# Global Liquidity Management

# **China Insights:**

# Interpreting Interest Rate Volatility

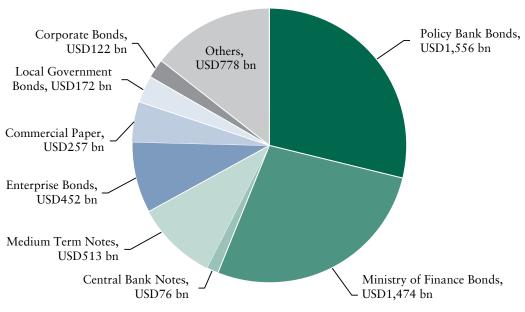
### **Executive Summary**

- China's domestic bond market is in a new phase of its rapid evolution, as the investor base is broadening and strengthening with increased interest from institutional buyers focused on the front end of the market.
- The attraction for these typically more-conservative investors is a large and liquid market, which caters to a wide range of very secure borrowers and offers more attractive yields than those available on bank deposits.
- However, a key idiosyncrasy of China's market at this stage of its development is heightened volatility at the front end of the yield curve, with considerable implications for risk and returns.
- Understanding the nature and drivers of volatility is important for navigating China's markets, in our view, and active management can help turn this challenge to investors' advantage.

#### **China's Market Evolution**

In the past couple of decades, China's bond market has grown in both size and depth to become the third largest in the world at more than USD4 trillion, according to the Bank for International Settlements, with trading volumes topping USD43 trillion in 2013. This liquidity has become a key attraction for institutional investors globally. Most corporate treasuries have already gained exposure to Chinese fixed income via money market fund (MMF) investments, and pension funds and sovereign investors are showing increased interest.

Figure 1: Size and Composition of China's Domestic Bond Market



Source: China Bond, as of July 2014

The benefits of market access via MMFs include exposure to the highest quality issuers in the government-, quasi government- and banking sectors, potentially higher yields than are available on bank deposits and, depending on the fund, management consistent with global standards for triple-A rated stable net asset value (NAV) funds. Moreover, we believe active management is necessary to help address anomalies in China's short-term markets that have significant implications for investor portfolios.

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5 Year Ministry of

Finance Bonds

### Not Your Average Market - Nature and Drivers of Volatility

For institutional investors, the most significant anomaly in China's rates markets is their volatility. The typical relationship between tenor and range is inverted, so that instead of increasing with the length of maturity, volatility is most pronounced at the front end of the yield curve. Figure 2 shows that the annual ranges of yields on shorter-dated securities are considerably wider than those for longer-dated securities. This phenomenon has been consistent over a number of years, though year-todate the range is substantially smaller than it was in 2013, when a mid-year credit crunch drew international attention. In this instance, short-term benchmark rates rose several percentage points on the convergence of several catalysts for volatility: seasonal effects, foreign exchange flows, reduced bank lending and a pullback in support from the central bank.

■2011 ■2012 ■2013 ■2014 13% 11.62 11% 9.04 9% 7.72 6.59 7% 5.11 4.61 5% 4.25 3.94 2.99 3% 3.09 1.99 | 2.17 | 2.49 | 2.23 2.54

2.16

1 Year Ministry of

Finance Bonds

1.97

3 Month Ministry of

Finance Bonds

Figure 2: Annual Ranges in Yield for Select Instruments

Source: Wind, as of July 2014

7 Day Interbank Repo

1%

Given the degree of potential volatility in China's markets, it pays to understand the drivers. The most predictable one is seasonal, as liquidity constraints are common around major holidays such as Chinese New Year and key quarter-end balance dates (see Figure 2). Around holidays, the fluctuations are attributable to consumption patterns and resulting bank behavior. For example, consumers draw down savings for vacation spending, and immigrant workers returning to their home provinces bring cash for their families. To cater to this demand, banks accumulate cash by borrowing in the repurchase (repo) markets and offering higher yields on interbank deposits. The quarter- and year-end spikes are also common but less pronounced, and they occur when banks store up cash to meet required loan-to-deposit ratios at the end of each reporting period.

These seasonal effects are closely followed by the central bank, which has the capacity to intervene via its open market operations to alleviate liquidity pressures. That said, market observers note that the People's Bank of China (PBoC) has been known to tolerate significant levels of volatility before intervening materially, as was the case in May/June 2013. Moreover, the triggers for intervention are opaque, and no clear pattern of intervention has emerged.

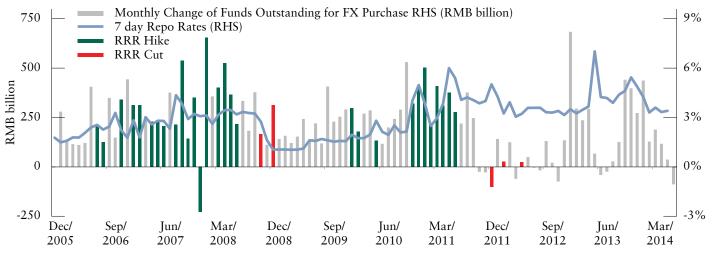
Volatility in China's short term markets is also partly attributable to fluctuations in foreign capital flows. Over much of the past decade China has seen strong inflows as international investors have looked to capitalize on the Renminbi's appreciation versus the US dollar. These flows, all else equal, inject liquidity into China's financial system, exerting downward pressure on money market rates. In order to stabilize money market rates, the PBoC has historically relied on the reserve requirement ratio (RRR), which determines the share of deposits banks must set aside in case of financial trouble. By raising this ratio periodically, the PBoC created extra demand for liquidity from banks, which helped absorb foreign currency inflows. As Figure 3 shows, between 2005 and 2011 when inflows were generally substantially positive, the RRR was consistently raised (with the exception of reductions during the global financial crisis). However the RRR is a blunt tool: rates would head lower as foreign currency inflows accumulated, then spike after each RRR hike.

Since 2011, foreign currency flows have become more volatile and two-way in nature, in part due to slowing growth outcomes and most recently due to the PBoC doubling the currency's daily trading earlier this year. At the same time, the PBoC has implemented new tools, relying increasingly on Open Market Operations of varying tenors to help fine-tune market liquidity. However, as noted above, the triggers and patterns of its interventions are unpredictable.

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Figure 3: Forex Flows, Repo Rates and Period of RRR Adjustment



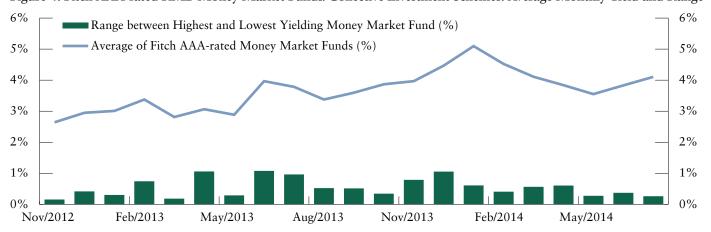
Source: Wind, as of July 2014.

### **Case for Active Management**

In China particularly, such insights are not just helpful to understand market behavior – they are instrumental in helping manage interest rate risk. Active management of an asset portfolio's duration can aid in reducing adverse market movements when rates are rising, and allow increased yield generation when yields are falling. Volatility of this kind raises important risk and return considerations for investors in short-duration or money market funds as interest rate fluctuations increase the potential for higher earnings, but also the risk of underperformance on adverse market moves.

The volatile front end provides substantial scope for individual specialists to differentiate their performance, as managers better able to anticipate and position flexibly for large movements in short rates should be able to deliver better returns for clients. Figure 4 highlights this point by showing a significant distribution of performance across a range of Fitch AAA money market strategies. Though all are limited to a 75-day weighted average maturity (WAM), the return differential between the highest and lowest yielding funds can often exceed 50 basis points (bps).

Figure 4: Fitch AAA-rated RMB Money Market Funds/Collective Investment Schemes: Average Monthly Yield and Range<sup>1</sup>



Source: Wind, as of July 2014.

In sum, we see a trend of continued expansion in the investor base for Chinese debt, and particularly with the increased attention from more conservative institutional buyers. For these investors, the attractions of risk diversification in a liquid market of increasingly high quality are clear. However, alongside these benefits are factors idiosyncratic to this stage of China's market development, which contribute to volatility. As a result, an informed approach is key to navigating China's markets, in our view, and investors need to take an active role in managing the risks to reap the rewards.

<sup>&</sup>lt;sup>1</sup> RMB Fitch-AAA funds launched after November 2012 are not included in this investment universe.

### China Insights: Interpreting Interest Rate Volatility





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Subash Pillai heads our Global Liquidity Portfolio Management business in Asia Pacific and our Fixed Income and Multi-Sector business in Australia. He leads the investment management teams responsible for the management of Money Market Fund Portfolios in Australian dollars (AUD), Chinese renminbi (RMB) and Indian rupees (INR) as well as supports the distribution of GSAM's broader range of Global Liquidity Management portfolios. Subash also has investment management responsibility for a range of AUD fixed interest and multi-sector portfolios. He has been with the firm since 1998.



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