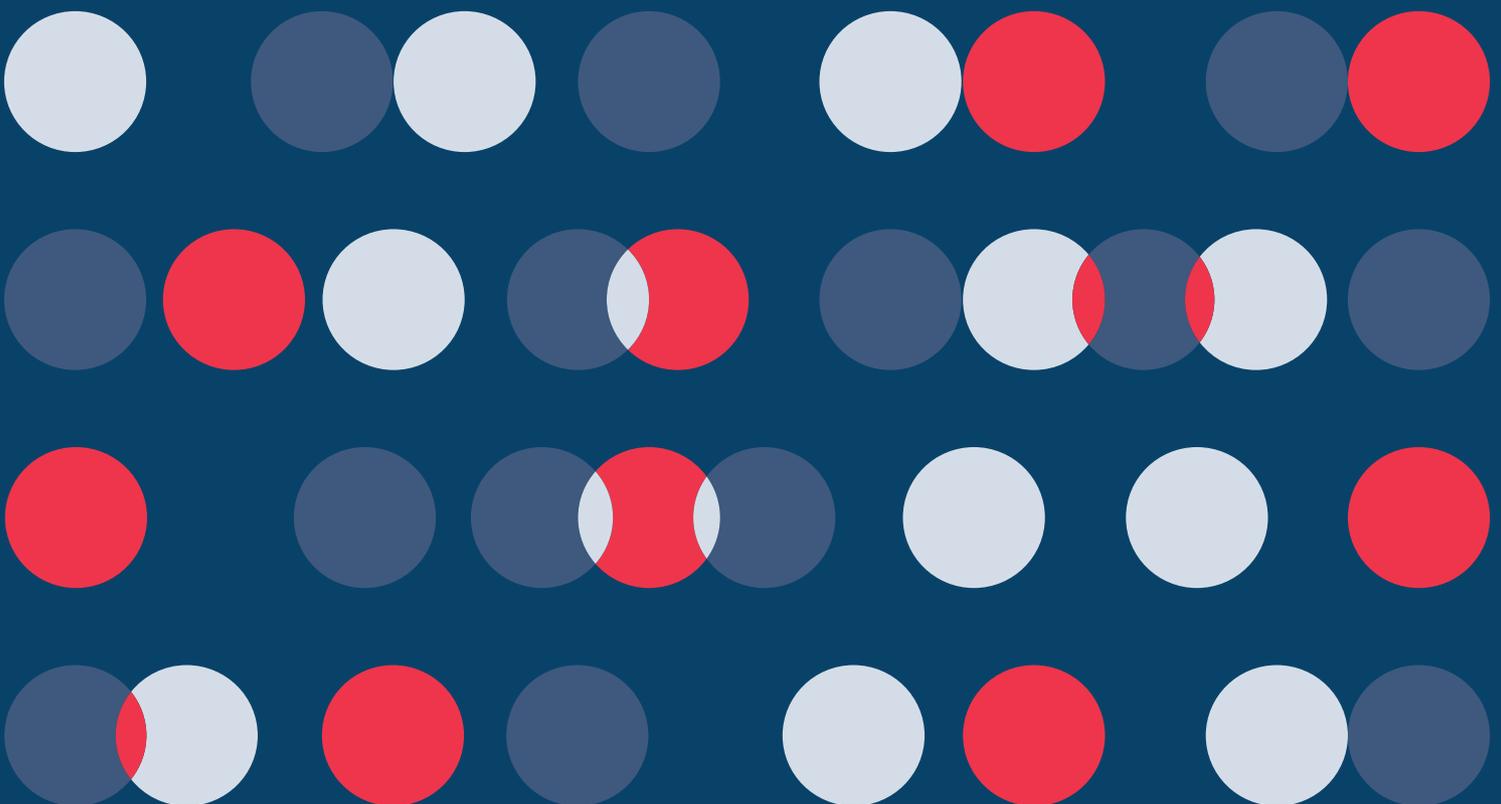


May 2017

RESEARCH REPORT

TAPPING INTO CHINA'S DOMESTIC BOND MARKET —
AN INTERNATIONAL PERSPECTIVE



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SUMMARY

A well-developed RMB bond market with a high level of foreign participation is an essential attribute that underpins RMB as an international reserve currency. The growth potential of foreign holdings of RMB bonds would be considerably large, given the size of China's economy and the RMB bond market. However, due to the restrictions under the current market opening programmes for foreign investors, the degree of foreign participation in China's bond market is significantly lower than those in the countries with international currencies and even some emerging markets. This reveals the needs to enhance market infrastructure, trading rules and financial products with innovative measures in order to further advance RMB internationalisation.

At present, China runs three main programs that allow foreign investors to access the domestic bond market, namely the Qualified Foreign Institutional Investor (QFII) scheme, the Renminbi Qualified Foreign Institutional Investor (RQFII) scheme and eligible institutions in the Mainland's interbank bond market (PBOC Eligible-Institutions scheme)¹. Although related regulations have been gradually relaxed, the rules on quota administration, account management, or fund remittance are still major hurdles in effective investment strategies and funds allocations of foreign participants. Moreover, some institutional features of the domestic market are of key concerns that need to be addressed in order to promote more active foreign participation. These include issues like market fragmentation, less diversified market structure, under-developed credit rating system, and potential credit risk.

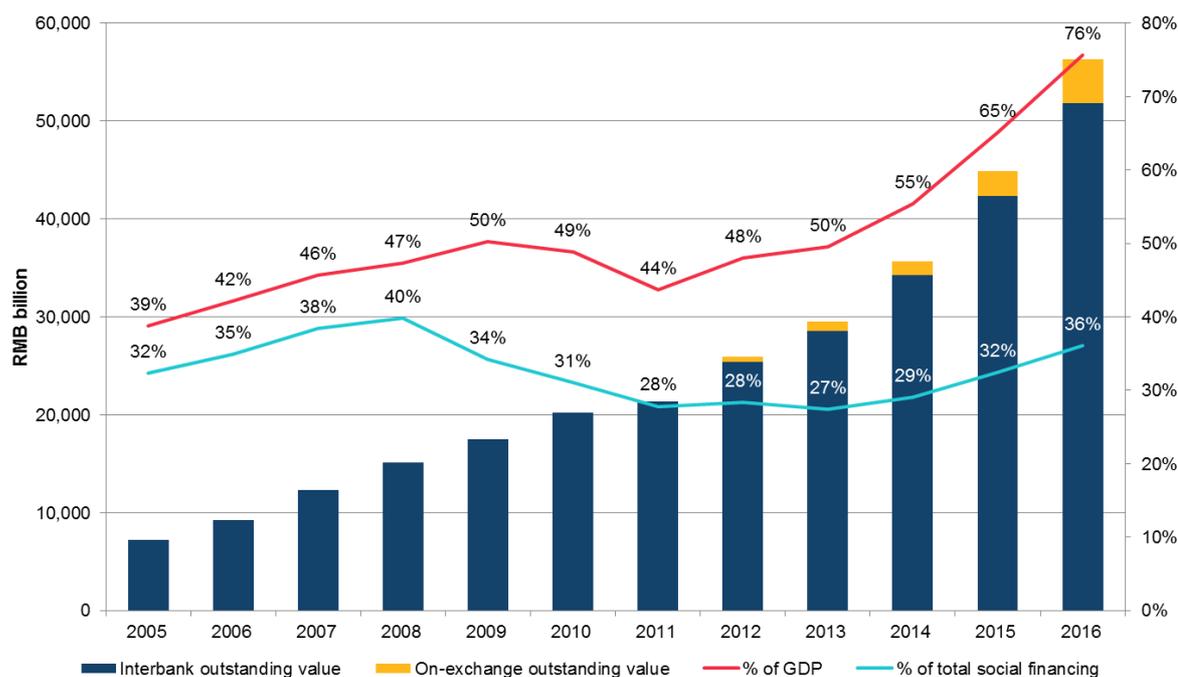
Domestic bond market development has been one of the state policy priorities for both the Mainland capital market development and RMB internationalisation. To further promote foreign participation in China's domestic bond market, the following potential improvements can be considered: (1) Further integrating trading platforms and foreign participation schemes; (2) Accelerating the pace of cross-border product innovation to bridge the offshore foreign exchange (FX) market strength with the domestic bond market; and (3) Linking up onshore and offshore bond markets, as the Bond Connect scheme jointly announced by the People's Bank of China (PBOC) and Hong Kong Monetary Authority (HKMA), to diffuse international practices and standards to the domestic market. A cross-border Bond Connect platform will offer a well-developed financial infrastructure and market practices in line with international legal and regulatory standards. This would reduce regulatory burdens and offer a more convenient trading environment for both foreign participants and domestic investors. This measure could be regarded as part of a wider effort to further open China's capital markets and to make RMB-denominated assets more accessible to foreign participants, and strengthen the role of Hong Kong as a gateway between the Mainland and international markets.

¹ See Section 4 for details of the schemes.

1. THE POTENTIAL FOR FOREIGN PARTICIPATION IN CHINA'S DOMESTIC BOND MARKET

Over the past decade, China has made significant progress in developing its bond market, with measures ranging from steadily liberalising interest rates to gradually easing capital controls. As a result, China's bond market experienced a rapid expansion at a simple average annual growth rate of 21% in outstanding value over the past five years, and has become the third largest in the world at RMB56.3 trillion², or about US\$8.1 trillion (see Figure 1).

Figure 1. Year-end outstanding value of China's debt securities and its share of GDP and total social financing (TSF) (2005-2016)



Source: China Central Depository & Clearing Co, Ltd (CCDC) annual reports on statistical analysis of bond market (債券市場年度統計分析報告) (2011 - 2016), excluding data for on-exchange market and bonds settled in Shanghai Clearing House (SCH) (2005-2011) due to data unavailability. GDP and TSF data are from Wind.

However, China's bond market is still modest as a percentage of gross domestic products (GDP) compared to countries with international currencies. Foreign participation in China's bond market has remained minimal at around 2.52% of the whole market, and 3.93% of the sovereign debt market³, significantly lower than that in Japan, U.S. and even some emerging markets (see Figure 2), indicating a large room to advance the foreign participation in China's domestic bond market.

The inclusion of RMB in the Special Drawing Right (SDR) basket of the International Monetary Fund (IMF) opens a special window for global participants to tap into China's bond market. Entering SDR basket is regarded as an official endorsement of RMB as part of the international financial system and is an important milestone for China to integrate into the global financial system. The importance of SDR status is more than symbolic. From an investment perspective, SDR inclusion itself will not directly spur significant investment needs, as the SDR basket is a supplementary international reserve asset of around US\$288 billion, within which RMB accounts only for 10.92% weighting⁴. However, the attainment of a SDR

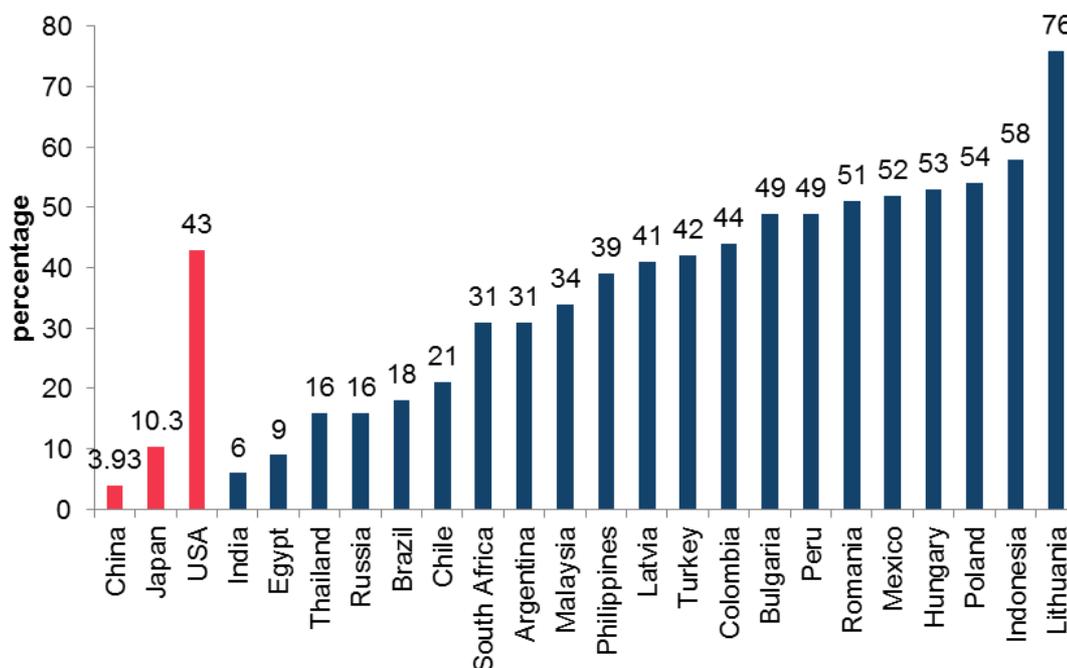
² Source: BIS, Wind, as of end-2016

³ Source: CCDC, as of end-2016

⁴ Source: IMF website

status will increase the global acceptance of RMB as a global investment and reserve currency, which would most likely trigger an increasing demand for RMB-denominated assets from both public- and private-sectors internationally, and hence would lead to a steady global asset diversification from other financial segments into Chinese assets, especially into RMB-denominated bonds and relevant financial products.

Figure 2. The shares of foreign ownership in sovereign debt market in China, Japan, US and major emerging economies



Note: The red bars refer to the shares of foreign ownerships in China, Japan and USA, and the blue bars refer to those in major emerging market economies

Source: Emerging markets data are from BIS and IMF report (2015); China data is from Wind, as of end-2016; Japanese data is from Asian bonds online, as of end-2015; US data is from Federal Reserve, U.S. Treasury, as of end-2016

In respect of the public sector, current holdings of RMB assets (including bonds, stocks, loans and deposits) by foreign governments and quasi-official sectors amounted to RMB 666.7 billion⁵, equivalent to around 1% of total official foreign exchange reserves worldwide⁶. This is much smaller than the share of Australian dollar (AUD) or Japanese Yen (JPY) in official global foreign exchange reserves, which are 1.94% and 4.48% respectively as of end of 2016Q3 (see Figure 3). If the foreign holdings of RMB by public sector could roughly reach the level of AUD, US\$110 billion of global reserve would be shifted into RMB assets. A further rise to a level comparable to that of JPY in global FX reserves could result in a US\$400 billion capital inflow into RMB assets.

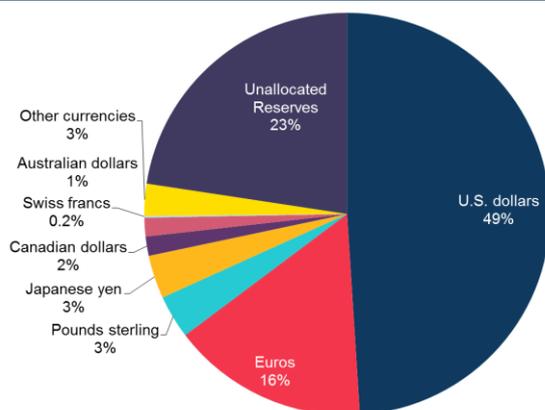
In respect of the private sector, China's bond assets are not well represented in international benchmarks at present. If Chinese assets were included in some international indices, such as J.P. Morgan Emerging Markets Bond Index (EMBI Global Index) which is widely-used as the central reference point in international fixed income market, China's weight in the index would be about one-third, according to an IMF report (see Figure 4). Furthermore, if supporting policies are in place to facilitate bigger access by institutional investors and private investors to the domestic bond market, foreign holdings of Chinese bonds could increase to a level comparable to those in other international currencies, e.g. about 10% of total bond market.

⁵ See RMB Internationalisation Report (2015) (《人民幣國際化報告(2015)》), the PBOC

⁶ Similarly, the RMB constituted 1.1% of total official foreign currency assets in 2015, according to IMF statistics.

Assuming that the growth rate of China's bond market in the next few years is same as compound annual growth rate of TSF in the past five years, i.e. 14%, and that foreign holdings of Chinese bonds reach the level of 10% of the whole market, then the foreign holdings of Chinese bonds could reach RMB9.5 trillion, or 9.93% of GDP, by 2020 (see Table1). The growth potential of foreign participation in China's domestic bond market would then be considerably large.

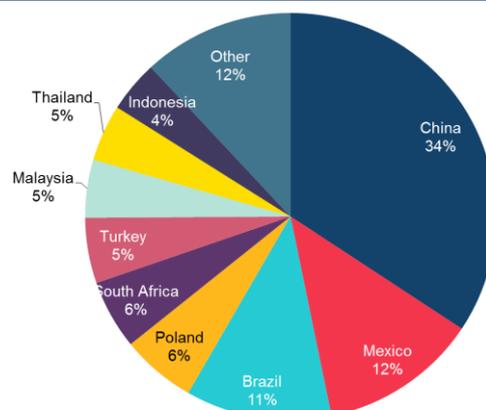
Figure 3. Currency composition of official foreign exchange reserves (End-2016Q3)



Note: The renminbi was included in the category of "other currencies."

Source: International Financial Statistics (IFS)

Figure 4. EMBI Global Index, if Chinese bonds included



Source: IMF Global Financial Stability Report, April 2016

Table 1. The projection of foreign participation in China's domestic bond market (by 2020)

	2016	2020
GDP (RMB billion)	74,413	95,730
Total domestic bond market (RMB billion)	56,305	95,100
Foreign holdings in domestic bond market (RMB billion)	853	9,510
As % of GDP	1.15%	9.93%

Note: Calculations are based on the following assumptions — (1) The annual growth rates of GDP and China's bond market are 6.5% and 14% respectively; (2) Foreign holdings account for 10% of total debt outstanding value.
Source: Foreign holdings data in 2016 is from the PBOC; Wind for 2016 data; author's calculations for 2020 estimation.

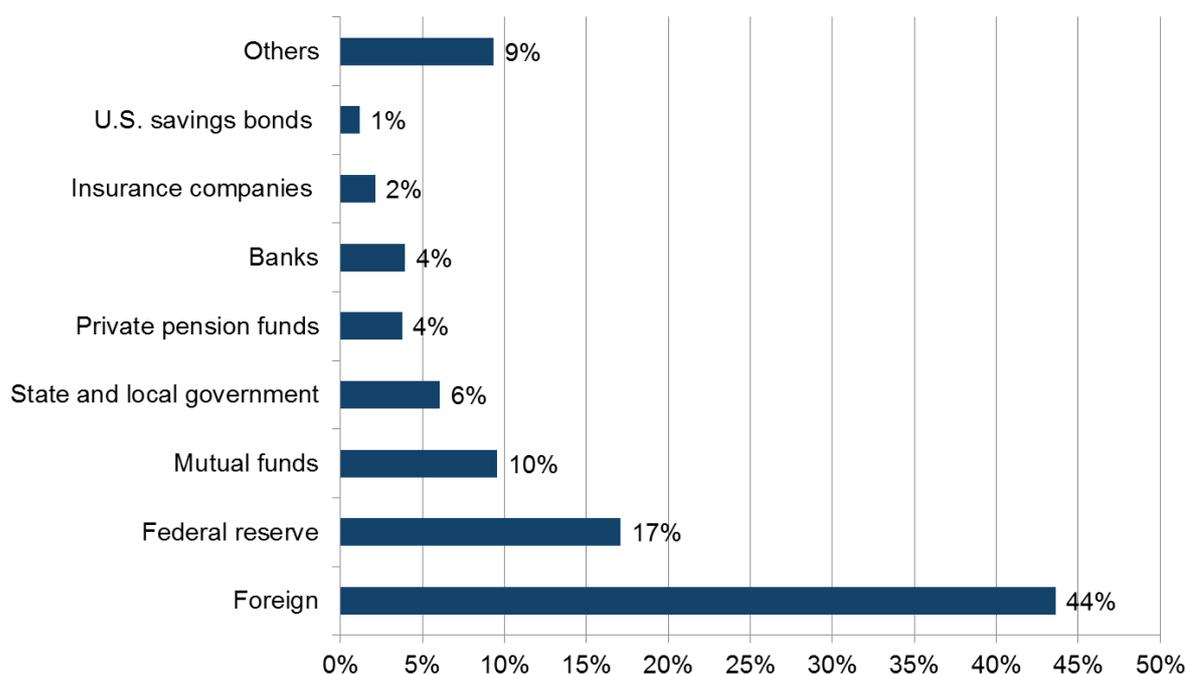
2. THE BENEFIT OF INCREASED FOREIGN PARTICIPATION IN THE DOMESTIC BOND MARKET

Firstly, having investors with different investment objectives will spur a wider range of investment strategies, and help to channel capitals towards the most productive industries. Therefore, encouraging various types of foreign investors to enter into the domestic bond market would help build a diversified investor structure, activate trading and contribute to a more competitive market. This would further increase the scale and depth of the domestic financial market.

Secondly, facilitating foreign holdings of Chinese bonds is a key to increase the international use of the RMB. Increasing foreign holdings would be one of the important factors in the assessment of a currency to be widely usable or not. However, current foreign holdings of China's bonds are much lower than that of the economies with international currencies. Take the case of the US treasury market where the investors broadly consist of financial institutions,

private individual investors and foreign entities. As of end-2016, government entities (Federal Reserve and local governments) accounted for 23% of total holdings of US treasuries. Apart from them, mutual funds and foreign investors are also major participants. In particular, the share held by foreign participants was over 40% of total outstanding value. The rest was owned by banks (less than 5%), insurance companies, and an assortment of trusts and other types of investors (see Figure 5). Since debt securities are typically a top asset class for central banks and global fund managers, the tradability and usability of China's bond assets for foreign investors are crucial to advance RMB internationalisation and support RMB as a meaningful reserve currency.

Figure 5. Percentage of outstanding value held by the diversified investor base in the US sovereign bond market (End-2016)



Note: The debts include treasury bills, notes, bonds, and special State and Local Government Series securities.

Source: Federal Reserve, U.S. Treasury

Thirdly, a deep bond market with a wide variety of instruments and long-term investors would help to absorb the impact of fluctuations of foreign capital flows and enhance global investors' confidence in holding RMB-denominated assets. In 2016, foreign holdings of China's domestic bonds continued to increase, in spite of the weak RMB exchange rate (see Section 3 below). Even foreign participation in other asset types fell, foreign capitals showed a steady preference for bond assets. Foreign participation in China's bond market is expected to increase, which would compensate the capital outflow and back up the exchange rate of the RMB in the medium term.

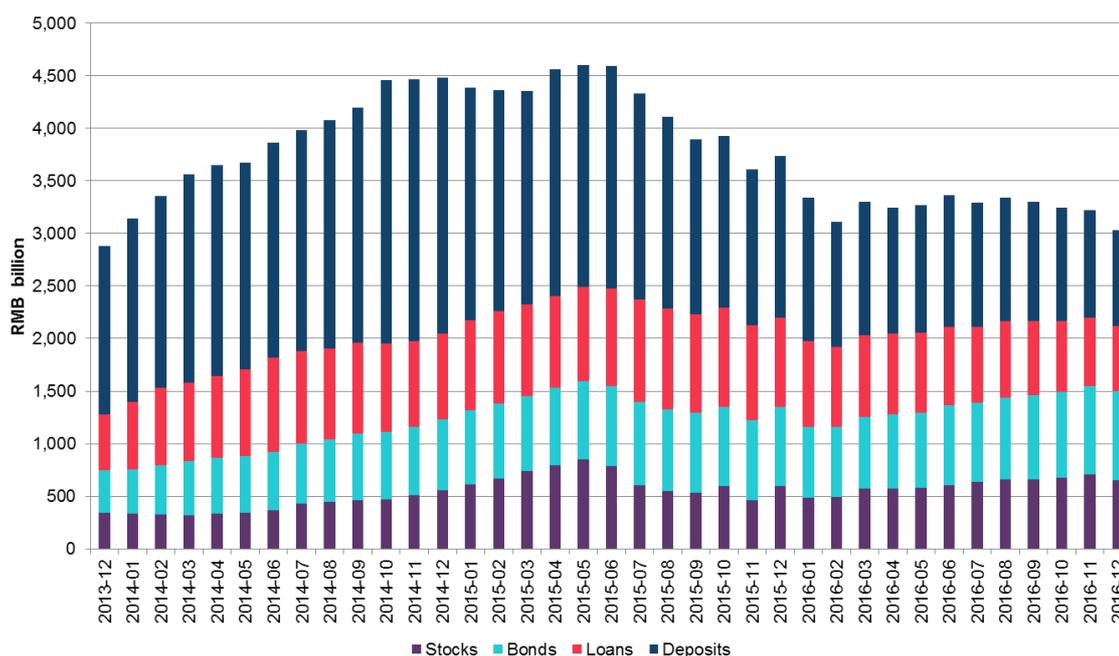
3. CURRENT STRUCTURE OF CHINA'S DOMESTIC BONDS HELD BY FOREIGN PARTICIPANTS

China is on its way of setting up an enlarged regime for promoting foreign participation in its domestic bond market. Along with the broad reach of offshore Renminbi centers around the world, and bilateral currency swap lines with a wide range of countries, China's approvals of qualified investors and investment quota under the RQFII and QFII schemes have been accelerating over the past few years. Meanwhile, the PBOC has also provided faster approvals for foreign institutions to gain access to the interbank bond market. Therefore, foreign capital inflows to China's onshore bond market have steadily increased. As of end-

2016, foreign holdings of China's domestic bonds have reached a new high of RMB852.6 billion, 13% higher than the previous year⁷.

Figure 6 shows that the overall foreign holdings of Chinese domestic assets, including bonds, equities (stocks), loans and deposits, amounted to RMB3.03 trillion at the end of 2016. Among them, foreign holdings in bonds and equities continued to increase, while those in deposits and loans fell significantly. Notably, the share of bond assets in overall foreign holdings rose to 28% from 20% at end-2015, versus a decline in the share of deposits from 41% to 30% during the period (see Figure 6), reflecting a significant shift in foreign capital's allocation to bond assets.

Figure 6. Total foreign holdings in China's domestic market by asset type (Dec 2013 - Dec 2016)



Source: the PBOC

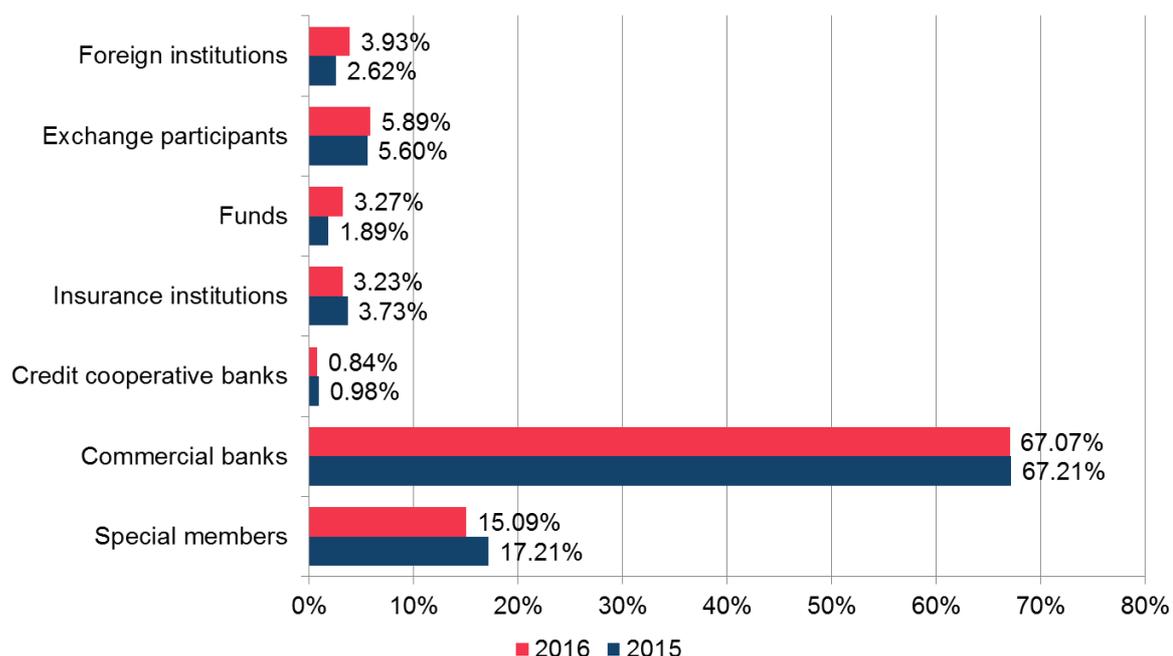
Within bond allocations, most of the foreign capital flowed into rates rather than credit bonds. Foreign participants increased their holdings by RMB233 billion of government and policy-bank bonds in 2016, a six-fold rise compared with RMB35 billion in 2015⁸. Foreign participation in China's sovereign bond market rose to 3.93% from 2.62% at end-2015 (see Figure 7).

Among the investor types with increased holding value of sovereign bonds in 2016, foreign investors contributed 14% of the total increased value, behind only nationwide commercial banks (38%) and city-level commercial banks (19%), becoming the third-biggest buyer of sovereign bonds in 2016. In contrast, foreign holdings in credit bonds fell to a record low of RMB49.4 billion, accounting for only 6% of total foreign holdings in bond assets at the end of 2016 (see Figures 8 and 9).

⁷ Source: Wind

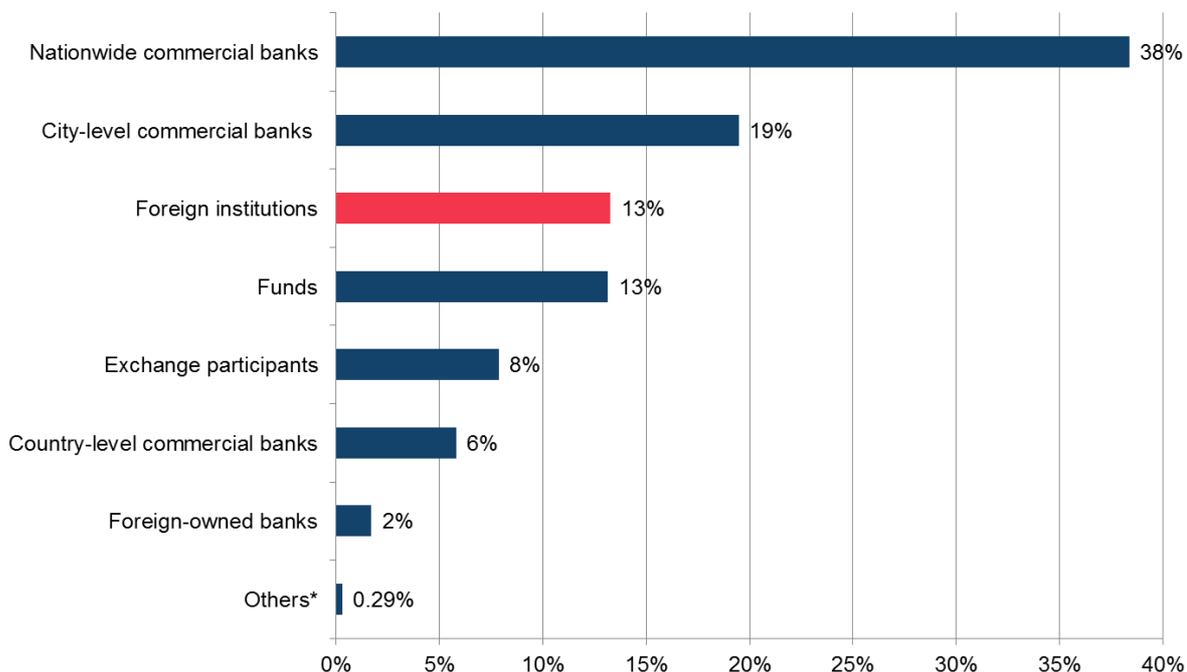
⁸ Source: Wind

Figure 7. The share in China's sovereign bond market by investor type (End-2016)



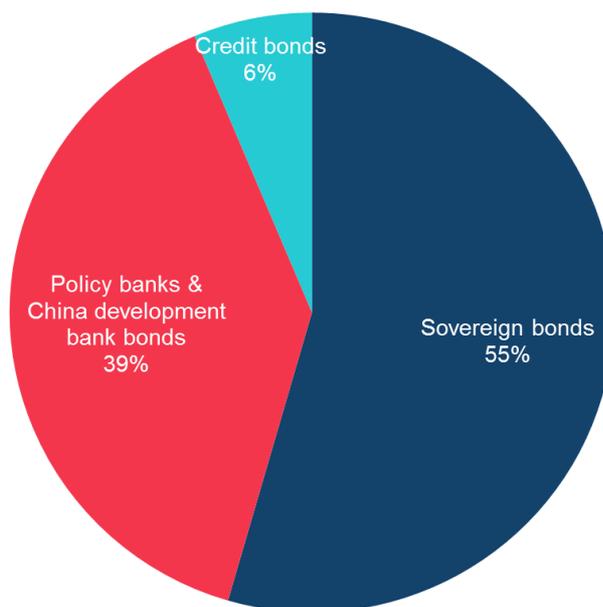
Source: Wind

Figure 8. The share in increased value of sovereign bonds by investor type in 2016



Note: Excluding the following investor types which had their sovereign bond holding value decreased in 2016: special members, rural cooperative banks, credit cooperative banks, securities companies and insurance institutions.
 Others include rural banks, other commercial banks, non-bank financial institutions, non-financial institutions, individuals and other institutes.

Source: ChinaBond website.

Figure 9. Foreign holdings by bond type in value terms (End-2016)

Notes: Foreign holdings of credit bonds include enterprises bonds recorded at CCDC, medium-term notes (MTNs) recorded at CCDC and SCH, commercial papers (CPs) and super commercial papers (SCPs) recorded at Shanghai Clearing House (SCH).

Source: Wind

The increased proportion of sovereign bonds in foreign holdings may reflect the fact that foreign investors are prone to be more cautious to Chinese assets amid increasing credit defaults in China's bond market recently. Due to China's weak market infrastructure, particularly the lack of creditable rating agencies, foreign institutions tend to hold sovereign and high-rating bonds as part of their foreign exchange reserves. **However, the incentive of diversifying to higher-yield assets and credit bonds would likely be stronger in the near future, given the currently low (or negative) yield environment in major developed markets. In this spirit, the credit bond sector could expand faster than government bond sector, once the market infrastructure and credit issues in China's bond market are considerably improved.**

Overall, at the end of 2016, foreign holdings of Chinese bonds increased to 2.52% of total outstanding value from 2.03% as of end-2015⁹, with 411 foreign institutions registered in China's bond market¹⁰. **However, the foreign participation in China's bond market is still at an early stage due to the restrictions under the current market opening programs. This reveals the need to enhance market infrastructure, trading rules and financial products with innovative measures in order to further broaden and deepen China's bond market.**

4. THE LATEST POLICY CHANGES IN CURRENT SCHEMES

In the past, China had remained prudent towards opening up its financial market and sought to restrict the movement of capital in-and-out of the country that might impose potential threats to the stability of the domestic financial system. Hence, China's bond market has been largely closed to foreign investors, resulting in the low share of foreign ownership in the domestic bond market. In recent years, China has taken steps to open up its bond market to catch up with the rapid pace of capital account liberalisation and RMB internationalisation.

⁹ The calculation is based on the data from ChinaBond website.

¹⁰ Source: ChinaBond website.

At present, China runs three main schemes that allow foreign investors to access the domestic bond market, namely the QFII, the RQFII and the PBOC Eligible-Institutions schemes, as explained below.

4.1 The Qualified Foreign Institutional Investor (QFII) scheme

The QFII scheme was launched in 2002 which initially allowed foreign investors to access the exchange market including bonds traded on the exchange market. Subsequently, there were substantial changes in the QFII regime, lowering entry barriers for foreign institutions and expanding the investment scope. In March 2013, the authorities relaxed the QFII investment restrictions and QFIIs are allowed to access the interbank bond market. In 2016, the Mainland authorities further relaxed the controls by simplifying the administration of investment quotas, the capital remittance and repatriation arrangements, and shortening the lock-up period (see details in Table 2). By the end of 2016, US\$87.3 billion of investment quota were granted to 276 QFIIs¹¹.

4.2 The Renminbi Qualified Foreign Institutional Investor (RQFII) scheme

The RQFII scheme was introduced as an extension of the QFII scheme in December 2011. Under this scheme, foreign investors can deploy offshore RMB funds to invest in onshore assets. In the first phase, Hong Kong-based subsidiaries of Chinese fund management and securities companies could apply for a RQFII license and investment quota to invest in China's capital market. The RQFII regime was subsequently expanded to more countries and regions, including developing and developed countries. As of end-2016, the aggregate quota was increased to RMB1,510 billion from RMB270 billion initially, and a total of RMB528 billion quota was granted to 175 RQFIIs¹².

Similar to the QFII scheme, the rules for RQFII scheme have been gradually relaxed. In 2013, major policy changes of RQFII were made under which the "20% equities/80% bonds" restriction on asset allocation was removed and the scope of permitted investment was expanded to include stock index futures and fixed income products traded on the interbank bond market.

In 2016, the RQFII and QFII schemes were significantly liberalised. In February, the State Administration of Foreign Exchange (SAFE) issued the *Foreign Exchange Administrative Rules on Domestic Securities Investment by QFIIs*. In September, the PBOC and SAFE jointly issued the *Circular Concerning the Relevant Matters on Domestic Securities Investment by RQFIIs*. **The changes under this "New Regime" are mainly in respect of quota administration, account management, and fund remittance of QFIIs and RQFIIs, which have been the major hurdles in effective investment strategies and fund allocations of foreign participants.** The major changes are:

- (1) **New administration on investment quota:** Under the New Regime, an investment quota is calculated according to a certain percentage of asset scale rather than the original investment quota limit. Moreover, investment quotas for foreign sovereign wealth funds, central banks and monetary authorities are unlimited based on their actual needs.
- (2) **Relaxation on inward remittance of principal amount and relevant lock-up period:** The New Regime removes the restriction on remitting the principal amount into China within 6 months after their investment quota being approved, and shortens the lock-up period of the principal amount for QFIIs/RQFIIs to 3 months upon the aggregate principal

¹¹ Source: SAFE website.

¹² Source: SAFE website.

amount remitted into China reaching RMB100 million for RQFIs, or US\$20 million for QFIs.

- (3) **Relaxation on outward remittance of funds:** The New Regime permits outward remittance of funds by RQFIs after the expiry of the relevant lock-up period. In terms of QFIs, outward remittance of principal is no longer subject to prior SAFE approval. However, outward remittance of funds by QFIs is still subject to threshold limitations.
- (4) **Improved account management:** The New Regime liberalises the quantity limitation on opening bank accounts on each QFI. Account management on QFIs and RQFIs is also unified.

4.3 Eligible institutions in the Mainland's interbank bond market (PBOC Eligible-Institutions scheme)

This pilot scheme was launched by the PBOC in 2010 to allow qualified foreign institutions to use offshore RMB to invest in the interbank bond market. At launch, three types of institutions were eligible, including foreign central banks or monetary authorities, offshore RMB clearing and participating banks. Meanwhile, sovereign wealth funds and international organizations may also access the domestic interbank bond market under this scheme.

Since 2015, a number of notable liberalisation measures under this scheme were introduced to further facilitate foreign investors to enter China's interbank bond market. Specifically, in late-May 2015, the PBOC allows offshore RMB clearing and participating banks to conduct repurchase (repo) financing by using their onshore bond holdings. In mid-July 2015, the PBOC further eased the scope of eligible bond transactions by allowing eligible entities to participate in onshore interbank bond market to engage in bond trading, bond repo, bond lending, bond futures, interest rate swaps and other trades permitted by the PBOC, without any prior approval by the PBOC or any quota restrictions.

In February 2016, the PBOC released No. 3 Announcement¹³ which further relaxed the rules applicable to foreign institutional investors accessing the interbank bond market. Firstly, the categories of eligible foreign institutional participants were extended to all qualified foreign institutional investors, including commercial banks, insurance companies, securities companies, fund management companies, as well as other types of financial institutions and medium-to-long-term institutional investors recognised by the PBOC. Secondly, the No. 3 Announcement further relaxed FX limitations which have been imposed on the foreign institutional investors. And thirdly, the No. 3 Announcement abides by the macro-prudential administration regime, and hence does not impose quota limit on specific investors. In May 2016, China further published the detailed rules to clarify the investment procedure of foreign institutional investors in the interbank bond market to facilitate the implementation of the No.3 Announcement.

The measures in 2016 moved a further step to open up the domestic bond market. However, further enhancements are advisable. For example, the current scope of qualified investors is still limited to financial institutions; some restrictions exist on bond products and quote limit, etc.; and the access procedure of the domestic interbank bond market could be further simplified and clarified in order to attract more foreign participation.

¹³ See “中國人民銀行公告 2016 年第 3 號”.

Table 2. Current framework for QFII, RQFII and PBOC Eligible-Institutions schemes			
	QFII	RQFII	PBOC Eligible-Institutions scheme
Regulatory approvals	<ul style="list-style-type: none"> • CSRC: QFII/RQFII license • SAFE: QFII quota • PBOC: Pre-filing for CIBM access 		Pre-filing with PBOC
Investment quota	<ul style="list-style-type: none"> • Only needs to pre-file with SAFE if requested quota is within the base quota or obtain approval if the requested quota exceeds base quota. • The base quota is calculated according to a certain percentage of asset scale. 		<ul style="list-style-type: none"> • Employment of the macro-prudential administration regime to foreign investors • No specific investment quota requirements. Applicant may pre-file with PBOC the anticipated investment value
Eligible fixed income products	<ul style="list-style-type: none"> • On-exchange market: government bonds, enterprise bonds, corporate bonds, convertible bonds, etc. • Interbank market: cash bonds 		<ul style="list-style-type: none"> • Foreign reserves institutions: all cash bonds, repos, bond borrowing and lending, bond forwards, IRS, FRA, etc. • Other foreign institutions: all cash bonds and other products permitted by the PBOC, offshore RMB clearing / participating banks can also trade repos.
Foreign exchange management	Onshore with the local custodian	Has to remit in offshore RMB (obtain from offshore)	Onshore/offshore
Lock-up period on principal repatriation	3 months	3 months, no restriction on open-ended fund clients	Nil
Frequency of repatriation and restrictions	Daily for open-ended funds, with threshold limitations	Daily for open-ended funds	The ratio of accumulated outward remittance need to meet some basic requirements
Source: as of end-2016. Please refer to the website of PBOC, CSRC and SAFE for the most updated rules and policies.			
<u>Abbreviations</u>			
CSRC	China Securities Regulatory Commission		
IRS	Interest Rate Swap		
FRA	Forward Rate Agreement		
CIBM	China's interbank bond market		

5. INSTITUTIONAL FEATURES THAT MAY LIMIT FOREIGN PARTICIPATION

In addition to restrictive access to the domestic market, certain institutional features are of key concerns that need to be addressed in order to promote more active foreign participation.

5.1 Fragmented framework across both trading platforms and instruments

The Chinese domestic bond market remains fragmented in terms of its regulatory framework across both instruments and trading platforms. There are multiple regulators supervising various debt instruments traded on different markets, mainly the stock exchanges and the interbank bond market. **Depending on the product and the market, foreign participants need approvals from different regulators.**

Table 3. Two major domestic bond markets in China		
	Interbank Bond Market	On-exchange Market
Regulator	PBOC	CSRC
Trading platform	China Foreign Exchange Trade System	Shanghai / Shenzhen Stock Exchanges
Central securities depository	China Central Depository & Clearing (CCDC)/ Shanghai Clearing House (SCH)	China Securities Depository and Clearing Corporation (CSDCC)
Available instruments	Central government bonds, local government bonds, policy bank bonds, central bank bills, enterprise bonds, medium-term Notes (MTNs), commercial papers (CPs), commercial bank bonds, financial institution bonds, interbank negotiable certificates of deposit, asset-backed securities, repos, bond lending, bond forwards, interest rate swap, etc.	Central government bonds, local government bonds, municipal bonds, enterprise bonds, corporate bonds, convertible bonds, asset-backed securities, private placement bond issued by small and medium-sized enterprise
Key investors	Institutional investors (banks, securities companies, insurance companies, funds, financial companies, enterprises, offshore institutions, etc.)	Securities companies, insurance companies, funds, financial companies, individual investors, enterprises
Source: PBOC, CSRC		

Domestic institutional investors mainly trade in the interbank bond market, leading to over 90% of total bond turnover taking place in the interbank market, and less than 10% on the Shanghai and Shenzhen stock exchanges in 2016¹⁴. **Each trading platform has their own set of restrictions, and not all products can be traded in both markets.** Basically, several types of bond (government bonds, enterprise bonds and corporate bonds) can be traded on both the interbank and exchange markets, while most of the rest (such as policy bank bonds, financial bonds, central bank bills, MTNs, CPs, repos, bond lending, etc.) are traded only in the interbank market. Convertible bonds and private placement bonds are traded in the exchange market.

As the bond market is divided into multiple segments with different regulators, liquidity is split and the market depth is depressed. Moreover, most hedging products are traded only in the interbank bond market. This raises the risk issue for most foreign participants, especially funds and securities companies, as most of them mainly access exchange market through QFII and RQFII schemes.

5.2 The concentrated investor base in the domestic bond market

Another key factor which hampers the liquidity of China's bond market would be the high concentration of investor structure. As of end-2016, commercial banks held 58.5% of the overall bond outstanding value. If special institutions (mostly the PBOC and policy banks) are included, the combined holdings by the banking sector account for over 60% of the total market. The holdings are even more concentrated in the government bond sector where the domestic banks held around 80% of outstanding value. In comparison, the proportion held by other non-bank financials, including insurance companies, funds and exchange participants, who tend to trade more actively, was 32% of the overall bond outstanding value at the end of 2016¹⁵.

Such a lopsided investor base is hardly to nurture bond market liquidity. China's bond turnover ratio, at 2.79 in 2016, is much lower than in the US, and is also lower than the levels of Japan and the Republic of Korea when they started to internationalise their currencies and

¹⁴ Source: Wind.

¹⁵ Source: Wind.

when commercial banks dominated the bond markets in the 1990s¹⁶. The lower turnover ratio in China can be explained by the less diversified investor profile, as well as the dominance of commercial banks in the bond markets. **A well-diversified investor base and the resulting higher market liquidity are two essential attributes for an international RMB as well as for a well-developed bond market in China.**

5.3 Lack of differentiation and transparency in credit ratings

Currently, nearly 90% of the domestic bonds are given AA or above grading by the domestic rating agencies¹⁷. The credit spreads of Chinese bonds, especially credit bonds, are often not wide enough to compensate for the underlying credit risk. Compared to international standards, there exists a huge credit rating gap and difference in assessment metrics between domestic and international rating agencies, making it quite difficult for foreign investors to identify credit differentials of Chinese corporate bonds. It is necessary to align the domestic market more with international rating standards and practices and to allow the entry of international rating agencies as well, so that foreign investors can easily track China's credit quality and to derive more sound differentiation in credit risks.

6. POSSIBLE IMPROVEMENTS

To further promote foreign participation in China's domestic bond market, the following potential improvement could be considered:

6.1 Integrate trading platforms and current foreign participation schemes

Market size and liquidity are the key attributes to the trading and pricing efficiency in the bond market. As mentioned in section 5, most of China's domestic bonds are still issued and traded separately on the interbank and exchange markets, with only a small portion of instruments available on both markets. Moreover, the trading volumes of these two markets are extremely imbalanced. The trading volume on interbank market is far exceeding 90%, while the liquidity on exchange traded bonds is relatively low.

Most of the foreign participants under QFII and RQFII schemes, such as securities companies, funds, or small and medium-sized institutional investors, gain access only to the exchange market, as the entry requirements and transaction cost on the interbank market are relatively high. The exchange market is less liquid and much smaller, leading to a higher credit spread and weak hedging capability. A more integrated trading platform could help to build up a favorable critical mass to improve pricing capability.

Furthermore, the recent policy changes under QFII and RQFI schemes have made their respective policies on investment quota, fund remittance and account management closer to each other. There would likely be further unification or integration of the QFII and the RQFII schemes, so as to reduce transaction cost and better support a more diversified investor base.

6.2 Accelerate the pace of cross-border product innovation to effectively bridge the offshore FX product strength with the domestic bond market

Increased foreign investment in Chinese bonds would result in a surging demand in related risk management. To facilitate risk diversification in RMB bond investment, it is necessary to introduce more instruments in the domestic bond market. Besides, FX instruments are also essential to hedge RMB exchange rate risk of RMB bond investment for foreign investors.

¹⁶ See details in the People's Republic of China's financial market: are they deep and liquid enough for RMB internationalization?, ADBI working paper, April 2014.

¹⁷ Source: Wind.

Despite the further opening up of the domestic FX market recently to foreign investors, leveraging on the strength and abundant supply of hedging tools in the offshore market to hedge the domestic bond assets could be another effective way. On 10 April 2017, Hong Kong Exchanges and Clearing Limited launched 5-Year China Ministry of Finance Treasury Bond Futures contract. As the world's first onshore interest rates product accessible to off shore players, the new contract is an efficient, transparent and easy-to-access tool to manage against China interest rate risk exposure¹⁸.

The advantage of offshore RMB market lies in that it is freely accessible to anyone, including private-sector entities. The liquidity of the offshore FX market has also improved considerably, with the FX turnover in RMB reaching a significant proportion of the onshore turnover volume. The Hong Kong offshore RMB market provides a solid foundation for the sustained development of RMB derivatives and hedging tools to facilitate foreign participants' risk management in FX volatility for holding Chinese bond assets.

6.3 Link up onshore and offshore bond markets to diffuse international practices and standards to the domestic market comprehensively

Similar to the Shanghai/Shenzhen-Hong Kong Stock Connect schemes, setting up a cross-border platform and developing a mutual market access to both the onshore and offshore bond markets (Bond Connect) can be a promising solution to further improve trading convenience and pricing efficiency in RMB bonds. Investors in one market would be able to trade bonds in the other market through the bridging of the Hong Kong and Mainland financial infrastructure institutions.

From the trading perspective, Bond Connect scheme would enable bond market integration across the border and between on-exchange market and interbank bond market, thereby improving liquidity. Furthermore, this integrated market can make available more standardised instruments for developing effective benchmarks for RMB-denominated assets and improve the pricing efficiency of Chinese bond assets.

Although international investors can now directly participate in the domestic RMB market, including FX and bond markets, the offshore market still serves as one central pillar supporting the RMB as a global currency. Given the well-developed offshore financial environment and infrastructure in Hong Kong, a cross-border Bond Connect scheme could reduce regulatory burdens and offer more convenient institutional conditions for foreign investors, such as credit rating with international standards and better investor protection.

Through Bond Connect, a great variety of international bonds will also be made available to the Mainland investors for their global asset allocation strategies. Through participating in an international trading platform together with professional international investors, Mainland investors could also gain experience in international market practice and regulation. In this way, Bond Connect could help develop a mature and professional investor base in, and the breadth and depth of, the Mainland domestic bond market.

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¹⁸ See "HKEX's Five-Year China Ministry of Finance Treasury Bond Futures — The world's first RMB bond derivatives accessible to offshore investors", HKEX research report, April 2017.

