



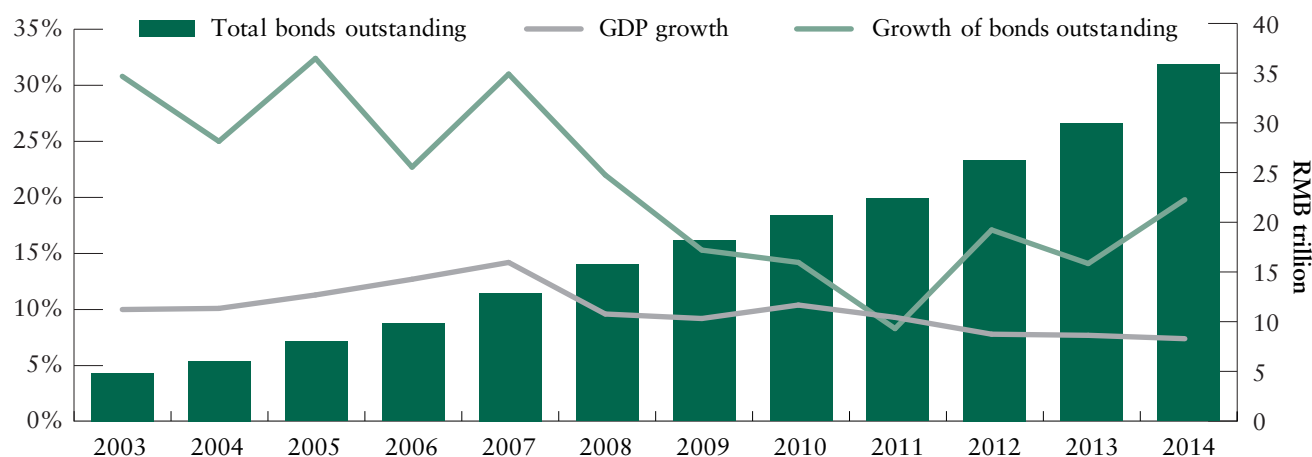
## FAQ: China's Bond Market

*In the last decade, China's economy has grown at a rate of around 10% on average and its bond market has grown from virtually nonexistent into one of the world's largest. However, investors seeking access to China's strong growth via the bond market continue to face hurdles, including a lack of familiarity with the range of bonds available, restrictions on who can invest and how, and other aspects of the Chinese bond market. In this document, we discuss some of the key elements of China's growing bond market.*

### How large is China's bond market?

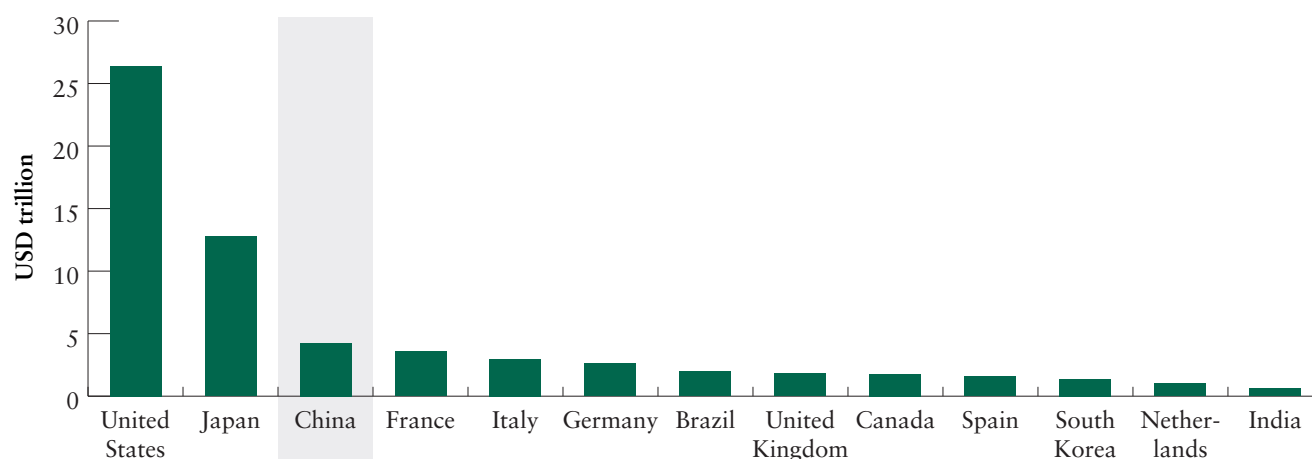
As China's economy has grown, the country has developed a large and increasingly diverse market that includes both public and private debt (Fig. 1). China's bond market is now the third largest in the world at about RMB 35.89 trillion, or about USD 4.24 trillion (Fig. 2).

Fig. 1: China's bond market growth over the last 10 years



Source: Wind, as of December 2014

Fig. 2: China's bond market is now the third largest in the world



Source: Bank for International Settlements, as of June 2014

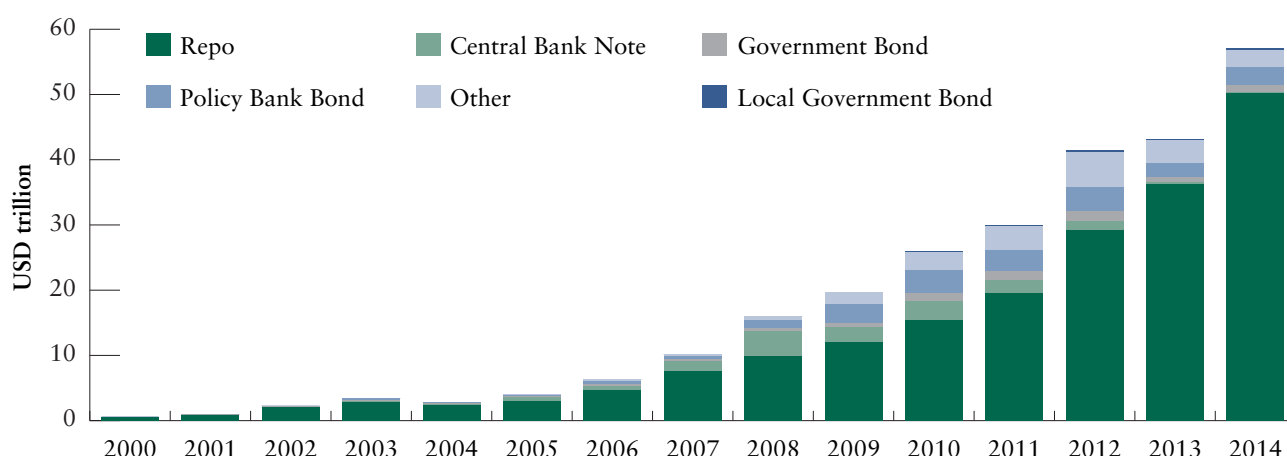


## How are bonds traded in China?

From a trading perspective, China has two bond markets: the Inter-bank bond market, which is regulated by the People's Bank of China (PBoC), and the Exchange bond market, which is regulated by the China Securities Regulatory Commission (CSRC). The Inter-bank market is much larger than the Exchange market, accounting for more than 95% of total trading volume.

Trading activity has grown rapidly and the market is very liquid, with about USD 57 trillion in total trading volume in 2014 (Fig. 3).

Fig. 3: Secondary market trading activity has grown rapidly



Source: Wind, as of December 2014

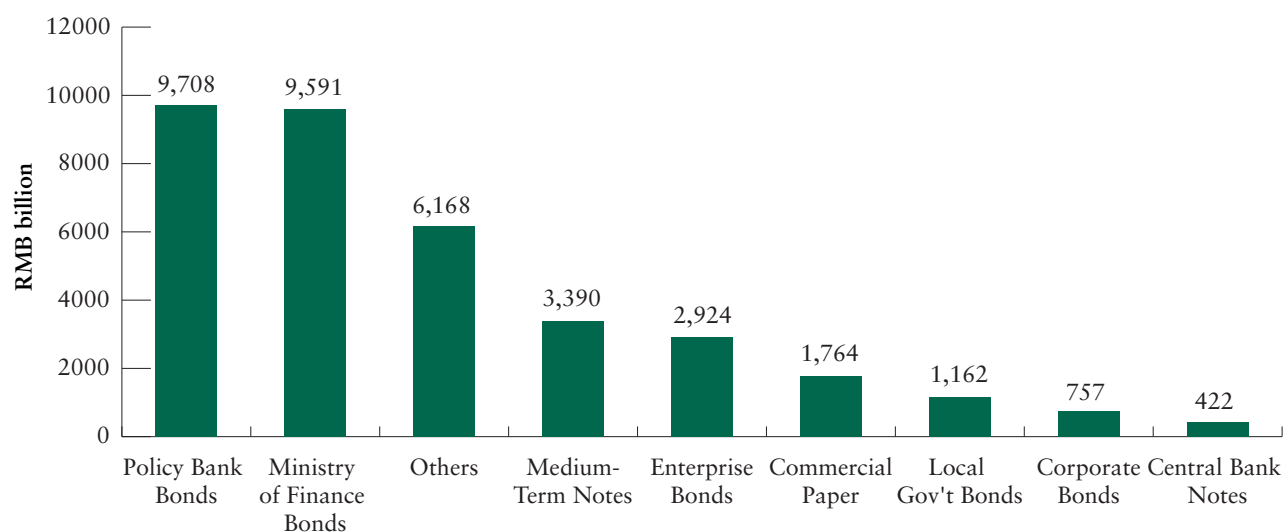
## What types of bonds are available in China's market?

There are four main types of bonds in the Chinese market:

- **Government bonds** are issued by the Ministry of Finance (MoF) in a range of maturities to finance government spending. Local governments also issue bonds, similar to municipal bonds in the US.
- **Central Bank notes** are short-term securities issued by the PBoC as a tool for implementing monetary policy. Central Bank notes are the most actively traded sector of China's bond market and are often used in money market and liquidity management portfolios due to the notes' short maturities.
- **Financial bonds** are the most actively traded bonds in China and are issued by policy banks, commercial banks and other financial institutions. The policy banks are the largest issuers and include the China Development Bank (CDB), the Export-Import Bank of China (China EximBank) and the Agriculture Development Bank of China (ADBC). Only Policy Bank bonds are backed by the central government. For further detail, see page 5: "What are the policy banks and what business do they support?"
- **Non-Financial Corporate bonds** include a wide variety of bonds but the largest sectors are known as "enterprise" bonds and "medium-term notes". Enterprise bonds are issued by institutions affiliated to Central Government departments, enterprises solely funded by the State, state-controlled enterprises and other large-sized state-owned entities. Examples of issuers in this market include companies like China National Petroleum, the state-owned fuel production company, China Petrochemical, Asia's largest refining and petrochemical enterprise, and China Telecom, a state-owned telecommunications company. Private companies of any size can also issue corporate bonds. Companies can also issue short-term financing bills (or commercial paper) and medium-term notes, which are the most liquid non-financial corporate bonds. The chart overleaf details the various sectors of the Chinese bond market.



Fig. 4: The size of various sectors of the market



Source: Wind, as of December 2014

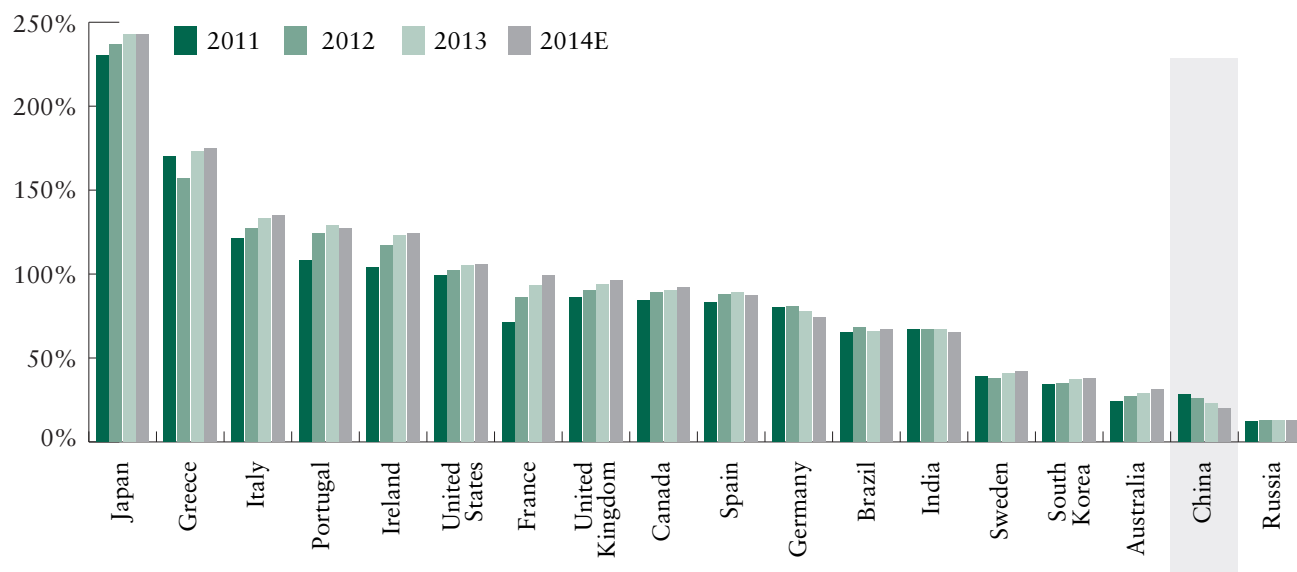
## What is driving the growth of China's bond market?

We believe one of the key reasons that China's government has been striving to develop a domestic bond market is because Chinese corporations still rely primarily on equity issuance and bank loans for financing. Due to the heavy reliance on bank loans, the government has a strong incentive to develop a bond market and encourage corporations to raise funds by bond issuance, as this would help to diversify credit risk concentrated in the banking system.

Infrastructure development is another important reason for the growth of China's bond market. Although fiscal revenues have grown rapidly, China still needs additional financing to fund infrastructure construction.

In addition, China's bond market is growing from a very small base. Despite many years of rapid growth in China's bond market, the country's government debt-to-GDP ratio is still relatively low (Fig. 5).

Fig. 5: China's debt remains low relative to GDP



Source: IMF, as of December 2014



## How can foreign investors access China's bond market?

China has two programs that allow foreign investors access to the bond market. The first program is the Qualified Foreign Institutional Investor (QFII) program, which allows foreign investors access to both the Exchange bond market and the Inter-bank bond market. This program was launched in 2002 to allow licensed foreign investors to buy and sell Yuan-denominated equities and bonds in China's mainland stock exchanges (in Shanghai and Shenzhen). This was the first time in history that China allowed foreign investors to invest and trade in the domestic securities market. Chinese mainland stock exchanges were previously closed to foreign investors due to China's exercise of tight capital controls, which restrict the movement of assets in-and-out of the country. In July 2012, CSRC published new regulation, which granted QFIIs access to the Inter-bank bond market. Prior to that, QFIIs could only access the Exchange bond market.

QFIIs<sup>1</sup> can transfer an approved amount of US dollars to a special QFII qualified custodian account and convert to RMB under the supervision of the State Administration of Foreign Exchange (SAFE). QFIIs are allowed to invest in 1) publicly listed shares on the Shanghai or Shenzhen Stock Exchange other than B shares; 2) bonds traded on the Exchange market and Inter-bank market; 3) open-ended funds and close-ended funds; and 4) other financial instruments approved by the CSRC.

RMB Qualified Foreign Institutional Investors (RQFII) was also introduced as an extension of QFII program in Dec 2011. RQFII<sup>2</sup> allows qualified financial institutions to establish Yuan-denominated funds in Hong Kong, Singapore, Taiwan and London etc. for investment in mainland China.

Another pilot program was launched in 2010 to allow three types of offshore institutions to invest in China's largely closed Inter-bank bond market. The qualified institutions include: Foreign central banks, lenders in Hong Kong and Macao that have already conducted renminbi clearing, and overseas banks involved in renminbi cross-border trade settlement.

The permitted funding sources of investment in the interbank bond market include currency cooperation between central banks, cross-border trades and onshore RMB businesses.

There are two ways for qualified investors to trade on the Inter-bank market:

**Direct access:** the investor opens a trading account in China's Inter-bank bank clearing house (CDC) and connects trading terminals to the Inter-bank trading center (CFETS). After setting up the trading and back office platforms, a central bank could trade directly on the market and conduct all daily operations including trade settlement and confirmation.

**Agent access:** the investor appoints a qualified agent bank as proxy. The central bank sends trading instructions to the agent bank, thereafter the agent bank trades on the market on behalf of the central banks and takes care of all the operations.

Foreign central banks and lenders in Hong Kong and Macau that have already conducted renminbi clearing can access the China Inter-bank bond market directly or via an agent, whereas the overseas banks involved in renminbi cross-border trade settlement only have access to the China Inter-bank bond market via an agent.

<sup>1</sup> As of 30 December 2014, a total of 274 foreign institutional investors and USD 66.9 billion quota have been approved under the QFII program. Foreign access to China's Yuan-denominated assets is still limited, with quotas placed under the QFII program amounting to USD 80 billion. Source: State Administration of Foreign Exchange, China. [www.safe.gov.cn](http://www.safe.gov.cn).

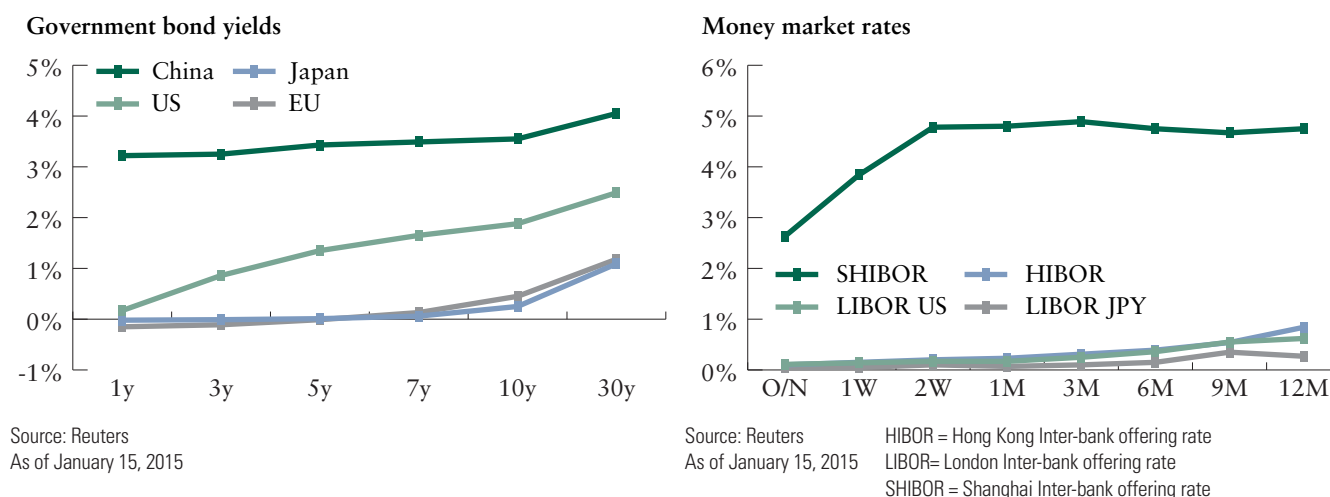
<sup>2</sup> As of 30 December 2014, a total of 118 qualified institutional investors and CNY 299.7 billion quota have been approved under the RQFII program.



## What is the case for investing in Chinese bonds?

We believe that several aspects of China's bond market may be attractive to foreign investors. First, China's sovereign credit quality is very strong given its low debt-to-GDP ratio (see Fig. 5). Second, Chinese bonds have historically offered significantly higher yields relative to other major bond markets, despite China's strong sovereign credit quality (Fig. 6). Third, foreign investors can also gain exposure to China's currency by investing in Chinese bonds.

**Fig. 6: Chinese bonds have historically offered attractive yields versus other bond markets<sup>3</sup>**



## What are the policy banks and what business do they support?

China has three policy banks: CDB, ADBC and China EximBank. The policy banks are directly supported by the central government and all three have received credit ratings equal to the sovereign credit rating from Standard & Poor's, Moody's Investors Service, and Fitch.

CDB is primarily responsible for raising funding for large infrastructure projects, including most of the funding for the Three Gorges Dam and Shanghai Pudong International Airport. The banks were established by the Policy Banks Law of 1994. The mission and purpose of the ADBC is to promote the development of agriculture and rural areas. The main mandate of the China EximBank is to facilitate the export and import of products, assist Chinese companies with comparative advantages in their offshore contract projects and outbound investment, as well as to promote Sino- foreign relationship and international economic and trade cooperation.

## Who are the largest participants in China's bond market?

Commercial banks dominate trading activity in China's Inter-bank bond market, accounting for around 70% of trading volume. Because bank deposits are the most important investment tools for Chinese households, commercial banks have very large balance sheets. However, local commercial banks have limited channels for investing, because regulations prohibit these banks from investing in equities or futures markets. Other major participants include asset managers and insurance companies, although both are small relative to banks in terms of bond trading.

## How are corporate bonds different from enterprise bonds?

Enterprise bonds are a much larger and a more actively traded sector of the Chinese bond market compared to corporate bonds. Enterprise bonds are bonds issued by institutions affiliated to Central Government departments, enterprises solely funded by the State, state-controlled enterprises and other large-sized state-owned entities (see overleaf for more on state-owned entities, or SOEs). Enterprise bond issuance is subject to administrative approval for a quota from the National Development and Reform Commission (NDRC). Typically, enterprise bonds are issued to fund infrastructure construction, fixed asset investment, key technical renovations, public welfare

<sup>3</sup> Past performance does not guarantee future results, which may vary.



undertakings and other projects that are vital to national well-being and people's livelihoods. Enterprise bonds can be traded on both the Inter-bank and the Exchange bond market. The total outstanding amount for enterprise bond is around RMB 2.9 trillion<sup>4</sup>.

Corporate bonds can be issued by any company. There are no restrictions on the issuers of corporate bonds. Even small companies can issue corporate bonds as long as they meet the relevant criteria. Corporate bond issuance requires verification and approval from the CSRC. However, the approval system for corporate bonds is quicker, easier and more market-driven compared to enterprise bonds. Companies file for corporate bond issuance according to their own business operational needs. Corporate bonds are only traded on the Exchange market which is a small bond market compared to the Inter-bank bond market. The total outstanding amount for corporate bonds trading on the Shanghai Stock Exchange is around RMB 757 billion<sup>5</sup>.

China is in the process of establishing a more actively traded credit bond market. One goal is to encourage corporations to seek more financing through the marketplace rather than through bank loans. In 2012, China's National Association of Financial Market Institutional Investors issued rules that allow non-financial companies to sell bonds through private placements, similar to US and other developed corporate bond markets.

## How is monetary policy conducted in China?

The PBoC is the Central Bank of the People's Republic of China with the power to control monetary policy in mainland China. The PBoC conducts monetary policy through open market operations, which affect the amount of reserves in the banking system, and by setting the reserve requirement ratio for Chinese commercial banks, which affects the amount of bank lending. The current RRR is 20% and 18% for major-sized and middle- / small-sized banks respectively. The PBoC also sets benchmark rates for deposits and benchmark rates for loans which apply to all commercial banks in China (see Fig. 7). On 7 June 2012, the PBoC started to introduce some flexibility to the bank deposit rate, and banks are allowed to offer deposit rates over benchmark deposit rates by no more than 10%. On 20 July 2013, the PBoC removed the restriction of 30% downward floating to benchmark lending rates, lifting the restrictions on lending rates. On 21 November 2014 and 28 February 2015, the PBoC further released the upper limit over benchmark deposit rates from 10% to 30%, when it announced base rates cut. We believe these moves are considered to be very important steps forward to the liberalization of interest rate control.

Fig. 7: Monetary policy tools<sup>6</sup>

Bank Reserve Rates			
Interest rate on required reserves:	1.62%	Interest rate on excess reserves:	0.72%
Benchmark Deposit Rates <sup>7</sup>		Benchmark Lending Rates <sup>8</sup>	
Current deposit:	0.35%	1 year or less loan:	5.35%
One week deposit:	1.35%	1 year to 5 year loan:	5.75%
3 month deposit:	2.10%	5 year or longer loan:	5.90%
6 month deposit:	2.30%		
1 year deposit:	2.50%		
2 year deposit:	3.10%		
3 year deposit:	3.75%		

Source: IMF, as of December 2014

<sup>4</sup> Source: China Central Depository and Clearing estimates, as of December 2014.

<sup>5</sup> Source: Shanghai Stock Exchange, as of December 2014.

<sup>6</sup> Source: The PBoC as of January 2015.

<sup>7</sup> Commercial banks are allowed to set deposit rates to a maximum of 20% upward floating to benchmark rates.

<sup>8</sup> There is no restrictions for commercial banks to set lending rates for their clients.





## How are open market operations conducted?

The PBoC conducts open market operations on every Tuesday and Thursday, selling Central Bank notes and repos to 49 primary dealers.

A typical issue schedule is as below:

- **Tuesday:** 1-year Central Bank notes and 7-day, 14-day, 21-day, and 28-day repo/reverse repo
- **Thursday:** 3-month and 3-year Central Bank notes, and 7-day, 14-day, 28-day, 91-day and 182-day repo/reverse repo

The PBoC at times chooses not to hike the issuance rate of Central Bank notes despite the spread of primary and secondary market of Central Bank notes. The PBoC will ask major local banks to buy a minimum amount of notes in order to maintain the consistency of open market operations.

Central Bank notes are one of two types of sovereign debt in China while the other one is the government bonds issued by the MoF. Before Central Bank notes were introduced in 2002, the PBoC used special MoF bonds the bank already owned as collateral when withdrawing liquidity from the market by repo. However, this approach effectively capped the amount of outstanding repos the PBoC could issue. This is one of the reasons that Central Bank notes were introduced in 2002.

Moreover, the PBoC introduced Short-term Liquidity Operations (SLO) in January 2013 to supplement the previous Open Market Operation (OMO) tools. Key features of the new SLO include:

- SLOs are only available to the 12 top OMO primary market dealers out of a group of 49, and the 12 dealers are all large to medium size local banks;
- The instruments of SLO are short-term repo and reverse repo operations (with maturity of less than seven days, which could be extended during holidays);
- The PBoC will determine the timing/size/tenor of the operations based on factors such as: 1) banking system liquidity; 2) money market rates; and 3) demand from the group of 12 top primary dealers;
- SLO will be conducted when regular OMO is not available and the details of the operations will be disclosed with one month lag

## What are the new tools the PBoC introduced to manage liquidity?

From early 2013, other than SLO, the PBoC implemented new liquidity management tools including Standing Lending Facility (SLF), Pledged Supplemented Lending (PSL) and Medium-term Lending Facility (MLF).

SLF was created and implemented in early 2013 as a monetary policy tool to improve liquidity management, meeting financial institutions' large amount of liquidity demand with duration of 1-3 months. The targeted banks originally are large commercial banks and policy banks. In early 2014, a pilot was initiated for small and medium-sized financial institutions. SLF is implemented in the form of collateralized loans and credit borrowing.

From September 2014, the PBoC started to introduce MLF. MLF is also a monetary policy tool to supply base money and improve liquidity management. It is targeted to qualified commercial and policy banks with a tenor of usually three months.

PSL is a collateralized form of on-lending facility with adjustable conditions of collateral. The PBoC has used it as a new channel of base money supply, and intends to improve credit allocation through this targeted liquidity provision. The tenor of the first PSL is reportedly three years and funding support was given to China Development Bank for shanty town renovation projects.

These tools will help decrease the volatility of money market rates and will help to construct a policy interest rate framework from very short term to long term, moving forward.



## What types of bonds qualify as collateral for Exchange market repos?

The eligible collateral bonds consist of MoF bonds, enterprise bonds, and corporate bonds. Enterprise bonds and corporate bonds have to meet at least one of the following requirements to be qualified as collateral bonds:

1. State-owned enterprises solely owned by central governments; or
2. Bonds with unconditional and irrevocable guarantee from one of the six large state-owned banks (these include Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Bank of China (BOC), Agricultural Bank of China (ABC), CDB, China Communication bank); or
3. Minimum credit rating AA or above by local agencies<sup>9</sup>

The Shanghai Exchange calculates and publishes a list of conversion rates for eligible collateral bonds on a daily basis. Market price, volatility and credit rating are key components in the calculation of conversion rates according to the methodologies published by the Shanghai Exchange.

As of January 2015, typical haircuts published by the Shanghai Exchange include:

- 1% to 6% for MoF bonds, the haircut could be as high as 10% for certain illiquid or low price MoF bonds
- 5% to 20% for high quality credit bonds
- 20% to 50% for relatively low quality credit bonds (the Shanghai Exchange published an announcement to enforce a lower conversion rate for low quality credit bonds with a negative watch; in addition, the Shanghai Exchange excludes low quality credit bonds from its collateralizing pool)
- 6% for local government bonds

<sup>9</sup> Both security rating and entity rating

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\* Gao Hua is the strategic partner of Goldman Sachs in China

# FAQ: China's Bond Market



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