross-border capital flows in certain fields (SAFE, 2015, p. 71/72; our griffins).

[8] "Changing external assets reflected the strategy of encouraging foreign exchange held by the private sector. By the end of 2014, outstanding international reserve assets totaled USD 3899.3 billion, which was still the largest component of the external assets and accounted for 61 percent of the total external assets, 4 percentage points lower than the ratio in 2013 and a historical low since 2004. The private sector accelerated its going-out investment. It preferred traditional investment due to its preference for low risks. Outward direct investments and other investments, such as loans and deposits, amounted to USD 2246.9 billion, accounting for 35 percent of total external assets, which represented a historical high. Outward portfolio investment assets totaled USD 262.5 billion, accounting for 4 percent of total external assets, 0.2 percentage point lower than the ratio in 2013" (SAFE, 2015, p. P49/50).

As the passage declares, the Chinese authorities highlight the opening-up process of the domestic financial markets, arguing that this would allow the country to continue attracting long-term capital inflows. In this context, the aim is to maintain an adequate level of reserves, even without explaining what it means. In the other passage, perhaps these aims are more evident:

> (…) Third, transforming administration, accelerating the construction of macro-prudential-related external debts and capital flow management, and **improving policy reserves** and response plans; Fourth, firmly cracking down on illegal foreign exchange operations and criminal activities, and placing high pressure on abnormal cross-border capital flows; and fifth, adhering to the target of serving the overall situation, **promoting the innovative use of foreign exchange reserve assets**, and **improving foreign exchange reserve management** (SAFE, 2015, p. 75/76; our griffins).

Again, it is not possible to say that the SAFE was going to reduce the reserve asset, however we can deduce that this might be implicit in its 'innovative use of foreign exchange reserve assets'. To understand this change in strategy, it is important to identify possible reasons why the Chinese authorities might have wanted to seek diversification of their external assets. Among other reasons, we can list: *i*) the realization of some specific investment projects; *ii*) the increase in the profitability of the country's foreign asset, given the low profitability of international reserves; *iii*) the net investment income recorded a structural deficit – this is intrinsically related to item *ii*; *iv*) the attempt to internationalize the renminbi, an aspect that will be further elaborated in the next section.

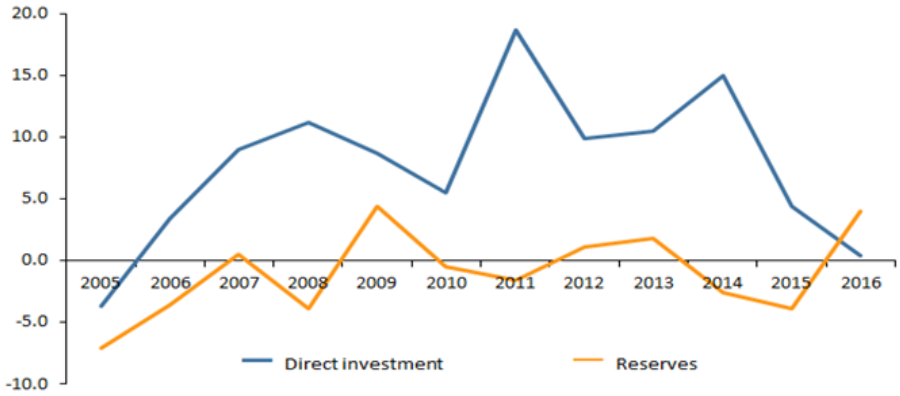
Concerning the realization of some specific investment projects (item *i*) in the aim of diversifying the external assets, Myers, Gallagher and Yuan (2016) relates the investments of the "One Belt, One Road" initiative, which intends to enable an extensive infrastructure development throughout Eurasia; for this purpose, the authors show that in 2015 China used its foreign exchange reserves in a domestic sovereign wealth fund and a policy bank. This can explain part of the decrease in Chinese reserve assets, especially because the authors pointed out that in the same year these funds intended to support regional infrastructure development in Latin American countries, increasing commerce and a stimulus for Chinese companies to invest abroad.

Coming now to item *ii*, regarding the will of increasing the profitability of the country's foreign assets, Hauang & Tang (2017) points that foreign reserves are

expected to have a lower rate of return than private investment[9]. In Figure 2 they show that China´s foreign reserves had a smaller return then Direct Investments, and that in the past decade the returns on reserves were even negative in some years. Figure 2 demonstrates that most of the period had nominal returns on reserves that were near to 0,0 %, whilst the direct investment incomes reached at least 5,0% per year in most of the years, which means a good reason for the diversification on China´s external assets and the decrease in the reserves amount.

Figure 2: Nominal returns on direct investment and foreign reserves in China, 2005-16

Percent (%), per year



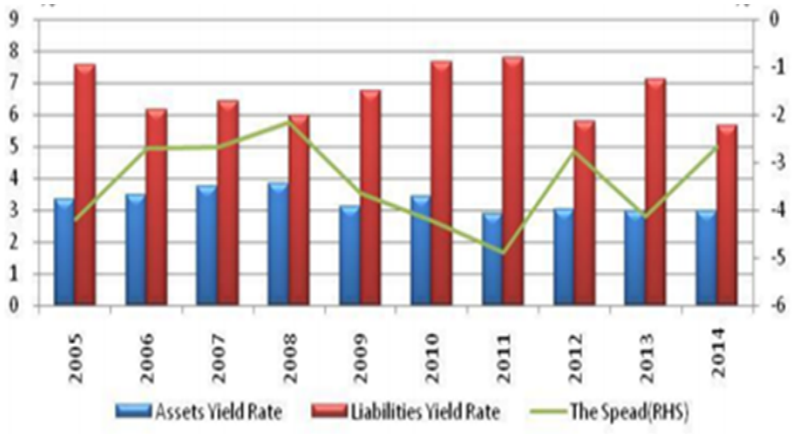
Source: Hauang & Tang (2017, p. 1)

Item *iii* concerns the net investments income that recorded a structural deficit. According to FACE (2015), in 2014 external liabilities income payments totalled US$ 242.9 billion and external assets income receipts totalled US$ 183.1 billion; the net investment income of the BOP recorded therefore a deficit of US$ 59.9 billion. These happened despite the fact that China has a net positive international investment position – external assets are larger than external liabilities. As Figure 3 demonstrates, these results occurred because the Assets Yield rates are persistently lower than the Liabilities Yield rates. One explanation for this negative net investment income is that the major component of the external liabilities was consisted by the Foreign Direct Investments (FDI), with a relatively high yield. Nevertheless, FDI was important to China because it "attracted capital as well as advanced technologies and management, created domestic employment and taxes, and developed international market. The

[9] International reserves are important to creat a "caution bulk" against sudden stops, so they are

social effects and economic income were far more than the fiscal costs (FACE, 2015, p. 52/53)". If FDI has an important role, it means that if China wants to have better results in the investment income it would have to increase the diversification in its assets to ensure higher yields, representing a possible reason for the great decrease in the reserves in the last years followed by an increase in other types of assets.

Figure 3 :Yield of China's external financial assets and liabilities, 2005-14
Percent (%), per year



Source: SAFE (2015, p. 53)
Obs: left axe = assets and liabilities yield rates; right axe = spread
Notes: i) Assets (liabilities) yield rate = investment income (payments)/{[assets (liabilities) position by the end of this year + the assets (liabilities) position by the end of the last year)]/2}; ii) Spread = assets yield rate - liabilities yield rate.

At this point, it is probably already clear that in this research the focus should not be on the mere analysis of these reserves. The methodology of the paper includes a broader analysis of the Chinese external stocks and flows, comparing their evolution between December/2014 and December/2016.

Some results are shown in Table 1. First of all, the external stocks in China´s International Investment Position indicate that the country's international reserves have been reduced in US$ 801 billion (3098 – 3899 = - 801) from December 2014 to December 2016. However, other Chinese external assets had a different trend: Outward Direct Investments (ODI) increased US$ 435 billion, Portfolio Investments increased US$ 103 billion and Other Investments abroad increased US$ 287 billion. This results means that this fall in reserves was more than offset, since these other external assets increased US$ 824 billion (435 + 103 + 287 = 824) in the same period. This allows us to think of the occurrence of a mere change in the composition of

normally composed by liquid and low risk assets (e.g. US Treasure Bonds), having hence low returns.

Chinese foreign assets. As a matter of fact, the total external assets are quite similar in the beginning and in the end of the time series (around US$ 6.4 trillion).

Table 1: China's International Investment Position (quarterly), 2014-16

US$ Billion (End of period)

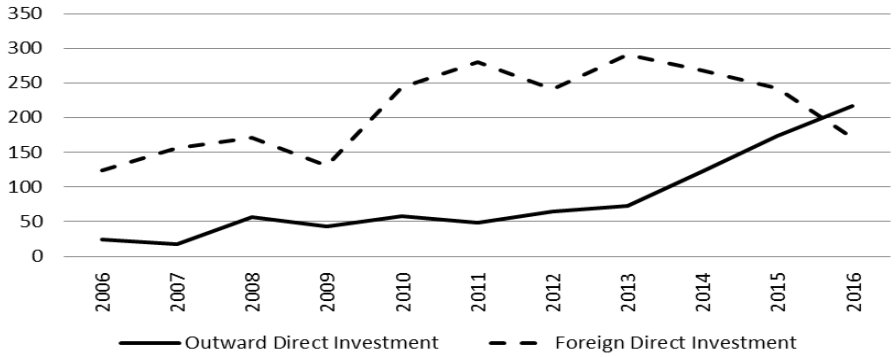
Item	dec/14	mar/15	jun/15	set/15	dec/15	mar/16	jun/16	set/16	dec/16
International Investment Position	**1603**	**1469**	**1397**	**1538**	**1673**	**1715**	**1818**	**1874**	**1801**
Assets	**6438**	**6290**	**6351**	**6197**	**6156**	**6196**	**6283**	**6464**	**6467**
Direct investment	883	904	919	965	1096	1161	1221	1280	1317
Portfolio investment	263	249	276	257	261	297	307	341	365
Other investment	1394	1334	1381	1378	1389	1427	1446	1575	1681
Reserve assets	3899	3785	3771	3590	3406	3305	3303	3264	3098
Liabilities	**4836**	**4821**	**4954**	**4659**	**4483**	**4481**	**4465**	**4589**	**4666**
Direct investment	2599	2676	2742	2770	2696	2752	2775	2806	2866
Portfolio investment	796	888	969	788	817	790	734	795	809
Other investment	1440	1242	1232	1090	964	930	944	983	985

Source: State Administrator of Foreign Exchange. Authors' elaboration.
Note: Financial Derivatives were excluded, because the values were not significant.

Looking to the external liabilities in Table 1, Foreign Direct Investment (FDI) rose US$ 267 billion (2866 – 2599 = 267) in the period, which suggests that China made more Outward Direct Investment than it received as Foreign Direct Investment[10]. Figure 4 displays the external flows, showing that after a long period with a preponderance of Foreign Direct Investments, in 2016 for the first time FDI was surpassed by the Outward Direct Investment. It is early to say that this is a new trend, but until 2014 it was normal that the annual flows of FDI were at least US$ 100 billion higher than the ODI flows and in the last two years this situation changed, contributing to the transformation in China´s International Investment Position.

Figure 4 China's Balance of Payments, Direct Investments, 2006-16

US$ billions



Source: State Administrator of Foreign Exchange. Authors' elaboration.

[10] With the only caveat that changes in external assets and liabilities are caused not only by flows but also by price variations.

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 Chinese economy.

Still looking to the external liabilities in Table 1, the stock of Other Investments decreased US$ 455 billion (985 – 1440 = - 455), possibly indicating that China is paying its debts and financings. At the same time, the country increased its external assets in Other Investments. To understand this movement it is useful to analyse China´s Balance of Payments. Table 2 shows that the net result of Other Investments (outward and inward) had expressive negative values in the period 2014-16 (one could include 2012 in this list) due to the net assets increase in 2014 and 2016, as well as the decrease in liabilities in 2015.

Table 2: China's Balance of Payments, Other Investment and Reserves, 2007-16
US$ billion

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Other investment	**-64**	**-113**	**80**	**72**	**9**	**-260**	**72**	**-279**	**-434**	**-304**
Assets	**-155**	**-98**	**18**	**-116**	**-184**	**-232**	**-142**	**-329**	**-82**	**-334**
Other equity	0	0	0	0	0	0	0	0	0	0
Currency and deposits	-6	-24	2	-58	-116	-105	-7	-186	-55	-43
Loans	-21	-19	3	-21	-45	-65	-32	-74	-47	-115
Insurance, pension, and standardized guarantee schemes	0	0	0	0	0	0	0	0	-3	0
Trade credit and advances	-24	6	-34	-62	-71	-62	-60	-69	-46	-101
Other accounts receivable	-104	-61	48	24	48	0	-42	-1	69	-74
Liabilities	**90**	**-15**	**62**	**189**	**192**	**-28**	**214**	**50**	**-352**	**30**
Other equity	0	0	0	0	0	0	0	0	0	0
Currency and deposits	41	3	12	60	48	-59	76	81	-123	10
Loans	17	4	7	79	105	-17	93	-34	-167	-20
Insurance, pension, and standardized guarantee schemes	0	0	0	0	0	0	0	0	2	-1
Trade credit and advances	29	-19	32	50	38	42	45	-2	-62	16
Other accounts payable	3	-2	1	0	1	5	0	5	-2	24
Special drawing rights	0	0	11	0	0	0	0	0	0	0
Reserve assets	**-461**	**-480**	**-400**	**-472**	**-388**	**-97**	**-431**	**-118**	**343**	**444**

Source: State Administrator of Foreign Exchange. Authors' elaboration.
Notes: a positive value for assets represents a net decrease while a negative value represents a net increase. A positive value for liabilities represents a net increase while a negative value represents a net decrease.

When the flows of the BOP in Other Investments are disaggregated (Table 2), we may notice that in the side of the liabilities, after a considerable inflow of funds in the form of "Loans" and "Currency and Deposits" during the period 2007/13 (mainly in 2010, 2011 and 2013), in 2015 there was an expressive outflow of funds in Other Investment (more than US$ 300 billion) – which meant the reduction of external liabilities in this item. The outflow of US$ 123 billions in this year may indeed be considered as a sign of a possible capital flight. On the assets side, there is an outflow of funds mainly from 2010 in the form of "Loans", "Currency and Deposits" and

"Trade credit and advances" (mainly on the years 2012, 2014 and 2016), which meant the increase of the external asset in this item.

In short, we may notice that the country is not only liquidating loans and financing against its economy (decreasing the liabilities), but it is also doing the same operations externally, but as a lender (increasing its assets). This may indicate a new financial integration strategy of the Chinese economy. One example is in Myers, Gallagher and Yuan (2016), that points that a broader range of lenders is issuing finance as China's financial sector develops, and that the country's commercial banks are progressively more active in Latin America and other regions, frequently in collaboration with international counterparts.

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

> **The major ways to distribute foreign exchange are to encourage holding of foreign exchange by the people and repayment of the debt**. Against the background that RMB exchange rate was moving in the direction of an equilibrium and remarkably fluctuating both upward and downward, domestic enterprises and individuals adjusted and optimized their balance sheets. In 2014, newly increased foreign exchange deposits amounted to USD 108.4 billion, and newly increased foreign exchange loans amounted to USD 20.4 billion. The difference between foreign exchange deposits and loans was utilized by banks in foreign markets, which became the major source of remarkably **increased external lending and deposits under other investment assets**. **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 percent year on year, reflecting that **domestic enterprises had accelerated their repayment of the USD debt** (FACE, 2015, p. 21-21; our griffins).

In this sense, according to FACE (2015, p. 42) China's BOP status is importantly influenced by the Other Investments, that had a large effect on gross flows; for example, in 2014 the other investment outflows accounted for 88% of the capital and financial account outflows; and their inflows accounted for 77% of the capital and financial account inflows. They are quite expressive values, but which are often not perceived when one observes only the net value of the capital and financial account. Moreover, it is important to notice, according to FACE (2015), that due to domestically and internationally uncertainties – that engender rising volatility and procyclicality –, China´s Other Investments have frequently alternated between surpluses and deficits.

Nevertheless, as Table 2 shows, between 2014 and 2016 the country issued expressive values of outflows within the account Other Investments. In a 2015 document FACE considered that the rising outward flows in that moment was a reflect 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" (FACE, 2015, p. 43); and 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" (FACE, 2015, p. 44). Probably that trend persisted until 2016.

Finally, there is one more detail that it is worth mentioning. When looking at the Table 2, we can see that during the 2007/16 period approximately US$ 598 billion exit China in the item "Currency and deposits", which means the constitution of a huge Chinese foreign asset in this item. However, the available data do not specify the currency of these flows (if they were totally in US dollars or also in RMB), an information that would be quite significant for the analysis of the possible internationalization of the Chinese currency that is done in the next section.

4. The International Monetary System hierarchy and the usage of the Chinese RMB

The International Monetary System (IMS) has been always asymmetric. As a matter of fact, most of the national currencies of the world are not able to fulfil money classical functions for the international economic transactions – that is, they are not money anymore beyond the national boarders of the countries where they are issued. On the other hand, there are some few national currencies that are used for the international economic operations[11]. The most used currency is the US dollar; the second one is the euro; after them, we may still find a considerable usage of the sterling pound, the Japanese yen, the Swiss franc and in a lesser extent the Canadian dollar and the Australian dollar[12]. Not by chance, only currencies issued by central countries[13].

[11] De Conti (2011) names the currencies that are used internationally as central currencies and those that are not able to fulfil the classical functions of Money for the international transactions as peripheral currencies.
[12] For a detailed analysis of the international usage of currencies, see De Conti & Prates (2016).
[13] For a discussion of the determinants of the international usage of a currency, see Cohen (1998) and De Conti & Prates (2016).

As we have pointed in the Introduction, the Chinese economy is already the second biggest in the world, but the international usage of its currency is far below the importance of its economy. For instance, the Chinese GDP represents around 15% of the world GDP, but the share of the Chinese RMB in the total transactions of the foreign exchange markets worldwide is only 4%. The reasons explaining this divergence is beyond the scope of this paper, but we may state at least two important ones: i) the IMS has an inertia, because the usage of currencies is also based in some conventions and networks that are not easily modified; ii) the strict control of the financial account and the foreign exchange markets in China, related to a previous policy that for many years had not stimulated the international usage of the Chinese RMB.

Nevertheless, even if it is still not high, the international usage of the Chinese currency is clearly rising. Table 3 reveals that the share of the operations in the world forex markets that have the RMB in one of the sides of the operation is only 4%, as indicated above, but since 2007 it is roughly doubling every three years.

For its own international operations, China already succeeds in using its currency in a much higher proportion. According to PBOC (2016), 28.7%[14] of the total payments involving China Mainland and overseas parties were settled in RMB in 2015. For the international trade, 18.6% of China's exports and imports were settled in its own currency in 2016 (IMI-RUC, 2017).

It is therefore clear that in spite of its still low position in the IMS hierarchy, the Chinese RMB is unquestionably increasing its role in the international economic operations. This may be seem as a consequence of the raising importance of China for the global economy, but not only. According to De Conti & Prates (2016), besides the economic and the geopolitical power, one of the important determinants of the international usage of the currencies is the *political will*, that is, the effort of the National State to stimulate – or even force – the usage of its currency. History shows that England and the United States have frequently created strategies to foster or even impose the international usage of their currencies. And the novelty is that after a long period in which the Chinese government was not acting in this behalf, in the recent period it has explicitly declared its intention and implemented strategies for the internationalization of the Chinese RMB.

[14] 5.1 percentage points higher than the previous year.

Table 3: Currency distribution on global foreign exchange market turnover
Net-net basis, percentage shares of average daily turnover in April of each year

Currency	2001	2004	2007	2010	2013	2016
US dollar	89.9	88	85.6	84.9	87	87.6
Euro	37.9	37.4	37	39.1	33.4	31.3
Yen	23.5	20.8	17.2	19	23	21.6
Sterling pound	13	16.5	14.9	12.9	11.8	12.8
Australian dollar	4.3	6	6.6	7.6	8.6	6.9
Canadian dollar	4.5	4.2	4.3	5.3	4.6	5.1
Swiss franc	6	6	6.8	6.3	5.2	4.8
Chinese yuan	0	0.1	0.5	0.9	2.2	4
Mexican peso	0.8	1.1	1.3	1.3	2.5	2.2
Swedish krona	2.5	2.2	2.7	2.2	1.8	2.2
NZ dollar	0.6	1.1	1.9	1.6	2	2.1
Singapore dollar	1.1	0.9	1.2	1.4	1.4	1.8
HK dollar	2.2	1.8	2.7	2.4	1.4	1.7
Norwegian krone	1.5	1.4	2.1	1.3	1.4	1.7
Korean won	0.8	1.1	1.2	1.5	1.2	1.6
Turkish lira	0	0.1	0.2	0.7	1.3	1.4
Russian rouble	0.3	0.6	0.7	0.9	1.6	1.1
Indian rupee	0.2	0.3	0.7	1	1	1.1
South African rand	0.9	0.7	0.9	0.7	1.1	1
Brazilian real	0.5	0.3	0.4	0.7	1.1	1
Danish krone	1.2	0.9	0.8	0.6	0.8	0.8
Polish zloty	0.5	0.4	0.8	0.8	0.7	0.7
New Taiwan dollar	0.3	0.4	0.4	0.5	0.5	0.6
Malaysian ringgit	0.1	0.1	0.1	0.3	0.4	0.4
Thai baht	0.2	0.2	0.2	0.2	0.3	0.4
Hungarian forint	0	0.2	0.3	0.4	0.4	0.3
Czech koruna	0.2	0.2	0.2	0.2	0.4	0.3
Chilean peso	0.2	0.1	0.1	0.2	0.3	0.2
other currencies	6.9	6.9	8.2	5.4	2.5	3.3
Total	**200**	**200**	**200**	**200**	**200**	200

Source: De Conti & Prates (2016)
Note: the sum is 200% because each operation at the forex market involves two currencies.

It is evident that this political will cannot have concrete results if the international community does not see this currency as reliable – reliability that is obviously related to the importance of the economy that backs this currency. Nevertheless, there are already some important signs showing this reliability regarding the Chinese RMB. The most important one came from the International Monetary Fund (IMF) that included the RMB in the basket of currencies that compose

the Special Drawing Rights (SDR)[15]. According to the People's Bank of China, this is "a milestone in the process of RMB internationalization" (PBOC, 2016, p. 41)[16]. At that time, China's leaders pointed out they wanted the RMB to be convertible by 2020.

After all, money is power. And having an international currency is obviously part of the Chinese strategy to increase its importance and influence in the world economy. A document by Bloomberg (2017b, p. 1) stated that "the yuan's advance into global markets demonstrates President Xi Jinping's ambition to challenge the hegemony of the dollar and a global economic order dominated by the US and Europe". Actually, the possibility of the Chinese RMB to become a real rival to the US dollar as the key-currency of the IMS is still not foreseeable. But still, even if it is not going to be the top currency in the near future, it is undeniable that it is becoming an international currency.

In this sense, Bloomberg (2016a) expected that the reforms pace would be accelerated and a more broadly used currency would increase China's influence in the world economy and offer companies and individuals on the mainland more options to diversify their savings; in the other hand, China could become more vulnerable to fluctuations in the international capital flows.

Coming back to the main topic of this paper, it is important to analyse if the supposed capital flight in China may not have some relation to this strategy of internationalization of the Chinese RMB.

This hypothesis arises from the doubts about the currency of the Chinese economy outflows. Aware of the gradual but unambiguous strategy of the Chinese government to internationalize its currency, it is possible to imagine that a growing part of the increase in Chinese loans, financings and even overseas deposits are being made in RMB and are part of the abovementioned strategy.

The People's Bank of China provides quite interesting data regarding this issue. In 2016, the international trade settled in RMB had 3.79 trillion yuans[17] as receipts and 6.06 trillion yuans as payments. That is, the cross-boarder RMB flows

[15] "The weight of the RMB in the SDR basket is 10.92%, whereas the weights of the U.S. 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).

[16] Another symbolic event has happened in May 2017, when the European Central Bank has purchased Chinese RMB to compose its international reserves – the amount was really low, but it shows the Chinese RMB being already seem as a potential store of value at the international level.

[17] The unity of account of the Chinese renminbi is the yuan.

related to trade resulted in a deficit of 2.27 trillion yuans. And this is not by chance, but is rather part of the strategy for the internationalization of the RMB. As stated by IMI-RUC (2017, p. 16), "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". Chinese government knows that one of the functions of the key-currency is providing liquidity to the world: "while consolidating trade settlement, we constantly strengthen the financial transaction function of RMB to provide safe assets and inject liquidity into the international community" (*op. cit.*, p. 7).

For the researches regarding capital flights however, it is important to go deep into the analysis of the financial flows. Starting with the Direct Investments, Chinese institutions have been also explicit that it may be used as a channel for the internationalization of the RMB:

> Direct investment can expand the use of RMB in many ways and play an efficient leveraging role. It can become an important facilitator of RMB internationalization. In the new situation where the multinational corporations dominate international trade, expanding direct investment can consolidate China's trade position and provide markets and impetuses for domestically funded financial institutions to go global and develop offshore RMB business (IMI-RUC, 2017, p. 5).

When we go into the data, we indeed see that the outstanding growth of the Chinese direct investments abroad is followed by an equally impressive growth in the usage of RMB for these investments. According to the statistics provided by the Ministry of Commerce, Chinese direct investments abroad settled in RMB totalized 1.06 trillion yuans in 2016 (nearly US$ 150 billion). Since the Foreign Direct Investments inward in RMB in 2016 reached 1.4 trillion RMB, the result in this specific account – and considering only the Direct Investments settled in RMB – was a surplus[18], but the growing trend of the outward flows allows to foresee that in the near future this will be another source of liquidity in RMB for the rest of the world.

Besides Direct Investments, Chinese analysts are aware that the credit market is also one of the most important pillars to strengthen the financial transaction function of RMB. According to IMI-RUC (2017, p. 21), the balance of RMB overseas loans for domestic financial institutions reached in 2016 437.3 billion yuans (nearly US$ 62 billion). Is still a modest level, but is also raising (a 38.7% growth compared

[18] This surplus in RMB Direct Investments means non-resident investors have already access to RMB offshore, maybe due to the deficit of the trade account in RMB.

to 2015). The strategy is pushing international credit in RMB taking advantage of the importance of Chinese trade:

> The dependence of the global economy on China's trade has increased, the problem of currency mismatch in developing countries has made the development of international RMB credit market an inevitable trend, and the appreciation of the US dollar provides a window of opportunity. History shows that the main international currency promotes the development of international credit market through the international financial center and trade. (IMI-RUC, 2017, p. 6)

In line with the analysis of section 3, it is therefore clear that from the point of view of the Chinese assets abroad, nothing allows us to identify a capital flight, but rather movements that are related to the Chinese strategy of exporting capital and internationalizing its currency. Nevertheless, when we move the focus to the liabilities non-residents hold in China, it is undeniable that some problems took place in 2015 and 2016.

Table 4 reveals that the deposits held by non-residents in China declined from 2.32 trillion yuans in December 2014 to 0.92 trillion yuan two years later. Considering all financial assets held by non-residents, there has been a decline of 34% between its peak (June 2015) and the end of 2016, when it reached 3.03 trillion yuans (around US$ 430 billion). The total reduction has therefore been equivalent to 1.56 trillion yuans (nearly US$ 220 billion). According to IMI-RUC, this is due notably to: i) in August 2015 there has been a relaxation in the Chinese exchange rate policy and the RMB started devaluating against the US dollar[19]; ii) uncertainties in the world economy, notably due to speculations around the possibility of an increase in the basic interest rates in the US and later on to the beginning of Donald Trump's governments.

Table 4: Domestic RMB financial assets held by non-residents
RMB billion

	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016
Stock	344.8	642.1	598.7	649.2
Bond	399.0	671.6	751.7	852.6
Loan	531.0	819.1	851.6	616.4
Deposit	1604.9	2372.2	1538.1	915.5

Source: People's Bank of China. Authors' elaboration.

[19] Compared to what happens in peripheral countries, the devaluations were not high, but for Chinese standards it was something unusual. In August 11th, 2011, the 2% devaluation was the highest in the last 20 years in China.

This perception is compatible with the ones of section 3, that is, there has been a net outflow of capital in China in 2015-16 in the account of Other Investments (notably due to the reduction in Deposits and Loans). But then we arrive to a really crucial perception for the current researches: these outflows were mainly in RMB. According to IMI-RUC (2017, p. 13), "RMB has become the main currency that flows out of China's border". The same thing was declared by Bloomberg (2016b), quoting declarations by the staff of Goldman Sachs: "a rising amount of capital is exiting the country in yuan rather than in dollars"; and the Australia & 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".

Connecting therefore the analysis of sections 3 and 4 – i.e. changes in Chinese external stocks and the process of internationalization of the RMB –, we come to a pivotal conclusion: there is effectively a net outflow in China in the Other Investments account in 2015-16, but the peculiar thing is that these outflows are mostly in RMB and it is something totally different from what has frequently happened in many peripheral countries all over the history – that is, a capital flight in US dollars (or other central currencies) that results in a lack of this currency (with harmful consequences over their economies, as we have seen in Section 2). Moreover, these outflows in RMB may play a positive role in the process of internationalization of the Chinese currency. Even if the agent who took these RMB out of China immediately sells them to an offshore financial institution – that 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. Talking about the changes in the capital account management to restrict capital outflows, IMI-RUC (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 means hence 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 foresaw this would eventually happen and this is already the case.

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

5. Final remarks

Several articles have suggested the occurrence of a supposed capital flight in China in 2015-16. The large decline in China's international reserves effectively attracts attention because it means a reversal in the strong upward trend since the 1990s. This paper shows however that the analysis of the phenomenon may not be done in a superficial way. First of all, an inspection that looks only to the international reserves may be deceptive, requiring researches 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 impressive fall in the international reserves that occurred in China in 2015-16 was not only due to a withdraw of resources from international investor or to the interventions of the People's Bank of China at the foreign exchange market to avoid an extreme devaluation of the RMB, but also due to a strategy of the Chinese government to diversify its international assets. Actually, Chinese international reserves were reduced in US$ 801 billion in 2015-16, but other Chinese external assets - Chinese Direct Investment (CDI), Portfolio Investments and Other Investments abroad - more than offset this fall, since they increased US$ 824 billion in the same period.

However, the analysis of the liabilities of Other Investments reveals a decline of US$ 455 billion in this period. There we arrive to the second conclusion, that there has indeed occurred a capital flight in China in 2015-16 mostly due to a reduction of the 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 fund's rate. Nevertheless, these outflows were mostly in RMB and this constitutes a crucial difference in comparison to the capital flight that has recurrently took place in many

peripheral countries all over the history. First of all, because its effects over the domestic economy are much lower, since there is no lack of US dollar and no exchange rate crises. Secondly, because it may paradoxically contribute to the internationalization of the RMB.

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