

## RMB policy risk: a look from external debt and reserve adequacy ratio perspective

Monday, February 01, 2016

### Highlights:

- Although data consistency remains an issue when analysing China's external debt, data from both borrowers and lenders show that the deleveraging process has started for Chinese corporates.
- The on-going unwind of carry trade may pressure RMB exchange rate, but the risk is still manageable given China's relative large FX reserve.
- However, from reserve adequacy ratio perspective, the room for China to intervene may not be as ample as what headline number shows. We think China may need at least US\$2-3 trillion reserve depending on the effectiveness of capital control.
- The next few months will be critical for China as market will closely watch the change in China's FX reserves amid tightening capital controls. Should macro prudential measures fail to stop the fast depletion of reserves, there is the risk that China may have to refine its strategy to reduce its intervention.
- US\$3 trillion is likely to be the first line of defence. One of the possible options is to allow a wider trading range for RMB index. Our scenario analysis shows that the downgrade of China's RMB index from current 100ish level to 98 will imply that USDCNY will go up to about 6.7 levels.
- Nevertheless, the macro prudential measures will cap the room for CNY depreciation to overshoot.

The latest panic sale of RMB paused in both onshore and offshore market following increasing tighter macro prudential measures to curb capital outflows, however, the outlook on RMB remains murky given the pace of loss of China's FX reserve in 2015 was unprecedented. Nevertheless, the temporary stability of RMB fixing and spot rate bought some time to look beyond sentiment. It seems market has shifted its focus from the central bank's willingness to intervene to China's capability to defend its currency. A look at China's external debt position and FX reserve adequacy ratio is necessary in order to assess China's capability to defend its currency.

Let's start from the external debt first. The external debt can be assessed from two perspective including borrower's perspective and lender's perspective. The external debt data reported by China's currency regulator SAFE provides borrower's perspective while the international claim on China reported by the Bank for International Settlements (BIS) and the Hong Kong Monetary Authority (HKMA) will add more colours to China's external debt position from lender's perspective.

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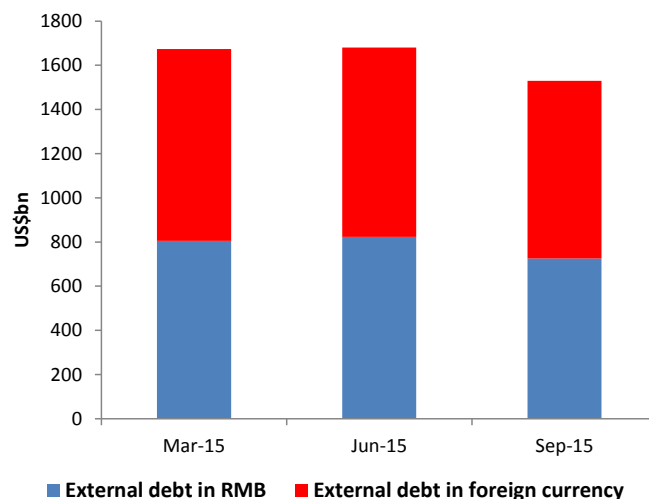
### Borrower's perspective

Since 2015, China has started to release its full-scale external debt data under the framework of IMF's Special Data Dissemination Standards (SDDS) to provide the broader coverage. As a result, China's external debt ballooned to US\$1.67 trillion in 1Q 2015 from US\$895 billion in 2014. However, the key statistical discrepancy mainly arose from the adoption of broader international standard coverage, which includes external debt in RMB. As shown on the table below, RMB denominated external debt accounted for around 48% in 2015. After adjusting for RMB denominated external data, the external debt in foreign currency actually fell from the end of 2014 level. According to SAFE, the adjustment of data coverage of external debt will not change China's liabilities to service its external debt.

**Table 1:** China's external debt in both foreign currency and RMB under IMF SDDS framework

US\$bn	External debt in foreign currency	External debt in RMB
2014	895.5	N.A
Mar15	868.5	804.7
Jun15	856.4	823.7
Sep15	804.2	725.6

**Chart 1:** External debt in both RMB and foreign currency has been falling since 2014.



Source: PBoC, OCBC

As there is no currency mismatch risk, we will exclude RMB denominated external debt for this analysis given it will not consume China's FX reserve directly. As of 3Q 2015, China's external debt in foreign currency has declined to US\$804.2 billion, down from US\$895 billion 2014, signalling the on-going unwind of resident's foreign currency liability due to rising RMB depreciation expectation and narrowing RMB-USD interest rate gap. Among US\$804.2 billion foreign currency denominated external debt, short term debt is estimated to be close to US\$600 billion assuming 70-75% of maturity of China's external debt are less than 1-year. The size of China's foreign exchange reserve relative to China's short term external debt remains high with the ratio was around 5.8 times as of 3Q 2015, much higher than international standard.

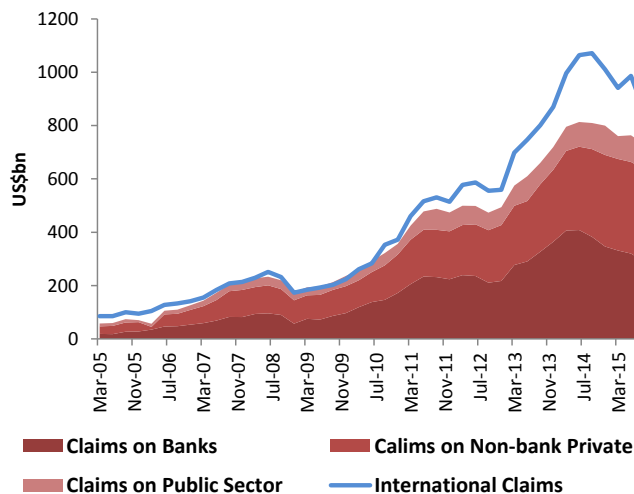
### Lender's perspective

Despite improving data transparency on external debt after China adopted IMF's SDDS methodology in 2015, questions about the data consistency issue remain for some foreign investors. As such, it may be helpful to look at China's external debt from lender's

perspective as alternative data source. The quarterly international banking statistics published by BIS captures the cross border loans that international active banks provide to residents in mainland China. Meanwhile, the monthly cross border claims reported by HKMA on both banks and non-banks customers in Mainland China is likely to complement BIS data.

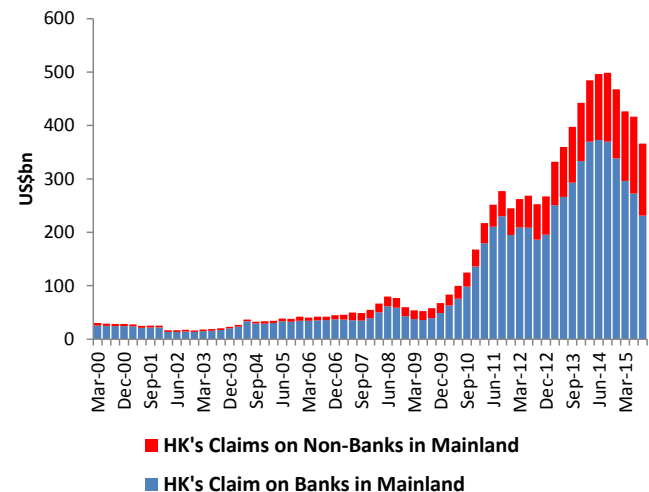
As of 3Q 2015, total international claims by foreign banks on counterparties resident in China stood at US\$856.3 billion, down from the peak of US\$1.07 trillion recorded in 3Q 2014. Data from the HKMA shows the similar deleveraging trend with total cross-border claims on both banks and non-banks customers fell to HK\$2.76 trillion (US\$357 billion) as of October 2015 from HK\$3.22 trillion (US\$416 billion) in June 2015.

**Chart 2: International banks' claims on China has fallen**



Source: BIS, HKMA, OCBC

**Chart 3: Hong Kong banks' claims on China has fallen**



As of September 2015, aggregate cross border claims reported by BIS and HKMA stood at around US\$1.2 trillion. After taking data overlap and RMB loan into account, the cross border loans provided by international banks to residents in Mainland China is likely to be no less than US\$1 trillion. However, **this number may underestimate China's external debt as BIS and HKMA data did not capture non-bank finance to residents in Mainland China.**

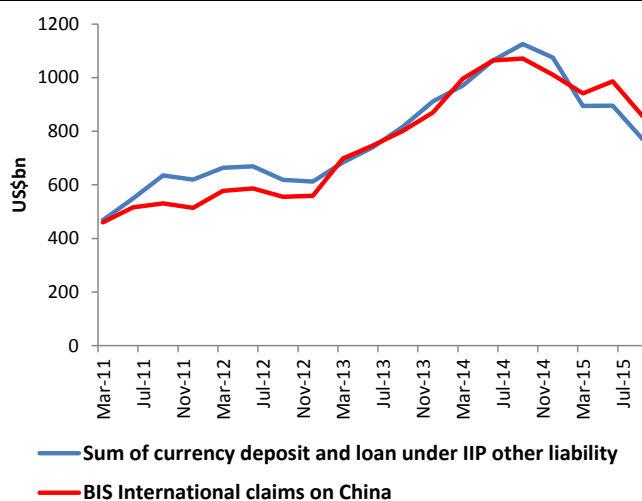
Since global financial crisis, we have seen the increasing use of offshore affiliates as financing vehicles by onshore corporates to take advantage of RMB appreciation expectation and interest rate differential from business perspective. In its quarterly review by BIS in December 2014, there are three main channels for offshore affiliate of non-financial corporation to act as financial intermediary to repatriating funds back to onshore including within company loan (such as direct lending to headquarter), between company lending (such as extending credit to unrelated company) and cross border deposit.

### Data consistency remains an issue

With the increasing capital inflows from non-banks, the external deposit and loan under International Investment Position (IIP) should exceed the international claims under BIS's international banking statistics in theory, as IIP captures cross border lending from both banks and non-banks while BIS only captures that from banks. However, in reality, this is not really the case for China as shown on chart 4 below, probably signalling the inconsistencies in data reporting.

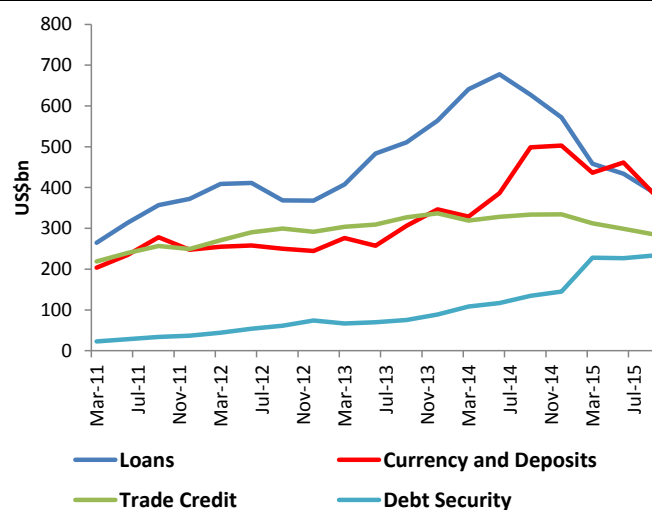
Having said that, although there is gap between external debt reported by borrower and external debt reported by lender, this is not going to change our conclusion significantly. After assessing China's external debt from both borrower and lender's perspective, we can draw two conclusions from here. First, both data are showing the similar deleveraging trend. Second, although the on-going deleverage is likely to pose further pressure on RMB, it is unlikely to be disorderly given the external debt is still well covered by China's FX reserves. As such, we believe China is still well positioned for corporate's painful deleveraging.

**Chart 4:** The difference between IIP and BIS data did not reflect the increasing non-banks financing



Source: BIS, SAFE, OCBC

**Chart 5:** Currency, deposits and loans under IIP have fallen significantly



### Pre-emptive macro prudential measures.

Based on numbers discussed above, we think the impact of unwind of China's external debt is still manageable. Most corporate debt is still trackable and controllable. What will give China's policy makers sleepless night is probably the individual purchase of dollar should the reservoir of individual confidence in leadership deplete rapidly together with the shrinkage of China's FX reserve. As such, we think it is not difficult to understand why China has tightened its grip on all avenues for capital outflows at the expense of capital account liberalization and RMB internationalization. Between reform and financial stability, clearly the latter is more important at the current juncture.

	<b>Recent macro prudential measures to curb capital outflows</b>
Nov15	PBoC suspended offshore Yuan clearing bank and participant banks' RMB account financing and cross border repo facility.
Dec15	PBoC suspended new applications for RQDII investment scheme
Dec15	PBoC suspended a few foreign banks from doing cross border RMB foreign exchange business
Jan15	China impose RRR for offshore Yuan interbank deposit with RMB agent and clearing bank
Jan15	China restricted cash pooling
Jan15	China announced to penalize residents who borrowed other's US\$50K quota to transfer to the same account in the offshore market
Jan15	Bloomberg reported that companies in some regions are only allowed to buy foreign currency maximum five days before actual payments.
Jan15	Reuters reported that China asked some funds to postpone the launch of new products under the QDII.

### Reserve adequacy ratio

Despite the huge loss of FX reserve in 2015, China still holds the world's largest FX reserve at US\$3.3 trillion at the end of 2015. Nevertheless, it does not mean China can spend all its reserve to defend its currency. China's ammunition to defend its currency may depend on the assessment of reserve adequacy ratio.

Traditionally, the appropriate level of FX reserves can be assessed by measures such as import cover, the ratio of reserves to short term external debt and the ratio of reserves to M2 etc. Nevertheless, over the past few years, the IMF has improved their assessment metrics on reserve adequacy ratio.

In the latest staff paper published by the IMF in early 2015, the staff proposed refined metrics for emerging market to comprise four components including export income, short term external debt, other liability except short term debt and broad money.

	Weights under the fixed exchange rate regime	
	Without capital control	With capital control
<b>Export:</b> potential loss from drop of external demand	10%	10%
<b>Short term debt:</b> rollover risk	30%	30%
<b>Other liability:</b> portfolio outflow	20%	20%
<b>Broad money:</b> potential resident's outflows	10%	5%
<b>Minimum reserve for China</b>	<b>US\$2.8 trillion</b>	<b>US\$1.8 trillion</b>

Based on the IMF metrics, we estimate China may need at least about US\$1.8 trillion FX reserve with capital control measure and US\$2.8 trillion without capital control for

precautionary purpose amid weak sentiment. In particular, after taking China's one belt one road initiative into account, China may need additional reserve to support its expansion overseas direct investment. Therefore, the room for China to burn its reserve may not be as ample as what the current number shows.

**What's next?**

The willingness of China's intervention may be affected should reserve continue to go down at a rapid pace. We think US\$3 trillion is likely to be the first line of defence. The next few months will be critical as market will closely monitor the change of China's reserve data to gauge the effectiveness of recent macro prudential measures. Should macro prudential measures fail to stop the fast depletion of reserve, there is the risk that China may have to refine its strategy to reduce its intervention once reserve break below US\$3 trillion to preserve its FX reserve. One of the possible options is to allow a wider trading range for RMB index from. Our scenario analysis show that the downgrade of China's RMB index from current 100ish level to 98 will imply that USDCNY will go up to about 6.7 levels.

**To conclude,** both data from borrowers and lenders show that the deleverage process has started for Chinese corporates. Although the on-going unwind of carry trade is likely to press RMB exchange rate further, the risk is still manageable given China's relative large FX reserve. However, from reserve adequacy ratio perspective, the room for China to intervene may not as ample as what headline reserve number shows. We think China may need at least US\$2-3 trillion reserve depending on the effectiveness of capital control based on the reserve adequacy metrics provided by IMF. The next few months will be critical for China. Should macro prudential measures fail to stop the fast depletion of reserve, there is the risk that China may have to refine its strategy to reduce its intervention. US\$3 trillion is likely to be the first line of defence. One of the possible options is to allow a wider trading range for RMB index from. Our scenario analysis show that the downgrade of China's RMB index from current 100ish level to 98 will imply that USDCNY will go up to about 6.7 levels. Nevertheless, the capital control will cap the room for CNY depreciation to overshoot.

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