

CONTRIBUTOR

Hong Xie
Director
Global Research and Design
hong.xie@spglobal.com

China's onshore bond market presents potential opportunities for foreign investors who would like to access one of the largest fixed income markets in the world.

A Changing Bond Landscape in China

Although Chinese government bonds were first issued in 1950, and secondary market trading of these bonds was introduced in the late 1980s, foreign ownership of Chinese bonds has been negligible, largely due to the lack of market access for foreign investors. This is set to change with a series of policy initiatives from the Chinese government that have the goal of opening up Chinese capital markets to international investors, liberalizing capital markets and internationalizing the renminbi (RMB). In March of 2013, Qualified Foreign Institutional Investors (QFIIs) were granted access to the interbank bond market, and RMB-Qualified Foreign Institutional Investors (RQFIIs) were permitted to invest in fixed income products traded on the interbank bond market. Given the fact that 97% of total cash bond turnover took place in the interbank market in 2013,¹ it is reasonable to conclude that these policy changes marked the real opening of China's onshore bond market to foreign investors.

With the newly granted access of QFIIs and RQFIIs to the interbank bond market and the continued expansion of the RQFII quota, international investor interest in China's onshore bonds has the potential for strong growth. In February 2014, the first Chinese bond ETF was launched in Hong Kong, providing foreign retail and institutional investors' access to a market that was previously only available to a few select, qualified investors. ETF bond funds followed suit in the U.S. in November 2014.

In light of this development, China's onshore bond market presents potential opportunities for foreign investors who would like to access one of the largest fixed income markets in the world. In this paper, we provide a brief overview of China's bond market, its important characteristics, and the potential risks and benefits of investing in Chinese fixed income. We also present the detailed index methodology behind the S&P China Composite Select Bond Index, which is designed to measure the performance of China's onshore bond market.

¹ www.chinabond.cn maintained by China Central Depository & Clearing Co., Ltd.

CHINA'S BOND MARKET: OVERVIEW

Market Size

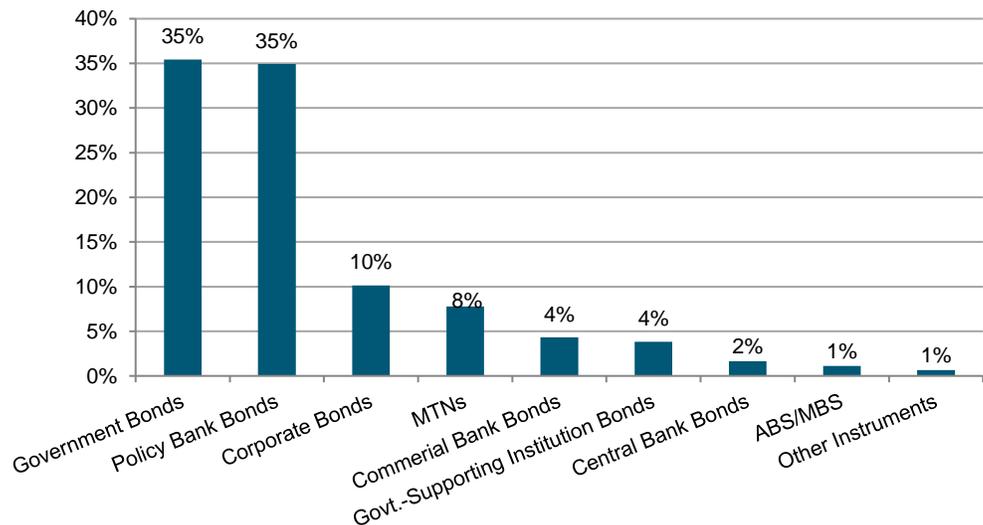
As of September 2014, the market capitalization of outstanding RMB bonds in China reached CNY 33.8 trillion (USD 5.5 trillion).² It is now the third-largest bond market in the world, trailing only the U.S. and Japanese markets. Given that the Chinese economy is the second-largest in the world and is still growing faster than most developed markets, the importance of China's bond market to the global financial market is expected to grow as well.

Composition

Government bonds and policy bank bonds heavily dominate China's RMB bond market, with each representing 35% of the total bond market as of September 2014 (see Exhibit 1). The remainder of the market is made up of corporate bonds (10%), medium term notes (MTNs) (8%), commercial bank bonds (4%), government-supporting institution bonds (4%), central bank bonds (2%), asset-backed securities/mortgage-backed securities (ABS/MBS) (1%) and other instruments (1%). Policy bank bonds are issued by the three policy banks and serve as their primary source of funding; the banks issuing these bonds are the China Development Bank, the Agricultural Development Bank of China and the Export-Import Bank of China.

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Exhibit 1: China's Bond Market Composition



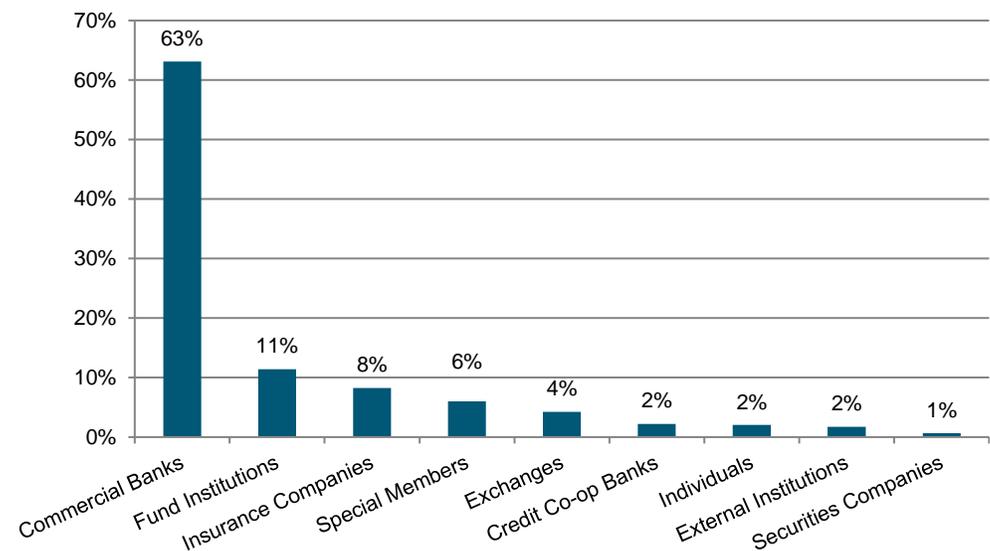
Source: www.chinabond.cn. Data as of September 2014. Charts and tables are provided for illustrative purposes.

² The People's Bank of China.

Investor Profile

Historically, Chinese commercial banks have been the biggest buyers of domestic bonds. While their market share has consistently decreased as other types of investors are allowed to participate in the bond market, commercial banks still hold 63% of outstanding bonds. Fund institutions and insurance companies hold 11% and 8% of China’s bonds, respectively (see Exhibit 2). It is important to note that foreign ownership remains significantly low at 2%.

Exhibit 2: China’s Bond Market Investor Profile



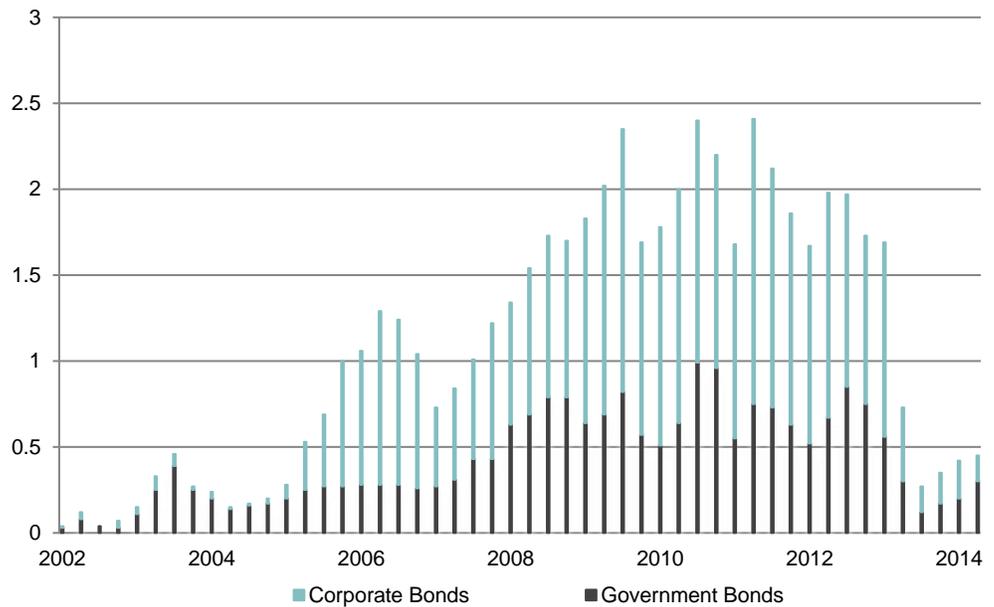
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Source: www.chinabond.cn. Data as of September 2014. Charts and tables are provided for illustrative purposes.

Market Liquidity

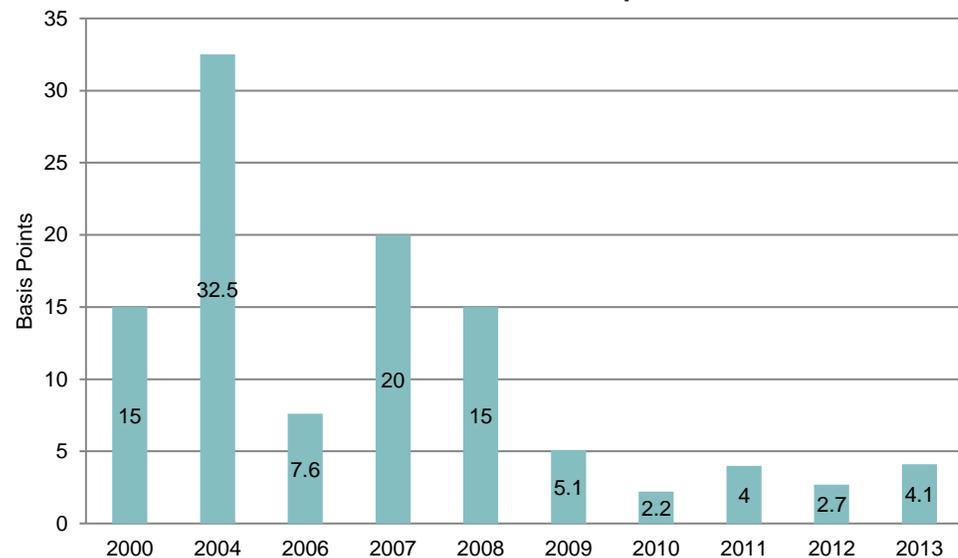
The liquidity of China’s bond market has continued to improve in recent years. The turnover ratio (value of bonds traded/average amount of bonds outstanding) has increased to 1.1 in 2010 from 0.1 in 2003 (see Exhibit 3). The government bond bid/ask spread survey by the Asia Development Bank (ADB) has also shown a downward trend, decreasing to 2 bps-4 bps in 2012 and 2013 from 32 bps in 2004 (see Exhibit 4).

Exhibit 3: China's Bond Turnover Ratio



Source: ADB. Data as of June 30, 2014. Charts and tables are provided for illustrative purposes.

Exhibit 4: Chinese Government Bonds Bid-Ask Spread



Source: ADB. Data as of Dec. 31, 2013. Charts and tables are provided for illustrative purposes.

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2-Tiered Bond Trading Markets

Onshore bonds are traded on two main markets: the interbank bond market and the exchange-traded markets, which are the Shanghai Stock Exchange and the Shenzhen Stock Exchange. In 2013, 97% of secondary bond trading took place on the interbank bond market.

Market Access

The People's Republic of China's bond markets are accessible to foreign investors via QFIIs and RQFIIs. In the past, foreign investors accessed the onshore bond market through QFIIs and could only participate in exchange markets, constraining them to limited types of bond instruments and exposing them to poor market liquidity. This limited market access for foreign investors has changed since 2013, when QFIIs and RQFIIs were allowed to trade in the interbank bond market. In fact, the ever-growing RQFII quota, the coverage expansion beyond Hong Kong to Singapore, London, Paris and Taiwan, and the RQFII advantage in fund repatriation have combined to prompt strong interest from the investor community.

POTENTIAL BENEFITS OF INVESTING IN CHINA'S BONDS

With the gradual opening of its capital markets and the size of its economy, China may present attractive investment opportunities to investors who are seeking to access its economic growth. In particular, China's onshore bond market contains attractive features in the form of higher yield, a stable currency and a low correlation to developed bond markets.

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Low Correlation to Developed Market Bonds

Reflecting the local domestic macroeconomic cycle and supply-demand dynamics, China's bonds bear a relatively low correlation to developed fixed income markets (see Exhibit 5). Therefore, the bonds may offer diversification benefits for international investors.

Exhibit 5: Correlation to China's Bonds

Index	Description	Beta	Correlation	Return (%)	Risk (%)	Return/Risk
S&P China Bond Index	Onshore China bonds	1.0	1.0	4.15	2.68	1.6
S&P Global Developed Sovereign Bond Index (USD)	Locally denominated sovereign debt	0.3	0.1	3.47	6.78	0.5
S&P U.S. Bond BMI	Investment-grade U.S. broad fixed income market	0.1	0.0	4.69	3.61	1.3

Source: S&P Dow Jones Indices LLC. Data from September 2007 to September 2014. Charts and tables are provided for illustrative purposes. Past performance is no guarantee of future results.

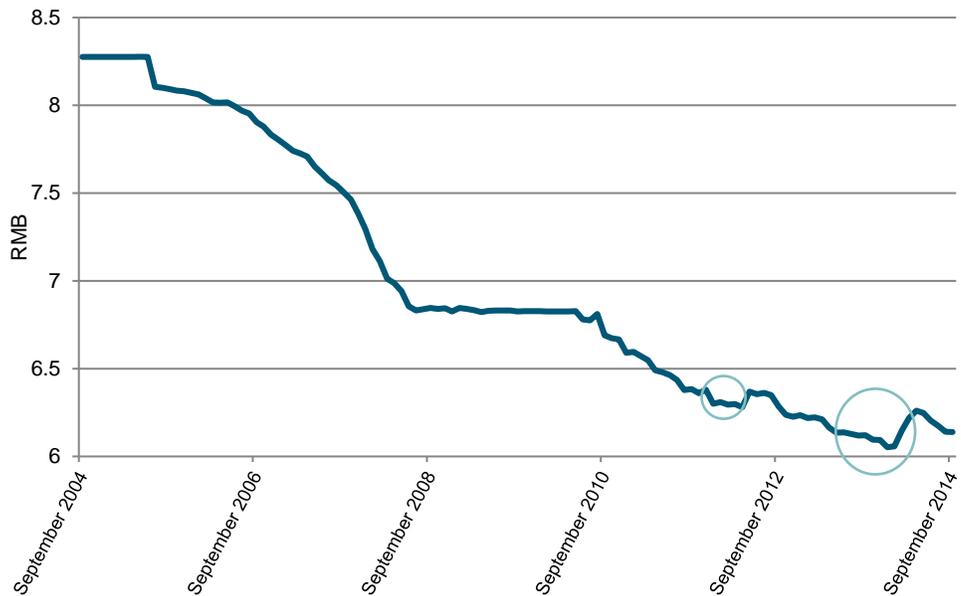
Access to a Strong Currency

The Chinese yuan (CNY, RMB) has experienced persistent appreciation since 2005. At this juncture, it is debatable whether the yuan is fairly valued or still has potential for further appreciation. However, market players may take comfort from a formidable war chest of foreign reserves (USD 3.9 trillion as of September 2014) to prevent currency market volatility.

During the recent financial turmoil and the global financial crisis, the yuan has stood out as a relatively stable currency among emerging markets, and it was regarded as an anchor for other Asian currencies. Since 2005, the appreciation trend has been interrupted twice. The first time was at the height of the eurozone sovereign debt crisis in mid-year 2012, during which the yuan depreciated by 2%. The second instance was the during first half of 2014, when the yuan depreciated by 3.7%, partly because the People’s Bank of China pushed to increase currency volatility before officially widening the currency trading band (see Exhibit 6).

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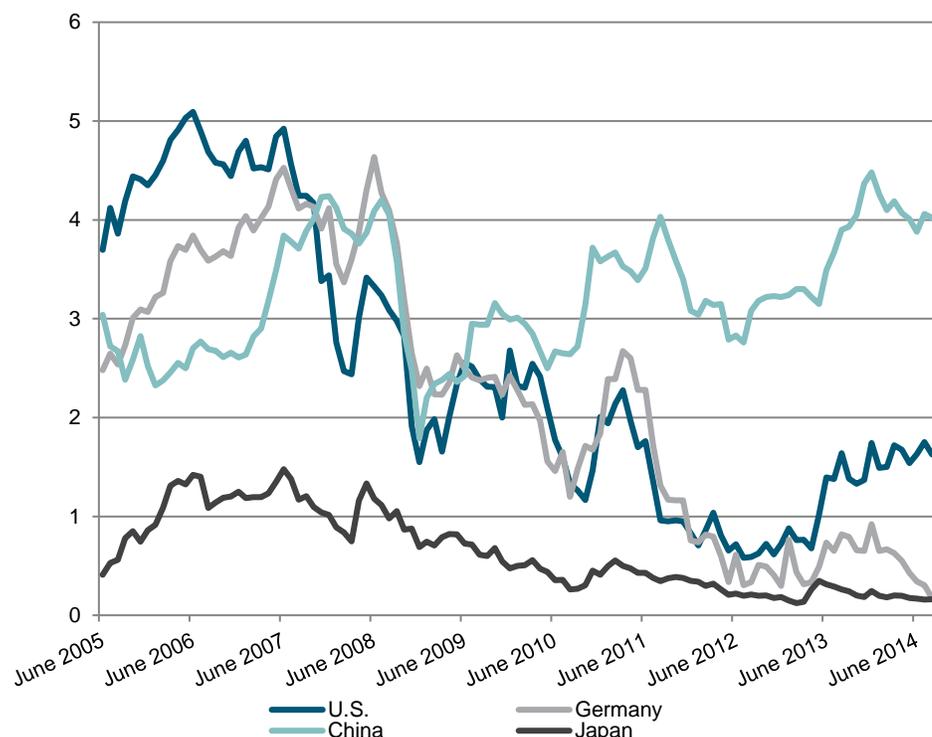
Exhibit 6: Exchange Rate: RMB/ USD



Source: Bloomberg. Data as of September 2014. Charts and tables are provided for illustrative purposes. Past performance is no guarantee of future results. Circles indicate periods of currency depreciation

Higher Yield Than Developed Markets

With a relatively stable currency, Chinese bonds have offered attractive yields compared with those from developed markets. The 5-Year government bond yielded 3.96% as of the end of September 2014, compared with yields below 2% from U.S., German and Japanese government bonds (see Exhibit 7).

Exhibit 7: 5-Year Government Bond Yields

Source: Bloomberg. Data as of September 2014. Charts and tables are provided for illustrative purposes. Past performance is no guarantee of future results.

To digest the overcapacity built up during the previous economic boom, and to allow for structural reforms, China may need to tolerate lower economic growth than in recent history.

Structural Change

China's economy is embarking on a new journey of structural reforms under the current leadership. A recent deposit rate cut has created the potential for policy easing and further stimulus which, should they occur, could lead to a downward adjustment to the target economic growth rate. To digest the overcapacity built up during the previous economic boom, and to allow for structural reforms, China may need to tolerate lower economic growth than in recent history (although Chinese growth is still much higher than that in most developed economies). With low inflation in the country (below 2%), China's bonds are fundamentally supported by local macroeconomic dynamics.

As we have previously noted, the size of the Chinese economy and the liberalization of its capital markets offer investors potential opportunities to access higher yield and to diversify. We also highlight that the potential benefits of a China onshore bond strategy should be evaluated in tandem with consideration of possible risks. Interest rate risk, credit risk and foreign exchange risk are inherent to foreign investment in China's bonds, as for all fixed income strategies. In addition, foreign investors accessing China's bond market via QFII/RQFII are exposed to regulatory risk, e.g., more clarity is needed in tax issues regarding fund repatriation. For investors interested in credit bonds, jurisdictional risk, including the solvency regime and corporate governance, needs to be taken into consideration.

THE S&P CHINA COMPOSITE SELECT BOND INDEX

The S&P China Composite Select Bond Index is designed to serve the investment community’s need for a benchmark that represents high-quality bonds with reasonable liquidity traded in mainland China on both interbank and exchange markets. It seeks to track the performance of China sovereign bonds, agency (policy bank) bonds and bonds issued by Central State-Owned Enterprises (CSOEs) denominated in Chinese yuan (CNY).

With a market capitalization of RMB 8.88 trillion, the index represents approximately 27% of China’s domestic bond market.

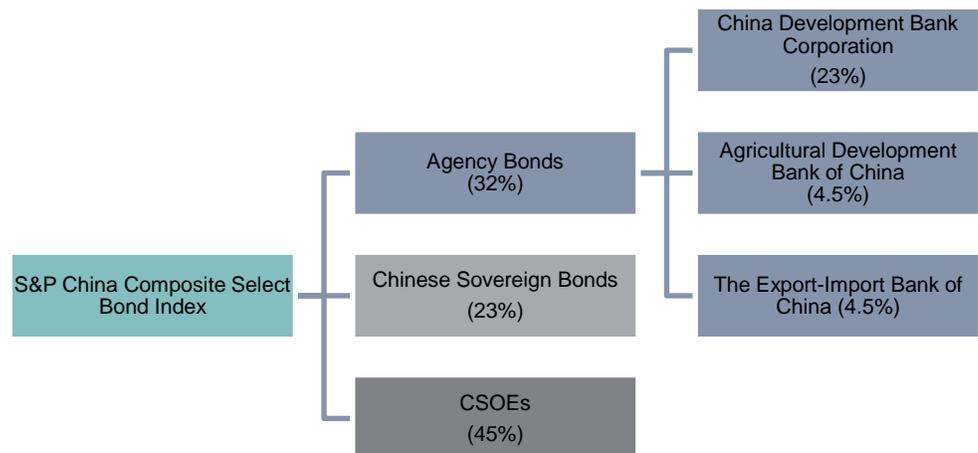
Index Highlights

Monthly Rebalancing

The index is calculated using a modified market capitalization weighting scheme. Index weighting criteria are outlined in Exhibit 8. Within each bond type, the constituents are market value-weighted, with each corporate issuer capped at 4% at each monthly rebalancing.

Interest rate risk, credit risk and foreign exchange risk are inherent to foreign investment in China’s bonds, as for all fixed income strategies.

Exhibit 8: S&P China Composite Select Bond Index Weighting Scheme



Source: S&P Dow Jones Indices LLC. Data as of November 2014. Charts and tables are provided for illustrative purposes. Each issuer is capped at 4%. CSOE: Central State-Owned Enterprises.

Constituent Selection

- **Country.** Securities must be issued in China and traded on China’s bond markets (the Shanghai Stock Exchange, the Shenzhen Stock Exchange and the Chinese interbank market).
- **Currency.** Securities must be denominated in Chinese yuan (CNY).
- **Maturity.** Each bond must have a maturity greater than or equal to one year, but less than or equal to seven years from the rebalancing date. No bond matures in the index.

The S&P China Composite Select Bond Index is designed to serve the investment community's need for a benchmark that represents high-quality bonds with reasonable liquidity traded in mainland China on both interbank and exchange markets.

- **Issuer.** Securities must be sovereign bonds issued by the Chinese government, or government agency bonds issued by three Chinese policy banks (China Development Bank Corporation, Agricultural Development Bank of China and The Export-Import Bank of China). Corporate bonds issued by Central State-Owned Enterprises (CSOEs) are also eligible.
- **Coupon Type.** Securities must be fixed-rate, non-zero coupon bonds.
- **Exclusions.** The following bond types are specifically excluded from the index:
 - STRIPS/Zero-coupon bonds
 - Inflation-linked securities
 - Floating-rate notes
 - Puttable bonds
 - Callable bonds
- **Issuer Amount Outstanding.** At each rebalancing, issuers must have bonds totaling at least USD 1 billion outstanding.
- **Size.** Criteria regarding eligible par amounts outstanding vary by bond type. They are:
 - Sovereign bond: CNY 20 billion
 - Agency bond: CNY 15 billion
 - CSOE bond: CNY 1 billion
- **Rating.** CSOEs must be rated 'AAA' by at least one of the Chinese rating agencies (China Chengxin International, China Lianhe, Dagong or Shanghai Brilliance). No ratings criteria are applied to government or agency bonds.

Exhibit 9: Risk/Return Characteristics

INDEX	1-YEAR RETURN (%)	1-YEAR RISK (%)	1-YEAR BETA	1-YEAR CORRELATION
S&P China Composite Select Bond Index	7.39	2.90	1.00	1.00
S&P Global Developed Sovereign Bond Index (USD)	-2.17	4.59	0.60	0.38
S&P U.S. Bond BMI	3.57	2.29	0.50	0.64

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2014. Charts and tables are provided for illustrative purposes only. Past performance is no guarantee of future results. These charts and tables may include hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 10: Index Characteristics of the S&P China Composite Select Bond Index

Number of Bonds	414
Market Cap	RMB 8.86 trillion
Weighted Coupon	4.45
Weighted Modified Duration	3.16
Weighted Price	100.87
Weighted Years To Maturity	3.61
Weighted Yield to Maturity	4.18
Weighted Yield to Maturity	4.18

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2014. Charts and graphs are provided for illustrative purposes only. Past performance is no guarantee of future results. These charts and tables may include hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

As China continues its various policy initiatives moving toward the internationalization of the RMB, foreign retail and institutional investors are gaining unprecedented access to China's onshore bond market.

CONCLUSION

As China continues its various policy initiatives moving toward the internationalization of the RMB, foreign retail and institutional investors are gaining unprecedented access to China's onshore bond market. While access to a sizeable, increasingly liquid fixed income market could offer investors potential opportunities to access higher yield and diversification, there are risks to consider as there are in any fixed income market. Interest rate risk, credit risk and foreign exchange risk all remain as potential concerns for investors looking to China's onshore bond market. Regulatory risk, solvency regime and corporate governance also need to be taken into consideration by investors interested in corporate bonds. The S&P China Composite Select Bond Index is designed to track high-quality bonds in the market.

PERFORMANCE DISCLOSURE

The S&P China Composite Select Bond Index was launched on Sept. 30, 2014, with a first value date of Aug. 30, 2013. All information presented prior to the launch date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect on the launch date. Complete index methodology details are available at www.spdji.com.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency on their products. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live; index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public Web site or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of Introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities (or fixed income, or commodities) markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

Additionally, it is not possible to invest directly in an Index. The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. For example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US\$ 10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US\$ 1,650), the net return would be 8.35% (or US\$ 8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US\$ 5,375, and a cumulative net return of 27.2% (or US\$ 27,200).

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