

With Chinese growth prospects critical to market sentiment, investors are obsessing over each instance of liquidity action (or inaction) by the PBoC, and feverishly speculating on the next RRR cut. Time for a deep dive into Chinese monetary policy...

Over the next three days we will:

- Review the basic mechanics of Chinese monetary policy
- Examine the post-GFC evolution of Chinese money and credit
- Assess the current context and provide a roadmap for coming policy actions.

PART I: The Mechanics of Chinese Monetary Policy

The Chinese economy is a command system which is unique from any other you invest in.

In a market economy, we observe changes in policy parameters (i.e. the interest rate target) and posit resulting changes in economic behavior (i.e. increased bank lending).

In China the process begins with the command of an outcome (bank lending will grow by x%) and policy parameters (i.e. RRR) are modulated to hit that target. PBoC action is seldom *causal* – it simply reflects accommodation of an economic dictate that’s already been issued from on high.

China’s “high savings rate” is forced, not organic

Let’s immediately dispense with the quaint myth of frugal Chinese households squirreling away their hard-earned savings to fund Chinese credit expansion.

There is no chicken and egg problem with regards to Chinese savings and investment. The process begins with a central plan which dictates the volume of investment necessary to hit the GDP target, and the volume of bank lending required to finance it.

Bank deposits do not spring organically from the frugality of the proletariat. **Loans create deposits.** Extension of a loan (an asset on the bank’s balance sheet) entails crediting the borrowers bank account with a newly-minted deposit (a liability on the bank’s balance sheet).

BANK		BORROWER	
Assets	Liabilities	Assets	Liabilities
LOAN	DEPOSIT	DEPOSIT	LOAN

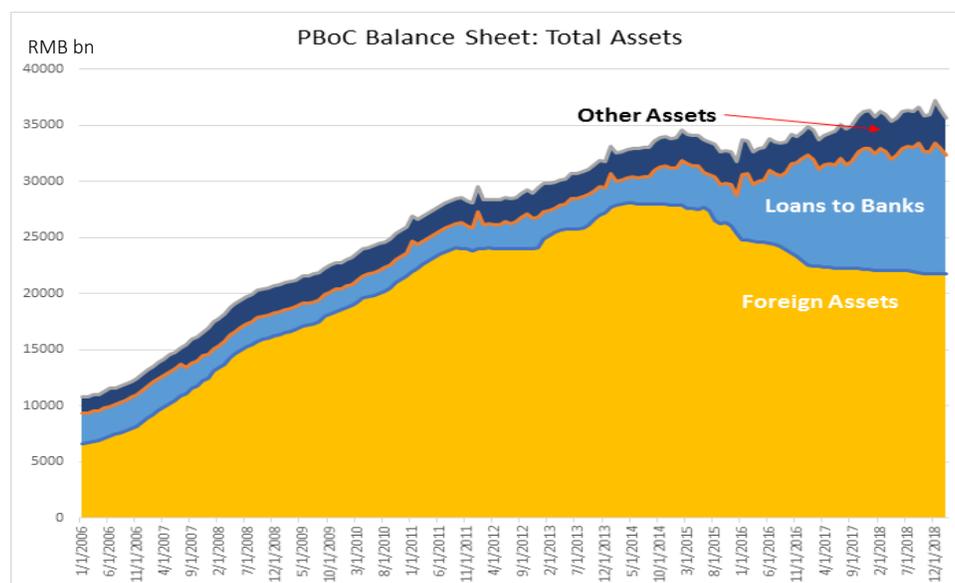
Via various means of financial repression, the preponderance of those deposits end up being held by households. Ergo, China's "high household savings rate." You didn't think Chinese households were actually excited about funding tens of trillions of Dollars in see-through buildings and bridges to nowhere did you?

Policy tools: bank reserves and the RRR

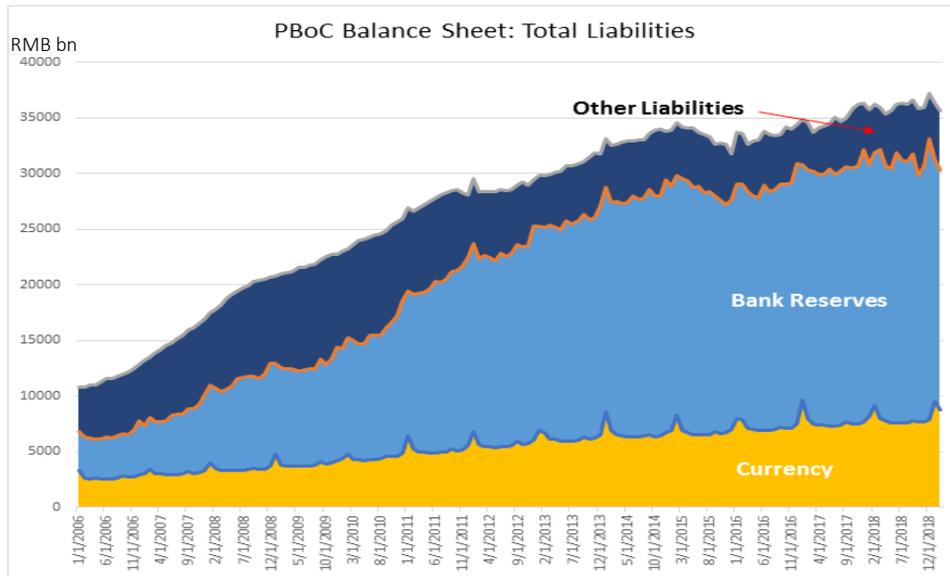
The main technical means by which the central planners dictate and control the quantum of bank lending are the issuance of bank reserves and the "money-multiplication" thereof via the Required Reserve Ratio, or RRR.

While an individual bank's level of required reserves is determined by the deposit liabilities it holds, it's imperative to keep in mind that **on a system-wide basis the level of bank reserves is central-bank determined**. As we've learned from Fed QE, activities on the asset side of the central bank's balance sheet determine the level of reserves (on the liability side).

For many years the predominant asset acquired by PBoC was foreign currency, via FX intervention. Since FX reserves began to shrink in 2014 the PBoC has been sustaining balance sheet expansion by making loans to banks via liquidity programs of various terms and maturity.



The liability side of the PBoC's balance sheet is dominated by bank reserves:



The “multiplication” of bank reserves is governed by the required reserve ratio, with the theoretical limit to reservable deposits set by the following formula:

$$(\text{Bank Reserves}) * (1/\text{RRR}) = \text{Limit of total deposits}$$

Via these two variables the PBoC controls the capacity for banks to create deposits via the extension of credit. Imagine the system consists of just one bank, with the RRR set at 10%. If the PBoC increases available reserves by 10 RMB, the bank doesn’t just “lend out” that 10 RMB. It now has capacity to make loans totaling 100 RMB, thereby creating 100 RMB in new deposits.

If bank reserves are the “stock” from which the monetary soup is made, the RRR would be akin to the amount of water added to the pot. Because the stock has not been growing much...



...PBoC needs to continually “add water” via RRR cuts to keep the pot full:



A cut in the required reserve ratio allows banks to expand the pool of deposits for a given amount of reserves *by making more loans*.

Gauging the banking system’s credit-extension capacity

Using the “money multiplier” equation above we can calculate the banking system’s capacity to extend credit for the given combination of reserves outstanding and the RRR:



“Easing monetary policy” would entail an acceleration of the red line above. Is that what’s happening presently?

We’ll continue tomorrow with a look at the post-GFC evolution of Chinese money and credit, and on Wednesday with a robust assessment of the current context and a roadmap for 2019.