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Assessing China's recent capital outflows: policy challenges and implications

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Abstract

China has experienced a dramatic swing from net capital inflows to large net outflows in recent years. Using balance of payments data, an analysis of the underlying factors that drove China's recent capital outflows since mid-2014 were (1) corporates adjusting their balance sheets to reduce foreign exchange exposure or to unwind "carry trade"; (2) Chinese corporate and households seeking to diversify assets offshore; (3) Renminbi internationalization push, which facilitated capital outflows and capital flight by encouraging outbound investment; and (4) higher US interest rates and strengthening US dollar all likely further amplified the above factors. The capital exodus to some extent reflects policy difficulties that China's authorities face in managing economic reforms. In particular, China faces tough challenges in balancing the benefit/risk trade-off from capital account opening and attempting to introduce more flexibility to the currency. To stabilize capital flows and currency expectations, clarity and transparency in communicating policy objectives are essential while the implementation of structural and institutional reforms to correct economic imbalances (such as overcapacity and debt) and improve macroeconomic fundamentals are imperative and particularly pressing.

Keywords: Capital outflows, Renminbi, Capital account, FX reserves

Introduction

China has seen a dramatic swing from net capital inflows to large net outflows in recent years, driven by the Renminbi (RMB) depreciation expectations and concerns about China's economic outlook. While capital outflows have stabilized since March 2016, there remain risks that such outflows could accelerate if concerns about RMB depreciation pressures intensify again or growth prospects worsen. This article attempts to examine the factors driving such outflows and the inherent policy difficulties that may have contributed to the capital flight. Policy implications are discussed when analyzing the policy challenges and dilemmas faced by the China's authorities.

The scale of the recent capital outflows from China illustrates that China is not immune from the vagaries and risks of capital flight even though its capital account is not yet fully open. It indicates how quickly market sentiments can shift, particularly in response to the lack of policy clarity about what is happening in the economy and the Chinese authorities' policy intentions.



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The adjustment of the RMB exchange rate in August 2015 exemplifies this phenomenon. The reform of the RMB central parity fixing mechanism on 11 August 2015, combined with China's move to weaken the yuan's daily reference rate by 1.9%, reverberated in financial markets worldwide as it was interpreted as an indication that China was attempting to engineer a weaker currency to bolster its exports, rather than implementing market-oriented currency reform. To calm markets, the People's Bank of China (PBOC) explained the move as a "one-off" adjustment to bring its central parity rate closer to market trading, stating that its daily fixings would be more "market oriented" from now on; however, the PBOC intervened heavily in both the onshore and offshore markets when the RMB further depreciated by another 3% (11–14 August 2015). To soothe financial jitters, top Chinese leaders like Premier Li Keqiang further reiterated that there was no basis for the continued depreciation of the RMB.

In early January 2016, the financial market was again shocked by the PBOC's move in setting the midpoint rate at RMB 6.5646 per USD, the lowest since March 2011. China's central bank again intervened in the market to support the currency which had triggered intensified RMB depreciation expectations, large capital outflows, and significant declines in China's foreign exchange (FX) reserves. Clearly, the inconsistency of actions and earlier public statements of no continued depreciation by China's policymakers caused markets to remain skeptical, raising doubts about government credibility and further underscoring concerns about China's commitment to market forces.

It is apparent that poor communication of policy change has undermined the credibility of the new exchange rate regime and stoked market expectations of further RMB weakness which led to capital outflow pressures. To help anchor currency expectations and as part of a wider effort by the PBOC to be more transparent as well as to smooth the transition to a more flexible exchange rate, the trade-weighted foreign exchange index² was launched on 11 December 2015, indirectly making it easier for the PBOC to guide the RMB lower against the US dollar, as it attempts to shift the heavy focus away from the bilateral (CNY/USD) rate to several "basket measures" (China clears way for further renminbi weakening 2015).

Fundamentally, clear, authoritative, and consistent communications about policy objectives and how they are being achieved are important to reduce uncertainty and misalignment of public expectations. It would help contain the risks of market turbulence and also improve the credibility of the new exchange rate regime that the authorities are attempting to implement. Being a developing economy, China has to manage the transitional risks that come associated with the opening up of its economy while at the same time, balancing the benefit/risk trade-off from capital account opening and introducing more flexibility to the currency. This is not easy given the challenging global and domestic context.

Improving the growth outlook is also important to stabilize capital outflows and currency expectations. Structural and institutional reforms, such as improved corporate governance in state-owned enterprises including banks, are imperative, and if reforms were to stall due to a slowing economy, capital flow and currency dynamics could become more difficult to manage and this may heighten financial risks and macroeconomic instability.

Main text

Recent literature review

Understanding China's capital flight is important in the context of the country's significance in the world economy and the implications that such outflows have on China's macro economy. There are plenty of theoretical and empirical studies examining the determinants of capital flight from developing countries. Among the studies that analyzed China's capital outflows, factors, such as exchange rate policy, preferential treatment for foreign capital, and domestic and foreign return differentials, have been found to influence China's capital flight (Gunter 1996, 2004; Ljungwall and Wang 2008; Wu and Leslie Tang 2000). These studies mainly focused on the period prior to the 2008–2009 Global Financial Crisis.

A new study by Cheung et al. (2016) found that while expected RMB depreciation encourages capital flight, China's capital outflows in the post-2007 behavior is influenced by quantitative easing or ultra-loose monetary policy in the USA. Other institutional factors, such as exchange rate variability, capital control policy, and trade friction, also contribute to capital outflows from China.

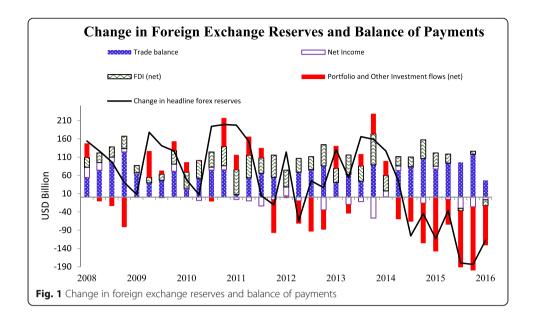
Driving forces behind China's recent capital outflows

This study analyzes the factors that drove China's capital outflows in the last few years since 2014. The "twin surpluses" of the current and capital accounts that China has experienced since the 1990s as a result of significant capital inflows came to an end in 2014, replaced by a current account surplus and a deficit in capital and financial account (Fig. 1).

Such a shift in the balance of payments (BOP) composition is driven by the changing role of China from a net capital recipient to a capital exporter due to initiatives such as "going out" and "One Belt-One Road" strategies, as well as other global and domestic market factors. These factors would include (1) corporates adjusting their balance sheets to reduce FX exposure or to unwind "carry trade"; (2) Chinese corporate and households seeking to diversify assets offshore; and (3) RMB internationalization push, which unwittingly facilitated capital outflows and capital flight by encouraging outbound investment. Lastly, higher US rates and strengthening USD more recently all likely further amplified the above factors.

Using the BOP framework, capital outflows are decomposed into four major components—(1) corporate balance sheet adjustments, including increases in corporate FX deposits and reductions in FX loans and trade credit; (2) changes in the net foreign direct investment (FDI) position; (3) portfolio investment; and (4) a residual component, including errors and omissions and other components, which can be roughly interpreted as capital flight from the household sector. Broadly speaking, the four components proxy for capital outflows from four types of entities—domestic corporates, multinational companies, institutional investors, and households.

Using this breakdown analysis, it can be seen that corporate balance sheet adjustment was one of the drivers behind the recent capital outflows, accounting for US\$655 billion of capital outflows in the seven quarters between 3Q 2014



and 1Q 2016 (refer to Table 1). This adjustment was due to a number of reasons. First, it was driven by changing market expectations of the RMB. In 2014, the RMB depreciated by 2.5% against the USD, reversing the one-side appreciation trend. Market sentiment shifted towards CNY depreciation before cooling off in 2Q 2015 after the PBOC sent a clear signal that the RMB will remain relatively stable against the dollar.th=tlb=

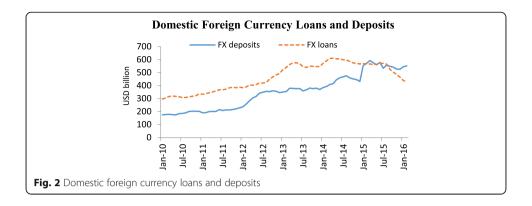
Second, the start of the PBOC's rate cut cycle in November 2014, along with changing CNY expectations, had weakened the carry trade incentive (this describes the strategy in which investors borrowed money offshore at low interest rates in order to invest in onshore RMB-denominated assets that were likely to provide a higher return—a strategy that is very common in the foreign exchange market).³ This caused corporates to reduce their exposure to exchange rate risk by changing their FX strategy, increasing FX deposits, and reducing their foreign currency liabilities. Banking statistics show that compared to the peak in April 2014, domestic foreign currency loans have declined by 30% by the end of February 2016 (Fig. 2).

The unwinding of foreign exchange liabilities slowed after 1Q 2016 (Table 1); foreign debt repayment stabilized in early 2016 before resuming growth while domestic entities increasing foreign assets replaced foreign debt repayment as a major driver of outflows in 2016. Capital flight in the household sector (residual

Table 1 China's balance of payments (quarterly), US\$ billion

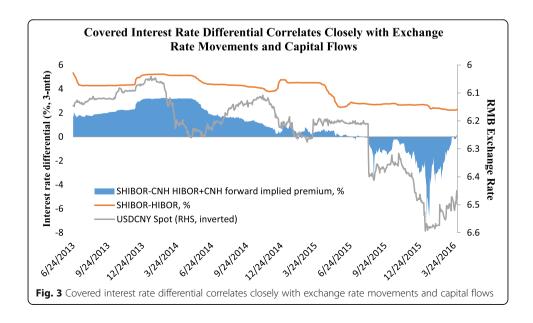
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	1Q14	2Q14	3Q14	4014	1Q15	2Q15	3Q15	4Q15	1Q16	3Q14-1Q16	2Q16	3Q16
1. Current account	17.5	86.1	83.7	90.1	85.3	88.0	65.5	91.9	39.3	543.8	64.1	69.2
1.1 Merchandise trade	43.7	104.9	139.4	147.0	116.6	135.2	157.3	157.9	103.9	957.3	125.9	137.1
1.2 Service trade	-42.1	-31.7	-57.7	-40.8	-39.3	-41.7	-61.5	-39.9	-57.6	-338.5	-55.8	-69.5
1.3 Income	16.0	12.8	2.0	-16.1	7.9	-5.6	-30.3	-26.1	6.9—	-75.1	-5.8	1.6
2. Capital and financial account	82.4	-29.7	-27.2	-50.9	-111.8	-44.6	-161.2	-165.8	-124.4	-685.9	-40.6	-127.7
2.1 FDI (net)	42.3	25.2	26.5	51.0	36.1	24.7	-6.7	8.0	-16.3	123.3	-30.4	-29
2.2 Portfolio investment (net)	22.3	14.6	23.5	22.0	-8.1	-16.0	-17.2	-25.1	-40.9	-61.8	7.7	-10.5
2.2.1 Debt securities	14.8	3.7	9.4	3.9	-1.0	-11.7	-13.9	-15.1	-32.8	-61.2	12.6	-8.0
2.2.2 Equity	7.5	10.8	14.1	18.1	-7.1	-4.3	-3.3	-10.0	-8.1	-0.6	-4.9	-2.5
2.3 Other investment (net)	17.8	-69.5	-77.2	-123.9	-139.8	-53.3	-137.3	-148.7	-67.2	-747.4	-22.8	-90.7
2.3.1 Currency and deposit	-29.8	-43.7	24.2	-28.9	-54.2	21.5	-103.3	-86.7	7.4	-220.0	10.4	-13.7
2.3.1.1 Change in resident FX deposits	-68.8	-86.3	-11.6	31.8	-120.6	12.5	29.3	25.0	-38.7	-72.3	8.6	-9.0
2.3.1.2 Bank deposits/others	38.9	42.5	35.8	8.09-	66.4	0.6	-132.6	-111.7	46.1	-147.8	9:0	-4.7
2.3.2 Loans	37.4	-17.1	-72.0	-56.4	-76.5	-53.5	-68.4	-15.8	-55.3	-397.9	-20.6	-31.8
2.3.3 Trade credit	10.8	-8.4	-29.6	-43.6	-4.5	-18.2	-54.0	-31.6	-3.3	-184.8	-7.4	-30.3
2.3.4 Others	-0.5	-0.3	0.2	5.0	-2.6	-1.0	86.2	-15.8	-15.9	56.1	-5.2	-14.9
3. Net errors and omissions	25.8	-28.3	-43.9	-61.8	-52.9	-30.6	-63.4	-41.3	-39.2	-333.1	-49.9	-74.3
Capital outflow (2 + 3)	108.2	-58.0	-71.1	-112.7	-164.7	-75.2	-224.6	-207.1	-163.6	-1,019	-90.5	-202
Corporate balance sheet adjustment (2.3.1.1 + 2.3.2 + 2.3.3)	-20.6	-111.8	-113.2	-68.2	-201.6	-59.3	-93.1	-22.4	-97.3	-655.1	-18.2	-71.1
FDI (2.1)	42.3	25.2	26.5	51.0	36.1	24.7	-6.7	8.0	-16.3	123.3	-30.4	-29
Portfolio investment (2.2)	22.3	14.6	23.5	22.0	-8.1	-16.0	-17.2	-25.1	-40.9	-61.8	12.6	-8.0
Residual (hot money and others)	64.2	14.0	-7.9	-117.5	8.9	-24.6	-107.6	-167.7	-9.1	-425.5	-54.5	-93.9
Change in FX reserves (BOP)	125.5	22.4	-0.1	-30.0	-80.2	13.1	-160.5	-115.2	-123.3	-496.2	-34.5	-136.3
Memo: change in FX reserves (SAFE)	126.8	45.1	-105.5	-44.7	-113.0	-36.2	-179.7	-183.8	-117.8	-780.7	-7.42	-38.8
Source: CEIC SAFE Falling external debt shows up as a net outflow	In as a net		tho "oth	er investment'	of loans in the "other investment" category of the BOP financial account	ne ROP financ	ial account					

Source: CEIC, SAFE. Falling external debt shows up as a net outflow of loans in the "other investment" category of the BOP financial account



component in Table 1) has picked up rapidly since 3Q 2015 to 4Q 2015, and such domestic asset outflows stabilized in 1Q 2016 before increasing in Q2–Q3 2016. While the rise in domestic asset outflows was partly due to the reduction in the onshore-offshore interest rate spreads, it was driven more by an increase in RMB depreciation expectations after August 2015. Figure 3 shows that while the onshore-offshore interest rate differential has been closely associated with capital flows, it is mainly the exchange rate expectation (included in the covered interest rate differential) rather than the difference between nominal interest rates that matters more to capital movements.

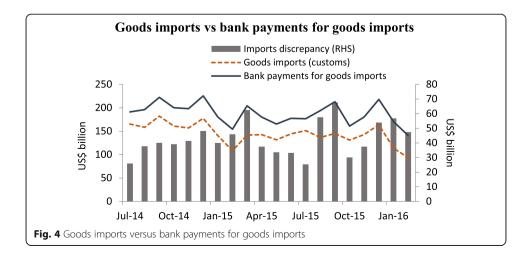
A large channel of capital outflows captured within the "residual component" is manifested in the "net errors and omission" (NEO), which by definition, is a residual term that arises when the total of the officially recorded entries in the current account and that in the capital and financial account do not match up. Theoretically, this should be zero on average, but in China's case, it has been growing more negative in recent years. In 2015, cumulative NEO totaled US\$188 billion in outflows.

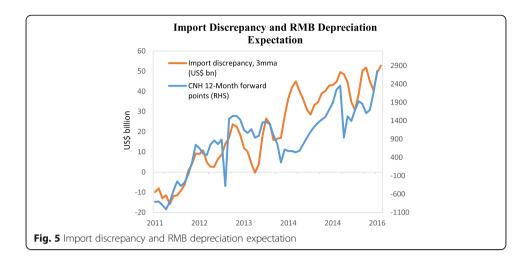


However, not all illicit outflows necessary show up as NEO, and some of this "hot money" may be hidden in current account items (i.e., some capital flows being disguised as trade transactions). In recent years, imports paid by banks (recorded by the Safe Administration of Foreign Exchange) have been significantly higher than those reported by Customs. For instance, the importers in China paid US\$2.2 trillion for goods imports in 2015, but Customs recorded only US\$1.7 trillion of such imports, resulting in a gap of over US\$500 billion (Fig. 4).

This discrepancy widens when market sentiment of RMB worsens; when the market expected the RMB to depreciate further in the next twelve months, the forward points (an indicator of the RMB's future trends) rose, and the size of the discrepancy grew (Fig. 5). Capital outflows through this over-invoicing of imports can explain over 70% of the decline in China's FX reserves between August 2015 and January 2016. During these 6 months, China's FX reserves dropped US\$420 billion, while the cumulative discrepancy between the bank-reported payments for goods imports and the customs-reported imports was around US\$300 billion.⁶

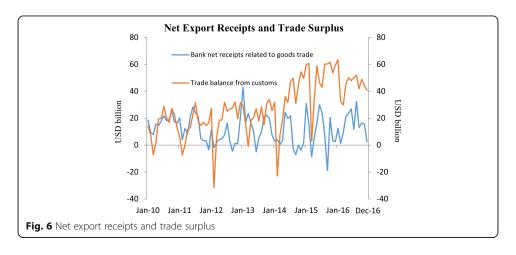
In addition, there is evidence to suggest that capital outflow pressures have been broadening across various channels through which residents transfer capital overseas, despite China's heavy capital account restrictions. Outflows facilitated by Chinese trading companies have recently been a more important factor. There is a notable dichotomy between China's strong trade surplus and the significant depreciation pressure on the RMB. This phenomenon is in part a manifestation of the fact that Chinese trading companies have not repatriated a lot of their trade surplus proceeds back to China recently (Fig. 6). Since the mid-2000s, corporates have been allowed to keep their export proceeds offshore, but that is not the only reason explaining the gap between net export receipts and the trade surplus. In light of RMB depreciation expectations, exporters have been delaying FX conversion into RMB. It is believed that a substantial part of these foreign currency receipts has been placed with overseas banks as offshore deposits. The rapid rise in net trade credit (issued by Chinese corporates to their counterparts) together with NEO likely reflects demand for FX assets by domestic residents.⁷





Capital outflows in the form of outbound mergers and acquisitions (M&A) further explained capital leaving the country. According to Dealogic, China's cross-border M&A volume totaled US\$112 billion in 2015. Foreign concerns about a weaker RMB coupled with a slower rate of return on investment (as a result of overinvestment and overcapacity) in China have also led to the repatriation of FDI profits. BOP data reported a net FDI outflow of US\$6.7 billion in 3Q 2015 (Table 1), and although net FDI turned positive in 4Q 2015, Chinese corporate overseas investment surged, turning net FDI negative (–US\$76 billion, as shown in Table 1) for the first three quarters of 2016 (latest data available at the time of rewriting). As for portfolio investment (mainly debt securities), the small size of such outflows suggests that global institutional investors play a very limited role in capital flows given that investment through this channel is heavily regulated and largely conducted through a quota-based system (such as the Renminbi Qualified Foreign Institutional Investor scheme or RQFII).

Theoretically, the surge in capital outflows would erode FX reserves if the country operates a tightly managed exchange rate system. This could potentially result in tighter domestic liquidity which would counteract the effects of accommodative monetary policy and pose a risk to growth. However, the PBOC has tools such as the pledged supplementary lending (PSL) program and reserve requirement ratio (RRR) to inject liquidity into the system. It also has other quantitative instruments like the medium-



term lending facility and short-term liquidity operations to ensure adequate base money expansion. The use of liquidity provisioning tools such as open market operations in the past one and a half year was to avoid sending too strong of an easing signal and to accommodate government's concerns about financial leverage and asset bubbles. However, by relying mostly on shorter-duration tools to fine-tune monetary conditions, bouts of onshore rates or liquidity volatility have thus become more frequent.

Policy challenges and implications

To some extent, China's capital outflows reflect policy difficulties and obstacles that China's policymakers face in managing its exchange rate and capital account opening. According to well-known Nobel Laureate Robert Mundell, it is impossible for a country to have complete control of all three closely related monetary policy instruments—a fixed exchange rate, an open capital account, and an independent monetary policy, the so-called "Impossible Trinity". China used to have complete control of all these three variables (via sterilization that enabled China to retain monetary autonomy and exchange rate control in the face of massive capital flows), but the situation changed when China gradually liberalizes its capital and financial account since the 2000s, and the RMB was included in the IMF's Special Drawing Rights (SDR) basket in October 2016.

The difficult policy choices posed by the "Impossible Trinity" suggest that somewhere, something has to give if China were to maintain control of its monetary policy and yet manage its exchange rate given its gradually open capital account and RMB internationalization. Monetary autonomy is important for China while maintaining reasonable exchange rate stability of the RMB is also highly crucial for China's domestic financial and monetary stability. Serious RMB instability will not only adversely affect China's exports, international business strategy, outgoing overseas investment, and tourism but also undermine its various international economic diplomatic initiatives under the One Belt, One Road scheme. It may be stressed that RMB stability is also crucial to many other currencies in the region on account of their extensive trade and financial linkages with China.

China therefore faces a macroeconomic conundrum in keeping the exchange rate stable (to prevent excessive volatility in capital flows) along with the gradual liberalization of the capital account since the 2000s. The authorities recognize that capital account liberalization serves as a catalyst for domestic financial reforms by deepening financial markets and increasing competition for domestic banks that would benefit private savers and borrowers. Liberalizing capital movements is also in line with China's drive towards RMB internationalization, but more currency flexibility implies greater exchange rate fluctuations and volatility that could be destabilizing to the economy, given banking fragilities and lack of regulatory supervision in the banking and financial system. Further, if the RMB exchange rate is allowed to move flexibly and sufficiently, with the consequence of letting the yuan weaken through capital outflows, the cost of servicing foreign currency-denominated external debt would increase. Sectors with heavy FX debt exposure include airlines and property developers that would suffer, and this would have a knock-on impact on corporate profits and domestic investment. A much weakened yuan would almost certainly intensify competitive devaluations in the region and trigger global protectionism, which may eventually not benefit China much.

Restricting capital flows would go against the authorities' stated objective of further capital account convertibility and RMB internationalization ambitions and even invite criticism that China is backtracking on its financial sector reforms. China's approach is to cautiously pace its capital account liberalization in a calibrated manner while managing the stability of the RMB relative to the dollar. While the official policy is still one of capital account liberalization and opening up, in some respects, the capital account liberalization has recently slowed to some extent, with capital inflows continue to be liberalized while capital outflows restricted in a bid to ease the selling pressure on the currency. Moves to ostensibly increase exchange rate flexibility in August 2015 with the adjustment of the exchange rate regime have seen limited currency flexibility—the PBOC continued to manage the currency's value relative to the dollar. As a result, China's reserves had fallen to US\$3.2 trillion by February 2016 (a loss of US\$791 billion in the 20 months since its June 2014 peak) as the PBOC tried to limit the RMB's depreciation relative to the dollar.

Given the constraints posed by the Impossible Trinity, China will have to move to greater exchange rate flexibility if it were to maintain an independent monetary policy, especially given China's gradually liberalized capital account and RMB internationalization. One benefit of a flexible exchange rate regime is that the PBOC need not have to spend its reserves to keep the exchange rate within a tight band, thus addressing the current problem of rapidly depleting reserves. However, if FX reserves rapidly deplete, this would not inspire confidence in the economy and would further exacerbate the capital outflow situation. A freely floating currency can be destabilizing due to reasons as mentioned above, and widening the trading band against which the RMB moves against the dollar and choosing an appropriate width of the band will depend on the Chinese government's tolerance level for market volatility, which tend to be on the low side.

The government's main approach is therefore to seek a suitable balance between market and control by letting the RMB float down gradually and become increasingly more market based, using the trade-weighted basket of currencies as a guide. In December 2015, China introduced its currency weighting system for RMB or the China Foreign Exchange Trading System CFETS based on 13 currencies led by the US dollar and Euro. Such is also the basket of currencies that is used to work out China's effective exchange rate. As the recent sharp rise in the US dollar had aggravated the RMB's downward pressures, the government recently broadened the CFETS by including more new currencies (e.g., the Korean Won and the Indian Rupee) into the weightings in an attempt to dilute the direct impact of the US dollar on RMB fluctuations. Still, most RMB traders have continued to use the US dollar as the main anchor.

Downward pressures on the RMB exchange rate are expected to remain in the near term due to weak growth momentum and capital outflow pressures arising from a gradually liberalized capital account. China's policy of encouraging outward direct investment and other policy initiatives like the One Belt, One Road project and "stock-connect" schemes would also add on to pressures on capital outflows and RMB depreciation. In addition, global macro conditions such as the future rate hikes by the US Fed Reserve have effectively added to the challenge in continuing the policy of holding

the RMB exchange rate stable relative to the US dollar. Political uncertainty and the government's ongoing anti-corruption campaign will further trigger capital flight and outflows.

Accordingly, capital control has become the most effective tool to stem the RMB devaluation short of direct market intervention. To stem speculative capital outflows, the government had taken measures to crack down on illegal capital flight by plugging various loopholes, notably imposing a higher reserve requirement on forward transactions, and enforce stricter FX transaction documentation requirements and tighter controls on corporates' offshore lending and outbound investment. More recently, stricter documentation requirements were also imposed on personal FX transactions though the annual \$50,000 per capita quota officially remains.

Review and Conclusion

Policy implications

As China's economy becomes increasingly integrated with the global economy, China will not be immune from the vagaries and risks of capital flight. Tightening cross-border capital flows and using macro-prudential measures are useful and necessary to curb short-term capital outflows that are speculative in nature. Capital controls provide an alternative temporary option considering the risks of volatile capital outflows and RMB depreciation pressures, but if draconian measures are introduced for too long, this may run counter to China's aim of capital account liberalization and also complicate the management of capital account opening. The introduction of capital controls like the Tobin tax could deter potential foreign direct investment in China and encourage further capital flight which drains much needed resources from the domestic market and potentially create financial instability that threaten economic growth.

In the long term, to address the issue of capital outflows including capital flight, the key challenges and tasks that the government faces are to improve the economy's growth prospects and fundamentals with structural and institutional reforms. Macro policies (for instance, investment in infrastructure, social welfare, etc., to support growth and consumption) aimed at stabilizing the growth outlook as well as reforms to restructure and correct the economic imbalances and vulnerabilities (i.e., overcapacity and debt problems) are crucial and pressing.

However, the implementation of structural reforms would not be possible until the incentive incompatibility problems are resolved through sheer political will and accompanied by improvement in policy transparency and communication to manage public expectations. From a policy perspective, China's recent capital outflows and exchange rate pressures are emblematic of the incentive incompatibility problems on a deeper level. In spite of the central leadership's strong reform motive, the economic system is plagued by incentive incompatibility issues. The overall reform process has moved slowly due to vested interests and incompatible or misalignment of objectives from various entrenched interest groups. For instance, some reforms are only meaningful when they are implemented nationally, and these include interest rate liberalization, capital account and RMB convertibility, and state-owned enterprise restructuring, so to speak. The central leadership may want to deepen reforms, but local authorities and many vested interest groups may resist deeper changes to protect and maximize their

short-term gains. These conflicting interests have created the potential for capital outflows as groups and entities seek better opportunities elsewhere to escape financial repression and economic uncertainties.

Just as importantly, the lack of policy clarity of the government's reform agenda has clearly led to market turmoil in the aftermath of August 2015 and triggered capital outflows and exchange rate pressures in the wake of the RMB exchange rate reform. Government policy and pronouncements seem to alternate between prioritizing reform and growth. Given that it is complex and politically challenging for the Chinese economy to transit from the "old growth model" to one that is more market determined or oriented, the implementation of government policies has not been easy. At the same time, the vested interests of various political groups have also resulted in the perceived lack of policy coordination. The seemingly lack of consistency at times led to external concerns about China's commitment to reform. For instance, the heavy-handed response to the equity market correction in June 2015 and the adjustment of the exchange rate regime in August 2015 reflected policy inconsistencies and difficulties (International Monetary Fund 2016). In part, this also reflects policy ambiguities among top leaders and an inherent tension in an economic strategy that simultaneously aims to allow the market to play a "decisive" role in the allocation of resources yet also affirms the "dominant" role of the state sector as the core of the economic system. The policy dilemmas posed by the Impossible Trinity underscore these policy ambiguities.

As the Chinese economy transits to a modern economy, market-based monetary and financial policies, which are needed to enhance macroeconomic stability, are important. Achieving a smooth and successful transition would hence require policy clarity and skilful economic management to navigate and steer the economy through various macroeconomic challenges.

Endnotes

¹China still has an extensive capital control regime in place, but it is selectively and cautiously dismantling these controls. Many of the restrictions on cross-border capital flows have been loosened over time but not eliminated entirely.

²Broadly, this index is compiled as a weighted average of exchange rates of home (i.e,. CNY) versus foreign currencies, with the weight for each foreign country equal to its share in trade. Hence, the "basket measures" refer to a basket of currencies. With the launch of the trade-weighted foreign exchange index, the PBOC could be averted of potential criticism of competitive devaluation if the yuan continues to decline against the US dollar but remains stable against the basket of currencies. "China clears way for further renminbi weakening", *Financial Times (FT)*, 11 December 2015.

³Mainland firms not only reduced their foreign currency borrowing in both onshore and offshore markets but also increased the pace of early redemption of their US dollar bonds issued in the offshore market. Based on corporate announcements made by listed company in Hong Kong, Mainland firms redeemed US dollar bonds worth of US\$3.4 billion before maturity in the fourth quarter of 2015, which is one of the quarters with largest early redemption in recent years. Breakdown by issuer shows that most of the early redemption is exercised by Mainland real estate developers who have actively tapped US dollar funds in the offshore bond market to benefit from low US dollar interest rates over the past few years. Hong Kong Monetary Authority 2016.

⁴Currently, the PBOC holds large FX assets (in the form of FX reserves), but the non-government sector runs a large FX liability. To improve FX asset allocation and encourage private forex holdings, the government provides channels for international portfolio diversification whereby financial institutions, corporations, and individuals could undertake hedging activities to sell the RMB and buy USD as part of their investment decisions. The central bank would no longer be the ultimate buyer/seller in the FX market while the corporates and households benefit by having greater flexibility in the structuring of their assets and liabilities (Eswar Prasad 2016).

⁵http://news.xinhuanet.com/fortune/2016-03/12/c_128794342.htm.

⁶Import discrepancy gap was later reduced to US\$260 billion between Jan–Nov 2016 when RMB depreciation expectation by the market softened, thereby creating weaker incentive for capital outflows.

⁷At the time of rewriting, 4Q 2016 BOP data is unavailable. But judging from the continued large gap between net export receipts and the trade surplus in Fig. 6, it seems probable that 4Q 2016 might have been another quarter of significant FX asset demand by Chinese residents.

Availability of data and materials

CEIC database, Bloomberg.

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Competing interests

The author declares that she has no competing interests.

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