Macro Notes

Macro Update: PBOC's New Roadmap for the RMB Regime



Strong Signalling Effects That Other EMs May Follow

April 7, 2017

Last week Sun Guofeng, the head of the PBOC's internal financial research institute, released a working paper that makes it pretty clear: 1) capital controls will remain in place, but are only partially effective on their own and will be upgraded to countercyclical "macro prudential management"; 2) China is after increased "international coordination of monetary policy", code for both coordinating policy with the Fed and at the same time taking measures to reduce the impact of Fed rate hike decisions on the rest of the world; 3) the flexibility of the RMB exchange rate, particularly against the dollar, is going to increase.

The PBOC's task has been to establish a theoretical model for central bank policy that provides the optimal level of macro-prudential management and crossborder capital flows under different exchange rate regimes, as well as the optimal level of international coordination of monetary policy. The end result is a New Macro-Financial Policy Framework (MFPF), which includes the MPA and other regulatory tools. The formulation defined by Sun and Li includes "macroprudential management + exchange rate flexibility + International monetary policy coordination". Translated into plainer language: "a freer float for the RMB can only be achieved and beneficial for the PBOC where it comes to containing external shocks under the condition of comprehensive capital controls and Fed-PBOC policy coordination."

We think there are four major takeaways from the PBOC making this paper available to the public:

- This paper indicates that internally the PBOC has been running scenarios for the future transition of its FX regime, which means the current regime reflects only intermediate arrangements;
- The current regime will transition towards a combination of: 1) a freer floating exchange rate (or show "greater flexibility" in the PBOC's codebook); 2) upgraded and institutionalized capital controls to replace ad hoc measures, including quantitative controls in the form of caps on banks' dollar positions and leverage, and price measures in the form of a tax

on short-term capital flows;

- Reliance on MPA reviews and Fed-PBOC policy coordination as a form of forward guidance, with capital control measures having already been included in the former, and with the latter having been strengthened since the Shanghai G20 meetings. This all implies that the conditions for PBOC to resume progress towards a freer float have been met;
- · The future transition of the RMB regime will be a function of Fed-PBOC policy coordination and the minimization of spillover effects to global capital markets and other emerging markets. This makes the current roadmap conditional on the profile of the incoming Trump Fed (which should be in place by the start of 2Q2018), and the sequencing of concrete measures will likely follow regularly scheduled gatherings of central bankers (i.e the G20) to help mitigate resulting FX market and capital flow volatility. The desire to limit disruptive effects on capital markets means that the transition for the RMB will only get underway during a period of relative market stability. Taking all of this into account, we expect more specifics from the PBOC in the form of similar working papers in the near future as to how it might measure "greater currency flexibility". Additionally, the future pace of change should be based partly on feedback from market signals.

In this note we outline the MFPF. Much of Sun's analysis is based on a reconsideration of the classic "policy trilemma", which he characterizes as a "non-equilateral" trilemma that should assign a greater importance to the need for various forms of capital controls. Along with this, Sun and the PBOC are putting their stamp on central banking by proposing a "utility function" for the PBOC (and presumably others) that incorporates the MFPF as a complement to the conventional focus on output and inflation. As noted in **The Strategic Context of the SDR Question in China** (May 2015), Beijing approaches monetary and exchange rate policy reform from a strategic perspective first, and from the more linear logic of market efficiency second.

PBOC's New Roadmap for the RMB Regime

This implies that the US\$1 trillion in FX reserves that the PBOC has spent defending transitional arrangements was not the dead weight loss that many make it out to be, and that a significant component of it was a trade-off against longer-term objectives.

Beijing sees an intermediate managed float regime as a means of managing short-term volatility and longer term currency misalignments. On a short-term basis, a managed float helps limit the transmission of external shocks to the real economy. For example, the recent effects of a strong dollar and cheap energy are absorbed by the underlying currency basket, and mitigate pass-through to the real economy. Similarly, a Singapore-style managed float allows for widening of the target bands for the basket by the central bank to provide additional flexibility when needed. Where it comes to the topic of longer-term misalignments, the managed float approach is designed to allow the target slope of the basket to be adjusted to reflect the macro fundamentals of the economy (see: An Overview of China's Singapore-Style NEER Regime, January 2016).

The Cyclical Appropriateness of Capital Flows

The key adjustment that the PBOC's research team has made is to conclude that the policy "triangle" or "trilemma" is not "equilateral". Conventional theory assigns an equal weight to each of the three policy options between which central bankers must choose, but the PBOC does not.

This view is in part a reaction to a world that the PBOC sees as characterized by ever-widening swings to global liquidity flows in a QE and/or post-QE world. Accordingly, the PBOC assigns a larger weight to the "capital account" leg of the trilemma, hence reducing the relative importance of monetary independence and the exchange rate.

In other words, in the current environment the PBOC sees exchange rate flexibility as a necessary but insufficient condition to curb capital flows, and hence inadequate to ensure monetary policy independence. In his earlier papers Sun has proposed that under extreme conditions, considerations over the exchange rate regime actually disappear from the equation, making the policy choices facing the central bank a simpler dilemma, rather than a "trilemma". Here Sun

also cites a paper published by the Kansas City Fed in 2013, which proposes that given financial globalization, and that credit cycles and capital flows obey global factors, significant capital flows may be inappropriate for the cyclical conditions many economies might face. Sun's conclusion is that in an extreme scenario, if monetary authorities chose absolute capital controls, they could simultaneously achieve a fixed exchange rate and monetary policy independence. On the other hand, if monetary authorities want to allow for some degree of the free flow of capital, they can only achieve a relatively stable exchange rate and relative monetary policy independence.

In this paper Sun acknowledges that: 1) capital controls alone cannot prevent the risk of cross-border capital flows, hence the need for "macro prudential management"; 2) capital controls should be targeted at "microeconomic behaviors" such as speculation, and themselves cannot effectively guide market expectations or confidence regarding systemic risks; 3) capital controls are expensive to maintain and will distort market behavior.

The goal of macro-prudential management, then, is to dampen the magnitude and cyclicality of capital flows and leverage, as well as the suppression of short-term speculation, and in doing so provide greater room for monetary policy independence. As identified in IMF working papers, capital controls are best used as a "last line of defense", not frontline policy. In this context, Sun's MFPF includes the monitoring of FX liquidity and cross-border capital flows as frontline policy.

The policy tools for macro prudential management of cross-border capital flows are divided into two categories: first are quantitative tools for managing commercial banks' FX positions and the management of systemic foreign debt in the banking system. The goal is to prevent excessive increases to foreign liabilities during periods of capital inflows and the hoarding of FX assets during periods of outflows; second are price-based tools, including interest free required margin deposits for onshore dollar derivaties, that can be used to control the accumulation of leverage, and required reserves for offshore CNH bank deposits to raise the funding costs for short-selling..

- Among these tools are pro-cyclical measures to prevent the accumulation of leverage in onshore FX markets. These tools were developed around August 2015 when the Bank noticed a spike to long-term FX sales well above "normal levels", and included the requirement that banks deposit a 20% reserve with the central bank against their clients' FX derivative exposure (including options and swaps, but excluding interbank FX derivatives). Imposing this cost on commercial banks was intended to raise costs and weaken incentives for speculators. The suppression of speculative demand was intended to make forward rates more "reasonable", and better reflective of real sector currency demand.
- Additionally, in 2015 the PBOC designed a model for the management of cross-border financing to accompany the launch of the Shanghai FTZ. This was implemented in January of 2016 with the trial participation of 27 financial institutions in the Shanghai, Guangzhou, Tianjin and Fujian towards a unified system of monitoring cross-border financing. This framework was expanded in April 2016 to track cross-border financing by all banks and corporates.
- Under this framework, the PBOC can set and adjust parameters according to macroeconomic fundamentals, the results of regular MPA checks, counter-cyclical adjustments to cross-border financing trends, debt servicing capacity, BOP trends, leverage risks or currency mismatches. This amounts to the

external framework for "preventing systemic financial risks".

• Finally, in response to offshore speculation, in January 2016 the PBOC applied domestic RRR requirements to offshore banks dealing in RMB in the form of required reserves for CNH deposits. This was also intended to increase the cost of speculation.

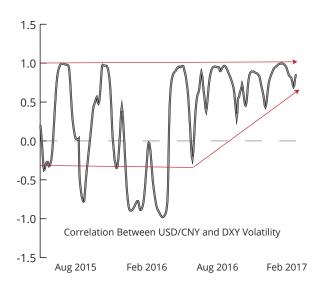
The PBOC's assessment is that following these measures financial institutions' net purchases of FX returned to "normal" levels, and the PBOC succeeded at suppressing short-term arbitrage. Such a stance, however, is ripe for unintended consequences, and creates the potential for a de facto quota on FX reserves for outbound acquisitions.

Exchange Rate Flexibility

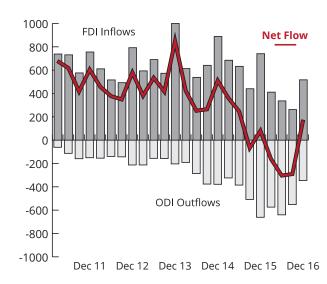
As noted above, the Sun paper proposed that although exchange rate flexibility alone is not sufficient to ensure the suppression of capital flows, nor is it sufficient to guarantee an independent monetary policy, if the degree of flexibility is inadequate it will not help to curb capital flows either.

Here Sun reiterated that: "the RMB exchange rate is based on market supply and demand, with reference to a basket of currencies to regulate and manage the floating exchange rate system. However, the market is not fully aware of the specific mode of operation of

PBOC's New FX Mandate Includes Supressing Volatility Correlation Between DXY and USD/CNY



Capital Controls and Administrative Policies Have Curbed ODI Flows US\$ billion



the system". This has resulted in the appearance of "contradictions", whereas the Bank is holding fast to its August 2015 formulation for the fixing of the daily parity rate as a function of the closing price from the previous trading session + adjustments to the currency basket. Sun (and others) tout this as greater transparency, but in reality this means that the PBOC has given itself greater flexibility in setting the daily parity rate, and in doing so, has given itself greater independence in conducting monetary policy.

Although in the months since the US election Beijing has kept the RMB relatively stable against the dollar (-0.27%), the ordering of priorities suggested in this paper puts monetary policy independence and the need to respond to domestic priorities ahead of preserving any target level for the exchange rate. The Xi-Trump meeting this week should provide some hints as to where the exchange rate fits into the first round of posturing between China and the new administration in the US. Next comes the currency report from the US Treasury in about 10-days.

The chatter in Beijing reflects the view that the US Treasury may use the term "currency misalignment" instead of "currency manipulation" when passing judgement on the RMB. It would be no surprise if the Treasury under Trump to continues to duck the currency question, but the implications of this new label would seem to be that the Trump administration will more explicitly link judgements about the currency to the level of China's current account surplus. As long as China runs a disproportionally high surplus with the US, the stance in Washington is that the currency should appreciate against the dollar. The use of the term "misalignment" implies a normative degree of potential correction, and this could be linked to a level for the currency consistent with either the trade surplus with the US relative to GDP in China, or the bilateral deficit as a proportion of the total US trade deficit. China would push back forcibly, arguing that if the savings rate in the US is low and if the government is going to willfully run large deficits, then the US will have a current account deficit, and there is little China can or should do in response.

Overall, a more explicit shift towards the use of trade balances rather than interest rate spreads as a determinant of the exchange rate would be an adjustment that could change the basic trend direction of the currency, assuming of course that the PBOC allows market forces to really work. Although there is sure to be sustained pressure from the US on China to prevent the currency from depreciating, we expect the PBOC to push back harder against the US judgements about the currency than it has in the past, and advance a more agnostic view of what the proper level of the currency should be at any point in time.

Policy Coordination

This paper should serve a signal that going forward the PBOC is going to be promoting the "positive welfare effects" of greater international monetary policy coordination. Here "policy coordination" is a loaded term, and a proxy for "monetary independence". To some extent they are interchangeable because it is too politically sensitive to come right out and say that the PBOC does not have much independence from the Fed right now. Conversely, when Sun advocates for less monetary policy coordination, it is really code for advocating for more, real policy independence from the Fed.

This seemingly bland statement can be interpreted on a number of levels: first, PBOC researchers like to quote the "Stackelberg leadership model of game theory", whereby the actions of a lead individual or institution makes decisions in its own interest, and in doing so determines the pay-off structure for others. There may or may not be any intentionality directed at others in their actions, but regardless, other actors in the system have to assess the costs of their own policy options and respond accordingly.

Additionally, as we noted in **PBOC Press Conference Positive for RMB** (March 11): 1) PBOC's FX reaction function has changed, and; 2) officials think exchange rate overshooting and capital outflows may have come to an end, or have reached the last leg. PBOC may not have a particular numeric target for the USD/CNY exchange rate, and considers minimizing the differential between USD/CNY and DXY volatility as one of its FX policy goals. This fits with new official language from Li Keqiang at the NPC regarding the contribution of the RMB to global currency stability. This may not be entirely new, however, and may be a carryover from a working consensus reached at the G20 in 2016 by Fed and PBOC officials. This also looks like an attempt by PBOC to contain RMB spillover

to other EMs, and this is positive for EM equities and currencies. Here Sun was clear: "each national monetary authority is seeking to maximize the welfare of the country, but in order to maximize the welfare of the country must also consider the economic and financial situation of other economies".

We continue to believe that PBOC's short-term exchange rate policy is a function of potential capital inflows, US-China interest rate differentials, and spillover effects from policy in China to the rest of the world. Of course, the strength of the dollar remains a big factor, but we think the weight assigned to dollar strength will fade gradually, as other factors begin to dominate the equation. Among these determinants, what is worth noting is official mention of spillover effects from China. This is important because it implies Chinese policymakers no longer consider RMB exchange rate as entirely domestic issue for China, and are putting more emphasis on China's global reputation and image. As a practical matter this means RMB volatility suppression against the dollar, and that the mandate to maintain basket stability comes from top political leaders.

Here Sun cites the PBOC's own rate increases in response to the Fed as "a certain degree of international monetary policy coordination", and this statement provides further confirmation that the PBOC will probably raise rates again in response to the next Fed rate hike. Additionally, we would expect that China would request that the Fed accommodate China in its future rate hike decisions, which would be consistent with "positive welfare effects" from greater international policy coordination. Growth in China and the impulse from growth support measures in 2016 made a solid contribution to the bounce in global activity, and the PBOC appears to be proposing that the Fed should not ignore this as it gets further along in its rate hiking cycle.