Investing in China’s Bond Market
An Overview for Global Investors
July 2016
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>Accessing China’s Interbank Bond Market (CIBM)</td>
<td>2</td>
</tr>
<tr>
<td>Section 2</td>
<td>Overview of China’s Domestic Bond Market</td>
<td>8</td>
</tr>
<tr>
<td>Section 3</td>
<td>Deutsche Bank Capabilities</td>
<td>21</td>
</tr>
<tr>
<td>Section 4</td>
<td>Supplementary Material</td>
<td>24</td>
</tr>
</tbody>
</table>
Section 1  Accessing China’s Interbank Bond Market (CIBM)
CIBM Market Access: A Brief Background

I. Early Opening to Foreign Investors (2005 – 2010)
   • In 2005 the Pan Asia Fund and Asia Debt China Fund became the first foreign institutions approved to invest in the China Interbank Bond Market (CIBM).
   • In August 2010, the People’s Bank of China (PBOC) launched a pilot scheme allowing (i) foreign central banks or monetary authorities, (ii) RMB settlement banks in Hong Kong (HK) and Macau; and (iii) cross-border RMB settlement participating banks in HK and Macau to trade and settle bonds in the CIBM.

II. QFII and RQFII Liberalization (2011 – 2015)
   • In December 2011, HK-based subsidiaries of Chinese fund management and securities companies, which had been granted RQFII status during the first phase of the scheme (then limited to Hong Kong) were allowed to apply for approval and quota to invest in the CIBM via a bond settlement agent.
   • In 2012, the PBoC’s pilot CIBM scheme was extended to insurance companies in Hong Kong, Singapore and Taiwan
   • From March 2013, QFIIs were permitted, subject to PBOC approval, to invest in the CIBM within an approved quota.
   • Subsequently all RQFIIs across jurisdictions were also allowed to invest in the CIBM, subject to PBoC approval.

III. Broad Opening to Medium and Long-term Investors (2015 – Present)
   • PBoC released a notice in July 2015 allowing foreign central banks, monetary authorities, international financial organizations and SWFs to invest in the CIBM without approval requirements and quota limits. Institutions in these categories were permitted to invest without limit in the CIBM through an onshore bond settlement agent, subject to a filing with the PBoC.
   • A Feb 2016 announcement (implementation rules released in May) expanded the scope of foreign institutions permitted to invest through the new filing approach. The announcement permitted most types of foreign institutional investors to invest in the CIBM, including “commercial banks, insurance companies, securities firms, fund management companies and other asset management institutions”, their investment products, “pension funds, charity funds, endowment funds” and “other mid-term or long-term institution investors recognized by PBOC.”
   • In specifying that foreign institutional investors must be “mid-term or long-term” in their investment orientation, the February 2016 Announcement allows the PBoC flexibility to restrict investors that it considers short-term or speculative in terms of orientation.
Deutsche Bank

Highlights of the 2016 Announcement

- Removal of prior approval and quota restrictions
- Self-specified anticipated investment size*
- No lock-up period to repatriate investment principal
- Possible scope for long-oriented hedge funds to participate***

Funds Remitted into China

- FCY
- RMB

Funds Remitted Out of China

- FCY
- RMB

±10% allowable deviation in RMB to FCY ratio***

* Investors indicate anticipated investment size (should update filing if unable to remit principal matching at least 50% within nine months)
** Ability to engage in other types of trading, such as bond lending, bond forwards, or interest rate swap for hedging purposes
*** Ratio of RMB to FCY should be maintained within ±10% when capital remitted out of the market. The first such remittance does not need to follow this requirement, however it may not exceed 110% of the cumulative inward remittance in RMB or foreign currency.
Foreign institutional investors can trade bonds directly through onshore agents holding a Type A or B License

Foreign investors qualify for “Type C” status and must appoint a “Type A” investor as settlement agent to carry out bond trading on their behalf.

“Type A” participants can trade, settle and provide custody for CIBM products both on a proprietary basis and on behalf of Type C participants.

Deutsche Bank is among four foreign banks with a “Type A” license.

Foreign Institutional Investors have individually segregated bond accounts with the CCDC / SCH, which are in the name of the asset manager/name of the product.

Multiple products under the same asset manager should be filed with PBoC Shanghai separately to allow the beneficial ownership of investors to be identified.

*Type B participants can trade and settle CIBM products on a proprietary basis*
## Market Access Channels in Comparison

<table>
<thead>
<tr>
<th>Item</th>
<th>QFII</th>
<th>RQFII</th>
<th>PBOC Scheme</th>
<th>Non-FRM Foreign Institutional Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appointment of Settlement Agent</strong></td>
<td>Custodian bank has to be the settlement agent. Deutsche Bank can provide these services to clients</td>
<td></td>
<td></td>
<td>PBOC or an approved settlement agent bank like Deutsche Bank</td>
</tr>
<tr>
<td><strong>Regulatory Approvals</strong></td>
<td>CSRC: QFII/RQFII license (4-5 months) SAFE: RQFII quota (within 1 month) PBOC: Pre-filing for CIBM access (10-20 days)</td>
<td></td>
<td>Pre-filing with PBOC (10 working days for FRM and 20 working days for others)</td>
<td></td>
</tr>
</tbody>
</table>
| **Investment Quota** | QFII: only needs to pre-file with SAFE if requested quota is within the base quota or obtain pre-approval if the requested quota exceeds base quota. RQFII: Subject to SAFE’s pre-approval – separate quota for "open-ended funds" and "other product/fund " | | • Nil, applicant may specify the Anticipated Investment Volume in the registration form based on actual business needs  
• The accumulative net remit-in capital cannot exceed the Anticipated Investment Volume. Investor is required to update the registration if a higher investment volume is anticipated, | |
| **FX Management** | QFII: FX onshore with the local custodian  
✓ RQFII has to remit in quota in CNY (FX offshore);  
✓ Optional FX for repatriation | FX onshore/offshore (also see Note 1) | FX onshore/offshore (also see Note 2) | |
| **Available Fixed Income Products (Note 3)** | • Exchange Market: Government Bonds, Enterprise Bonds, ABS, Corporate Bonds, Convertible Bonds  
• CIBM: Cash bonds only, including Government Bonds, Enterprise Bonds, ABS, PBOC Bills, Financial Bonds, Commercial Paper, Mid-term Notes, Panda Bonds. For FRM, including all cash bonds, (reverse) Repos, Bond Borrowing and Lending, Bond Forwards, IRS, FRA, etc. | All cash bonds, Repos, Bond Borrowing and Lending, Bond Forwards, IRS, FRA, etc. | - All cash bonds, based on hedging needs, can trade in bond lending, bond forward, IRS, FRA and etc.  
- Offshore RMB clearing / trade settlement banks: Can also trade Repos | |
| **Lock-up period on principal repatriation** | ✓ 3 months | ✗ | ✓ 1 yr | Nil. FIIs who fail to remit in 50% of its registered investment volume within 9 months are required to re-register the anticipated investment volume with PBOC Shanghai. |
| **Frequency of repatriation and restrictions** | Daily with monthly cap | Daily | Monthly | Daily |
| **Revolving quota is allowed** | ✓ | ✓ | ✗ | ✓ |
| **Taxation** | a. 10% WHT on coupon interest except for Government Bond (issued by MOF) which is tax exempted, but there is no standard WHT practice  
b. Cash Deposit Interest is subject to 10% income tax  
c. CGT is not collected as the State Administration of Taxation has not confirmed the collection. | | | |
| **Regulatory Reporting** | Various reports prepared by settlement agent. Deutsche Bank can manage this for clients in China | | | |

**Note 1:** Foreign Reserve Managers can directly enter into China’s Interbank FX market via three channels: 1) entrusting the PBOC as their agent; 2) using inter-bank FX market members as their agent(s), and 3) directly participating in the inter-bank FX market as foreign members.

**Note 2:** The accumulative outward remittance ratio in terms of FCY vs RMB needs to remain consistent with the accumulative inward remittance ratio, where difference of +/-10% is allowed.

**Note 3:** Primary market subscription is allowed for all types of foreign investors.

**Note 4:** Investors can access CIBM via QFII/RQFII/PBCO Scheme simultaneously. In other words, the same FIIs (including foreign financial institutions and products issued by them) that has already been investing in CIBM via QFII/RQFII scheme, can make registration with PBOC Shanghai separately.
The Interbank FX Market is Open to Public Sector Institutions*

Spot Trading
- Anonymous centralized bidding
- Bilateral RFQ

Currency Pairs
- Direct trading against: USD, EUR, JPY, HKD, GBP, SGD, AUD, NZD, CHF, CAD, MYR, RUP, ZAR, KRW
- Centralized bidding/RFQ

Derivatives
- Forwards, swaps, options, CCS
- Central clearing, bilateral settlement

FX Lending
- USD / EUR / HKD
- RFQ system

*Including foreign central banks or monetary authorities, international financial organisations and sovereign wealth funds
Section 2  China Bond Market Overview
China Bond Market Overview
Supportive policies have made China’s bond market the world’s 3rd largest

Recent Developments
• Bond market development is a key pillar of China’s financial reforms. In 2015, the total outstanding notional amount of China’s domestic bond market rose by 35% YoY to RMB48tn.
• The authorities have adopted an approach known as “closing the backdoor while opening the front door”, i.e. tightening shadow banking regulation while widening access to bond issuance. Notably, policymakers have allowed local governments to issue municipal bonds, relaxed restrictions on the issuance of corporate bonds, and relaxed administrative controls on refinancing by property developers.
• Social Security Funds and Basic Pension Funds now have wider scope to invest in the bond market, while the growing domestic asset management industry is further boosting demand.
• China’s bond market is also taking on an international dimension. Policymakers have expanded interbank bond market access to all foreign medium and long-term investors, while relaxing QFII control with the introduction of a filing procedure for “base quota”. Meanwhile, the revival of the Panda bond market is opening a new funding channel for foreign issuers.
• Instances of credit bond defaults and the introduction of a deposit insurance scheme in 2015 will help to foster greater credit risk differentiation.
• Deutsche Bank expects the size of the onshore RMB bond market to grow by 20% YoY in 2016.

Source: Wind, DB Research, BIS
# Overview of Chinese onshore bond markets and regulators

The CIBM represents more than 90% of the total onshore market.

<table>
<thead>
<tr>
<th>Regulator</th>
<th>Interbank Bond Market</th>
<th>Exchange Bond Market</th>
<th>Commercial Bank Counter Market*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National Association of Financial Market Institutional Investors (NAFMII)</td>
<td>CSRC</td>
<td>PBoC</td>
</tr>
<tr>
<td>Trading/Transaction</td>
<td>China Foreign Exchange Trade System (CFETS)</td>
<td>Shanghai / Shenzhen Stock Exchanges</td>
<td>Banks</td>
</tr>
<tr>
<td>Central Securities Depository</td>
<td>China Central Depository &amp; Clearing (CCDC) / Shanghai Clearing House (SCH)</td>
<td>China Securities Depository and Clearing Corporation (CSDCC)</td>
<td>Commercial banks</td>
</tr>
</tbody>
</table>


| Key investors | Institutional investors (banks, rural credit cooperatives, securities companies, insurance companies, funds, financial companies, enterprises, offshore institutions, etc.) | Small and medium-sized institutional investors (securities companies, insurance companies, funds, financial companies, individual investors, enterprises, QFII) and individuals | Individual investors |

| Contribution to primary issuance in 2015 | 96.8% | 1.3% | 1.9% |
| Share of outstanding bond market value at end-2015 | 93.4% | 4.1% | 1.9% |

Source: CCDC, Moody’s

* The commercial bank counter market is considered an extension of the interbank market.
Bond Market Structure Overview

China Interbank Bond Market (CIBM)

CFETS

SHCH

CCDC

PBoC (CNAPS)

Exchange Market

SSE

SZSE

CSDCC

Commercial Banks

Source: NAFMII, ADB

Deutsche Bank
Government-related issuers account for the bulk of the total bond market

Composition of outstanding bonds (RMB48.5tn at end-2015)

Source: CCDC, ADB, Deutsche Bank Research

Domestic issuance volumes surged in 2015 (RMB bn)

Gov't & Policy Bank Bonds 45%
Corporate Debt 26%
Municipal Bonds 10%
Financial Institution Bonds 13%
Other 6%

2015 increase in issuance volumes was driven by policy support for new segments of the market, such as interbank CDs, municipal bonds, corporate bonds and ABS

Gov't Bond Turnover Ratio: Regional Comparison (Q1 2016)

Source: CCDC, ADB, Deutsche Bank Research

Deutsche Bank
Although gradually diversifying, bond market investment remains highly concentrated with commercial banks.

**Bond Depository Balance by Holder Type (May 2016)**
- Commercial Banks: 62.84%
- NBFI: 0.23%
- Securities Firms: 0.83%
- Insurance Institutions: 5.28%
- Funds Institutions: 15.03%
- Non-financial Institutions: 0.02%
- Individuals: 1.61%
- Exchanges: 4.25%
- External institutions: 1.61%
- Credit Cooperative Banks: 2.21%
- Special Members: 6.08%
- Other: 6%

**Holders of CGBs (May 2016)**
- Commercial Bank: 67%
- Special Members: 16%
- Exchange: 6%
- Insurance Co: 3%
- Offshore Institution: 3%
- Fund House: 3%
- Trust Cooperative: 1%

**Holders of Policy Bank Bonds (May 2016)**
- Commercial Bank: 69%
- Fund House: 19%
- Insurance Co: 5%
- Trust Cooperative: 4%
- Offshore Institution: 2%
- Securities Co: 1%

**Holders of Credit Bonds (May 2016)**
- Fund House: 45%
- Commercial Bank: 32%
- Insurance Co: 7%
- Exchange: 5%
- Special Members: 4%
- Trust Cooperative: 4%
- Securities Co: 2%
- NBFI: 1%

**Investor Profile: Government Bonds**
- Jun-97: 100%
- Jun-00: 90%
- Jun-03: 80%
- Jun-06: 70%
- Jun-09: 60%
- Jun-12: 50%
- Jun-15: 40%
- Jun-18: 30%
- Jun-21: 20%
- Jun-24: 10%
- Jun-27: 0%

**Source:** Thomson Reuters, Deutsche Bank Research
Chinese state and development banks represent a considerable share of the market at all maturities.

Source: Data from CCDD
**Index membership in due course**

Improvements in access support the case for inclusion in fixed income benchmarks

- Despite relaxations in CIBM market access, expectations of currency weakness have been a factor limiting foreigners’ holdings of onshore RMB bonds.
- Over time, China’s market access programs are shifting from approval to registration-based mechanisms.

- China remains underweight in international bond portfolios – less than 2% of outstanding CNY bonds (vs. >30% for the US).
- JPM’s index research division has placed the onshore CGB market under review for possible inclusion into its EM local bond index family. The GBI EM Global Diversified Index is tracked by ~$180bn of AUM (the maximum weight allowed by a single market is 10%).
- Citigroup Index LLC stated in March that it “welcomes the regulatory changes geared toward opening markets and will continue to assess China’s eligibility”

- RMB inclusion in the IMF’s SDR basket, effective October 2016, is expected to promote greater use of the RMB as a reserve currency and drive demand for government debt, as well as higher overall interest in corporate credit.
- From Q4 2016, the IMF will separately identify the RMB in its official Currency Composition of Official Foreign Exchange Reserves (COFER) database.
- Beyond EM indices, eventual inclusion in Global benchmarks could bring significant inflows – e.g. 1-2% of index weight in the JPM Global IG Aggregate Bond Index could result in total bond flow of USD40-60bn into China.

**Domestic RMB assets held by overseas entities**

**Ownership levels in global bond markets**

**SDR Inclusion has placed RMB bonds in spotlight**

Chinese debt owned by foreign investors, in USD bn

- **Domestic Investors**
- **Foreign investors**

<table>
<thead>
<tr>
<th>Country</th>
<th>Domestic Investors</th>
<th>Foreign investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>~1.5%</td>
<td>~38%</td>
</tr>
<tr>
<td>Japan</td>
<td>~9%</td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Private investors**

- **Public sector institutions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Private investors</th>
<th>Public sector institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MID-2016</td>
<td>100</td>
<td>16.5</td>
</tr>
<tr>
<td>2020 OUTLOOK</td>
<td>500</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: SAFE, CEIC, Standard & Poor, DB Research by Linan Liu

Deutsche Bank
Global sovereign market yield curves

Sovereign Yield Curves

Source: Thomson Reuters (as of 25-6-2016)

Deutsche Bank
## CIBM Characteristics

<table>
<thead>
<tr>
<th>Instrument</th>
<th>CGB</th>
<th>Policy Bank Bond</th>
<th>Enterprise Bond</th>
<th>Gov’t Support Inst.</th>
<th>Tier 2 capital instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Currency/Index</strong></td>
<td>CNY</td>
<td>CNY</td>
<td>CNY</td>
<td>CNY</td>
<td>CNY</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>3M to 50Y</td>
<td>3M to 30Y</td>
<td>3Y to 30Y</td>
<td>1Y to 30Y</td>
<td>2Y to 10Y</td>
</tr>
<tr>
<td><strong>Outstanding (CNY Bn)</strong></td>
<td>8417</td>
<td>10716</td>
<td>3062</td>
<td>1178</td>
<td>Authorized Corp</td>
</tr>
<tr>
<td><strong>Share (%)</strong></td>
<td>22.8%</td>
<td>27.4%</td>
<td>7.8%</td>
<td>3.0%</td>
<td>457</td>
</tr>
<tr>
<td><strong>Issuer</strong></td>
<td>MoF</td>
<td>3 Policy Banks</td>
<td>Authorized Corp</td>
<td>Authorized Corp</td>
<td>1.17%</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Discount, Bullet</td>
<td>Discount, Bullet, FRN, Option</td>
<td>Bullet, FRN, Option</td>
<td>Bullet</td>
<td>Bullet, FRN</td>
</tr>
<tr>
<td><strong>Coupon</strong></td>
<td>Various</td>
<td>Various</td>
<td>Various</td>
<td>Various</td>
<td>Various</td>
</tr>
<tr>
<td><strong>Auction Frequency</strong></td>
<td>Weekly</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Settlement</strong></td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
</tr>
<tr>
<td><strong>Day/Count</strong></td>
<td>Act/Act</td>
<td>Act/Act</td>
<td>Act/Act</td>
<td>Act/Act</td>
<td>Act/Act</td>
</tr>
<tr>
<td><strong>Bid/offer Spread</strong></td>
<td>3bps up to 10yrs, and 6-8bps for 10y+</td>
<td>4bps up to 5yr and 4-5bps for longer</td>
<td>5-15bps</td>
<td>4-5bps</td>
<td>Wide/generally no liquidity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instrument</th>
<th>MTN</th>
<th>CP</th>
<th>ABS</th>
<th>Panda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Currency/Index</strong></td>
<td>CNY</td>
<td>CNY</td>
<td>CNY</td>
<td>CNY</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>2Y to 10Y</td>
<td>&lt; 1Y</td>
<td>9M to 32Y</td>
<td>7Y and 10Y</td>
</tr>
<tr>
<td><strong>Issuer</strong></td>
<td>Authorized Corp</td>
<td>Authorized Corp</td>
<td>Trusts</td>
<td>Foreigners</td>
</tr>
<tr>
<td><strong>Outstanding</strong></td>
<td>1752</td>
<td>904</td>
<td>336</td>
<td>3.13</td>
</tr>
<tr>
<td><strong>Share (%)</strong></td>
<td>4.5%</td>
<td>2.3%</td>
<td>0.9%</td>
<td>0.01%</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Bullet, FRN, Option</td>
<td>Discount, Bullet, FRN</td>
<td>Discount, Bullet, FRN</td>
<td>Bullet</td>
</tr>
<tr>
<td><strong>Coupon</strong></td>
<td>Various</td>
<td>Various</td>
<td>Various</td>
<td>Various</td>
</tr>
<tr>
<td><strong>Auction Frequency</strong></td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Settlement</strong></td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
<td>T+1/T+0</td>
</tr>
<tr>
<td><strong>Day/Count</strong></td>
<td>Act/Act</td>
<td>Act/Act</td>
<td>Act/Act</td>
<td>Act/Act</td>
</tr>
<tr>
<td><strong>Bid/offer Spread</strong></td>
<td>5 to 10bps for high grade</td>
<td>3-5bps</td>
<td>Wide/generally no liquidity</td>
<td>Wide/generally no liquidity</td>
</tr>
</tbody>
</table>

Sources: DB Global Markets Research, ChinaBond (July 2015)
Corporate sector represents a growing share of China’s bond market
Exchange issuance surged in 2015, but the interbank market remains the primary venue for corporate sector bonds

Total Bonds Outstanding
2005-15

Breakdown of Corporate Sector Bonds Outstanding
May 2016

Terminology

- **Enterprise bonds**: Most established segment of the corporate bond market. Issuers are usually large SOEs with bonds typically issued in the CIBM
- **MTNs/CP and other corporate instruments**: A range of different issuers utilize this market. NAFMII serves as the interbank bond market regulator
- **Corporate bonds**: Issuers are mostly listed companies with bonds issued on the exchange (CSRC-regulated)

The corporate credit market had RMB12.45trn in outstanding bonds at end-Jan, or 30% of China’s bond market.

Source: Wind, Moody’s, DB Research

Deutsche Bank
Significant potential for further expansion in China’s credit market
Bond financing accounts for only ~12% of China’s corporate debt

Source: IMF, Deutsche Bank Research
The panda bond market is emerging from dormancy
Panda bonds represent only ~0.05% of China’s domestic bond market

- A Panda bond is a RMB-denominated bond from a non-China registered issuer, sold in the PRC.
- After a pilot program with international development banks in 2005 and the first corporate Panda bond issued in 2014, PBOC began another push to launch the Panda bond market in 2015 by sharing draft regulations with banks and allowing the Hong Kong subsidiaries of two commercial banks to issue.
- To date, non-Chinese issuers have included sovereigns/quasi-sovereigns and high quality Fis and corporates.
- The IFC has projected that outstanding Panda bonds will exceed USD50bn by 2020…
- Deutsche Bank’s China FIC Research analyst forecasts USD20bn in issuance in 2016 alone

Regulatory uncertainty aside, several conditions are supportive of further market development

- Continued easing cycle in China
- Declining yield environment in China will increase mark-to-market gains in RMB for Panda bond investors, while offering lowering funding costs and refinancing risk for issuers
- As offshore funding costs remain higher, Dim Sum bond issuers may be motivated to refinance via Panda bonds: RMB364bn and RMB176bn of Dim Sum bonds due to mature in 2016 and 2017, of which 28% and 65%, respectively of maturing notional amount from issuers incorporated outside China.
- China is home to the world’s biggest pool of savings (USD21tn at mid-2015), which cannot be easily deployed outside of China. Panda bonds offer onshore investors no currency risk, an opportunity for portfolio diversification and capital gain opportunities on the easing cycle.
- International issuers may be drawn by opportunity to make political gesture in support of CNY internationalization, as well as the opportunity to diversify accounting/reporting currency

The Panda bond market would be RMB1.18tn (USD181bn) in size if it accounted for a comparable share of the domestic market as Japanese Samurai bonds

Source: CCDC, Thomson Reuters, Dagong Credit Research

Deutsche Bank
Identifier
Section 3  Deutsche Bank Capabilities
Deutsche Bank’s CIBM capabilities

• DB China has been an active player in China interbank bond market (CIBM)
  • Dedicated onshore CNY sales team, presenting both local perspectives and global visions
  • Strong trading house covering full range of CNY products, including rates and credit, cash, derivatives and others
  • Top five market maker among foreign banks
  • First class fixed income research
  • Frequently trade with various foreign institutions, including central banks/monetary authorities/RMB trade settlement banks

• Obtained settlement agency license from PBOC in October 2013
  • Offer “one-stop” solution from bond trading to settlement and custody
  • Joint services by Global Markets (as the execution broker and/or counterparty) and Investor Services (as the settlement agent and custodian)
  • Ensure a seamless operational process from trading to settlement

• A full licensed provider in China for foreign investor’s access to China securities market
  • One of four foreign banks equipped with local custody & bond settlement agency capabilities to support client’s investment in both the exchange and inter-bank bond market

• Custody team with extensive experience
  • Adhere to international standards in relation to asset protection and client data segregation
  • Continued expansion in terms of number of clients, product offering and team size
  • Abundant experience in serving foreign investors: offer full suite of SWIFT reporting, understand client’s requirements, first-hand market info, quick turnaround time, etc.
  • Award winning services

Best Service Provider – Liquidity Management, Asia-Pacific
The Asset Triple A Treasury, Trade and Risk Management Awards 2016

Rank No. 1 (Unweighted)
Rank No. 4 (Weighted)
ISF Sub-Custody Survey 2016, China

Best Subcustodian, China - Rising Star
The Asset Triple A Asset Servicing, Investor and Fund Management Awards 2015
Deutsche Bank in China

In 1872, Deutsche Bank opened its first overseas branch in Shanghai, just two years after its founding.

An end-to-end solutions provider for investments in China

- Over 600 employees in Mainland China
- 1,500 employees based in Hong Kong – one of the bank’s four hubs in APAC
- A comprehensive suite of cross-border RMB solutions
- Licensed settlement agent for the China Interbank Bond Market since 2013
- Full suite of custody solutions from pre-trade to post-trade
- The No. 1 provider of liquidity to Asian FX markets (Euromoney, 2014)
- One of the first banks to execute onshore RMB FX option trades, CNH cross-currency swaps and CNH forwards
- Leading Asian equities franchise (first day participant in the Shanghai-Hong Kong Stock Connect)
- One of the largest China A-shares ETF providers in Europe and the U.S.
Section 4  Supplementary material
Pre-Filing and Account Opening Process

Notes:
1) Foreign reserve managers: PBOC will provide email confirmation within 10 working days upon receipt of registration form.
2) Others: PBOC SHH will provide registration acknowledgment within 20 working days upon receipt of registration form. The acknowledgment is valid for 3 months (i.e. account opening shall be completed within this period of time).
CIBM Cash Bond Trading & Settlement Process

1. Negotiate deal
   - Client executes order with trade counterparty (could be DB GM or other counterparties)

2. Contact DB Global Markets (GM) to input trades
   - Client contacts DB GM (as broker) to input trades in CFETS
     - Trading sessions (9:00 am to 12 noon and 1:30 pm to 4:30 pm).

3. DB GM input trades in CFETS
   - Both DB Global Markets (GM) and counterparty input trades in CFETS (by 4:30pm). Once the trade is input in CFETS, the transaction details will be automatically mirrored to the CCDC/SCH system.

4. DB GM prints trading ticket from CFETS and passes to DB GSO for settlement

5. Instruction

6. Affirm trades
   - DB GSO and counterparty check the trade details and affirm in CCDC/SCH system.
   - DB GSO effects payment to client’s designated DVP cash account via CNAPS.

7. Effect payments

8. Transfer cash

9. Settlement Confirmation

Note 1: Settlement is on a trade-by-trade basis – DVP (on T+0 or T+1)
Note 2: We pay purchase amount to CCDC/SCH at client level by batch.
Note 3: At 4:30pm, CCDC/SCH would return any residual balance in client’s DVP cash account in one lump sum.
Repo/Reverse Repo Trading & Settlement Flowchart

1. Negotiate deal
   - Client/GC
   - Counterparty (e.g. DB GM)

2. Contact DB GM to input trades
   - DB Global Markets
   - DB GM input trades in CFETS
   - Counterparty input trades in CFETS

3. DB GM prints trading ticket from CFETS and passes to DB GSO for settlement
   - DB GSO (as settlement agent)

4. DB GM contacts DB GM to input trades
   - Client/GC

5. Instruction
   - Both DB GM and counterparty input trades in CFETS (by 4:30pm). Once the trade is input in CFETS, the transaction details will be automatically mirrored to the CCDC/SCH system.

6. Affirm trades
   - Both DB GSO and counterparty check the trade details and affirm in CCDC/SCH system.

7a. Effect payment and receive bonds (reverse repo party)
   - 7b. Deliver bonds and receive payment (repo party)

8a. Deliver bonds and receive payment (repo party)
   - 8b. Effect payment and receive bonds (reverse repo party)

9. Settlement Confirmation
   - CCDC/SCH transfer bond from repo party’s account to reverse repo party’s account if there is sufficient cash in repo party’s designated DVP cash account and there are sufficient bonds in reverse repo party’s bond account.

Trading

| TD | Client executes order with trade counterparty (could be DB GM or other counterparties) |
| TD | Client contacts DB GM (as broker) to input trades in CFETS |
| TD by 4:30pm | Both DB GM and counterparty input trades in CFETS (by 4:30pm). Once the trade is input in CFETS, the transaction details will be automatically mirrored to the CCDC/SCH system. |

Settlement

| SD | Client/GC sends settlement instruction via MT54X to DB GSO before deadlines |
| SD by 4:30pm | Both DB GSO and counterparty check the trade details and affirm in CCDC/SCH system. |
| SD by 4:30pm | If client is a reverse repo party, DB GSO effects payment to client’s designated DVP cash account via CNAPS. |

Maturity Day

| MD by 4:30pm | If client is a repo party, DB GSO effects payment to client’s designated DVP cash account via CNAPS. |
| MD | CCDC/SCH transfer bond from reverse repo party’s account to repo party’s account if there is sufficient cash in reverse repo party’s designated DVP cash account and there are sufficient bonds in repo party’s bond account. |

Note 1: Settlement is on a trade by trade basis – DVP (on T+0 or T+1).
Note 2: We pay purchase amount to CCDC/SCH at client level by batch.
Note 3: At 4:30pm, CCDC/SCH would return any residual balance in client's DVP cash account in one lump sum.
Timeline of Developments

- **2010**
  - PBOC rolled out Pilot Scheme to allow foreign CBs/Monetary Authorities, RMB clearing banks, and RMB trade settlement banks to invest in CIBM (limited to cash bonds only)
  - Debut of RQFII scheme. RQFIs allowed to access CIBM (limited to cash bonds only)

- **2011**
  - QFIIs allowed to access CIBM (limited to cash bonds only)
  - Change of settlement mechanism to DVP in CIBM
  - All CIBM trades must be done via CFETS

- **2012**
  - Foreign investors allowed to participate in primary market subscription

- **2013**
  - CIBM opened to foreign insurance companies in HK/SG/TW
  - QFIIs allowed to access CIBM (limited to cash bonds only)
  - Change of settlement mechanism to DVP in CIBM
  - All CIBM trades must be done via CFETS

- **2014**
  - Investors able to trade with parent company or other subsidiaries/branches under the same parent company
  - RMB clearing banks & trade settlement banks allowed to do Repos/Reverse Repos
  - Market entry for foreign reserve managers changed to pre-filing approach and investment scope expanded to include Repos/Reverse Repos, Bond Borrowing and Lending, Bond Forwards, Interest Rate Swaps, Forward Rate Agreement

- **2015**
  - Further expansion of investment scope for QFII/RQFII/PBOC Pilot Scheme participants.
  - Clarification of foreign investor’s tax practices in CIBM
  - CIBM opened up to more types of foreign institutions, including commercial banks, insurance companies, securities firms, fund management companies, other asset management companies and products issued by those FIs, as well as other medium-long term investors recognized by PBOC (i.e. pension fund, charity fund, and endowment fund)
  - PBOC rolled out ‘Pre-filing’ approach to all types of foreign investors and removed quota limitation
  - Foreign investors allowed to remit in/out RMB or foreign currency for CIBM investments
  - Bond settlement agent may also provide custodian services in CIBM

- **2016 and Beyond**
### Contact Us

#### Institutional Client Group (ICG) – China

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Wachtel</td>
<td>Director – Institutional Client Group</td>
<td><a href="mailto:michael.wachtel@db.com">michael.wachtel@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+86 (21) 2080 2812</td>
</tr>
<tr>
<td>Lillian Tao</td>
<td>Vice President – Institutional Client Group</td>
<td><a href="mailto:lillian.tao@db.com">lillian.tao@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+86 (21) 2050 2884</td>
</tr>
</tbody>
</table>

#### Investor Services - Sales

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathryn Harkin</td>
<td>Investor Services Sales, APAC</td>
<td><a href="mailto:kathryn.harkin@db.com">kathryn.harkin@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+852 2203 6547</td>
</tr>
<tr>
<td>Helen Baker</td>
<td>Investor Services Sales, Europe</td>
<td><a href="mailto:helen.baker@db.com">helen.baker@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+44 207 541 9217</td>
</tr>
</tbody>
</table>

#### Investor Services - Product Management

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicky Tsai</td>
<td>Head of Investor Services, China</td>
<td><a href="mailto:vicky.tsai@db.com">vicky.tsai@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+86 (21) 2080 2894</td>
</tr>
<tr>
<td>Mark Law</td>
<td>Head of Product, North Asia</td>
<td><a href="mailto:mark.law@db.com">mark.law@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+852 2203 7111</td>
</tr>
</tbody>
</table>

#### Global Markets – China

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beng-Hong Lee</td>
<td>Executive Vice President &amp; Head of Markets, Deutsche Bank (China) Limited</td>
<td><a href="mailto:beng-hong.lee@db.com">beng-hong.lee@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+86 (21) 2080 2821</td>
</tr>
</tbody>
</table>

#### Global RMB Solutions

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amir Hoosain</td>
<td>Director – Global Renminbi Solutions</td>
<td><a href="mailto:amir.hoosain@db.com">amir.hoosain@db.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+852 2203 8429</td>
</tr>
</tbody>
</table>
This document is intended for discussion purposes only and does not create any legally binding obligations on the part of Deutsche Bank AG and/or its affiliates ("DB"). Without limitation, this document does not constitute an offer, an invitation to offer or a recommendation to enter into any transaction. When making an investment decision, you should rely solely on any specific final documentation relating to a transaction and not the summary contained herein. DB is not acting as your legal, financial, tax or accounting adviser or in any other fiduciary capacity with respect to any proposed transaction mentioned herein. This document does not constitute the provision of investment advice and is not intended to do so, but is intended to be general information. Any product or proposed transaction mentioned herein may not be appropriate for all investors and before entering into any transaction you should take steps to ensure that you fully understand the transaction and have made an independent assessment of the appropriateness of the transaction in the light of your own objectives, needs and circumstances, including the possible risks and benefits of entering into such transaction. For general information regarding the nature and risks of the proposed transaction and types of financial instruments please go to www.db.com/legal-resources.

You should also consider seeking advice from your own advisers in making any assessment on the basis of this document. If you decide to enter into a transaction with DB, you do so in reliance on your own judgment. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Any projections are based on a number of assumptions as to market conditions and there can be no guarantee that any projected results will be achieved. Past performance does not guarantee or predict future results. This material was prepared by a Sales or Trading function within DB, and was not produced, reviewed or edited by the Research Department. Any opinions expressed herein may differ from the opinions expressed by other DB departments including the Research Department. Sales and Trading functions are subject to additional potential conflicts of interest which the Research Department does not face. DB may engage in transactions in a manner inconsistent with the views discussed herein. DB trades or may trade as principal in the instruments (or related derivatives), and may have proprietary positions in the instruments (or related derivatives) discussed herein. DB may make a market in the instruments (or related derivatives) discussed herein. Sales and Trading personnel are compensated in part based on the volume of transactions effected by them. DB seeks to transact business on an arm’s length basis with sophisticated investors capable of independently evaluating the merits and risks of each transaction, with investors who make their own decision regarding those transactions.

The distribution of this document and availability of these products and services in certain jurisdictions may be restricted by law. You may not distribute this document, in whole or in part, without our express written permission. DB SPECIFICALLY DISCLAIMS ALL LIABILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR OTHER LOSSES OR DAMAGES INCLUDING LOSS OF PROFITS INCURRED BY YOU OR ANY THIRD PARTY THAT MAY ARISE FROM ANY RELIANCE ON THIS DOCUMENT OR FOR THE RELIABILITY, ACCURACY, COMPLETENESS OR TIMELINESS THEREOF. DB is authorized under German Banking Law (competent authority: BaFin - Federal Financial Supervising Authority) and regulated by the Financial Services Authority for the conduct of UK business. In the US, Deutsche Bank Securities Inc. is regulated by the Securities and Exchange Commission, a member of the NYSE, FINRA, NFA and SIPC. In Hong Kong, this document is distributed by DB's Hong Kong Branch is regulated by the Hong Kong Monetary Authority. In Singapore, this document is distributed by DB's Singapore Branch and is regulated by the Monetary Authority of Singapore.