



THE PEOPLE'S BANK OF CHINA
REPRESENTATIVE OFFICE FOR EUROPE

London RMB Business Quarterly

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Foreword



Catherine McGuinness
Chair of Policy and Resources
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The world is increasingly recognising the challenges posed by COVID-19 and climate change. Now, more than ever, the UK's global outlook and reach, and understanding of major partner markets has significant value in connecting markets and supporting resilience and sustainability. As we look ahead, to a global recovery and the climate transition to net-zero, the depth and breadth of the UK's financial and professional services (FPS) expertise will have a key role to play in supporting a sustainable and resilient global economy.

The London RMB Business Quarterly report supports the UK's position as a leading RMB hub outside China, providing an overview of the market for the Chinese currency in the UK. The report demonstrates the UK's FPS sector innovation and resilience, as the sector seek out new innovative ways to engage with the Chinese currency in a post COVID-19 world. The UK market strength is reflected in its ability to retain its position as a leading RMB trading hub outside China.



Giles French
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We are very pleased with the partnership between the City of London Corporation and the People's Bank of China Representative Office for Europe on the London RMB Business Quarterly report. It highlights the UK's influence as a leader in the RMB offshore business and the PBoC's efforts to develop and sustain the RMB at home and abroad.

The City of London is home to around 40 Chinese financial and professional services firms which joined the UK's financial market to build their international presence. The RMB is an important global currency, and it is natural as home to the world's largest FX market, that the UK monitors its use and innovations closely.

With access to onshore RMB investments in China rapidly increasing, opportunities for new products and ways to manage currency exposure are also growing. This makes for exciting times for the City of London and international investors. In the eleventh issue of the London RMB Business Quarterly we see the UK's offshore RMB market has remained resilient. The report highlights the opportunities for the onshore and offshore RMB market to support the development of China's newly launch carbon markets and China's green bond market as the world look towards mobilising private financing to meet net zero goals.

The London RMB Business Quarterly report serves to contribute to the understanding of the UK's offshore market, providing the most recent data, policies and commentaries from market participants. In addition, it aims to promote the healthy and sustainable development of the UK's offshore RMB market by monitoring and providing feedback to regulatory bodies in both countries.

We would like to thank all our valued partners who have contributed to the eleventh issue of the London RMB Business Quarterly report. Your contributions play a major part in the success of this quarterly report.

Market Overview

In Q2 2021, China's GDP registered a growth of 7.9%, contributing to an average growth of 5.5% over the past two years and an increase of 0.5 percentage points from Q1. London's offshore RMB market also showed its resilience. Almost all indicators including RMB FX trading, the value of new Dim Sum bonds issuance, Sino-Britain cross-border RMB transactions, RMB deposits and loans balance enjoyed an YoY increase. According to SWIFT, the UK maintained its position as the biggest RMB FX hub in the world and the second biggest offshore RMB payments centre in the world.



London Skyline

London RMB Foreign Exchange Market

During June 2021, about 34% of all CNH spot trading on EBS took place during EMEA trading hours, up 1% from June 2020. In Q2 2021, the average daily CNH FX trading volume in London stood at GBP74.38 billion, up 13.38% YoY.

London RMB Bond Market

Between April and June 2021, 10 new Dim Sum bonds were listed on the London Stock Exchange, with the value of RMB7.21 billion, up 104.40% YoY. By the end of June, there were 149 Dim Sum bonds listed on the London Stock Exchange with the outstanding value of RMB6.33 billion and an average coupon rate of 3.44%.

London RMB Credit Market

The outstanding RMB deposits in London hit a record high in Q2 2021. By the end of June, the amount of RMB deposits reached RMB88.5 billion, up 19.23% YoY. The outstanding amount of RMB loans reached RMB65.34 billion, up 1.68% YoY.

London RMB Clearing

Between April and June 2021, the cumulative volume of RMB clearing in the UK was RMB2.50 trillion, close to the volume in Q2 2020. The average daily clearing volume was RMB42.33 billion. By the end of June, the total cumulative RMB clearing volume reached RMB57.24 trillion. China Construction Bank (CCB) London Branch became the RMB clearing bank in the UK in June 2014.

China-UK RMB Cross-Border Settlement

In Q2 2021, total cross-border RMB transactions between China and the UK stood at RMB456.53 billion, up 79.1% YoY. Within this, cross-border RMB receipts and payments were RMB221.30 billion and RMB235.23 billion respectively, representing a net inflow of RMB13.93 billion from China to the UK. This net inflow was RMB4.53 billion higher than the same period of 2020. Cross-border RMB receipts and payments of Sino-British bilateral trade in goods rose to RMB27.81 billion, accounting for 5.4% of the total amount of Sino-British bilateral trade in goods during the same period.

UK's Rank as Offshore RMB Centre

The UK remained the biggest RMB FX hub in the world and the second biggest offshore RMB payments centre. In June 2021, offshore RMB foreign exchange transactions in the UK accounted for 36.74%, up 3.8% from last June.

RMB in Global Currency Reserves

According to IMF, there was an upward trend in RMB share in the global currency reserves, reaching a figure 2.61% as of Q2 2021, up 0.16% from Q1 2021. When it was first included in the SDR basket, the share registered at 1.07% in Q4 2016.

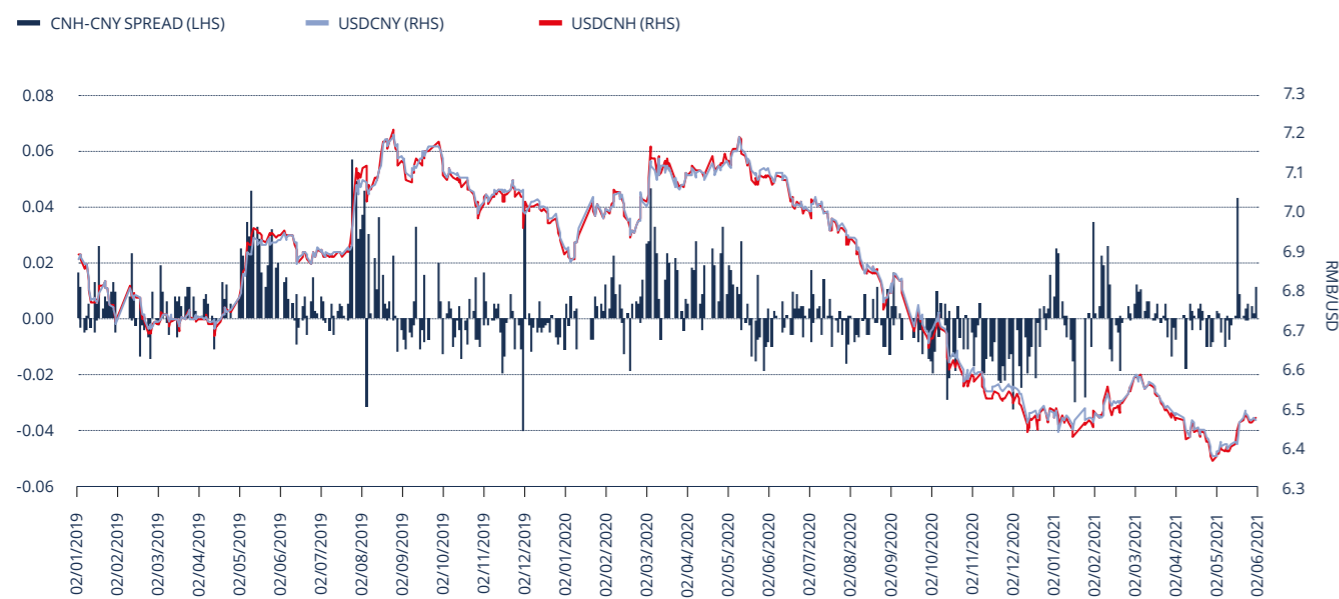
RMB Exchange Rate

April to June 2021, the RMB strengthened against USD from 6.57 to 6.36 at first, and then fell back to 6.46. The RMB FX rate kept fluctuation in both directions. The spread between CNH and CNY was very small and fluctuated between positive and negative. The sustained economic stability and recovery in China and the sound monetary policy continued to provide strong support for RMB FX rate. However, with the Federal Reserve unexpectedly turning hawkish in June, the USD index moved upwards and exerted

pressure on the RMB FX rate. In Q2 2021, the average FX spot rate of USD/CNH in the offshore market was 6.4580, with the average USD/CNY onshore FX spot rate 6.4573. The spread between offshore and onshore in this period was +8 basis points, while the spread of our last review period was +1 basis points.

The Onshore-Offshore Exchange Rate Differential as of June 2021

USDCNH-USDCNY FX Spot Rate



Source: Bloomberg, ABC

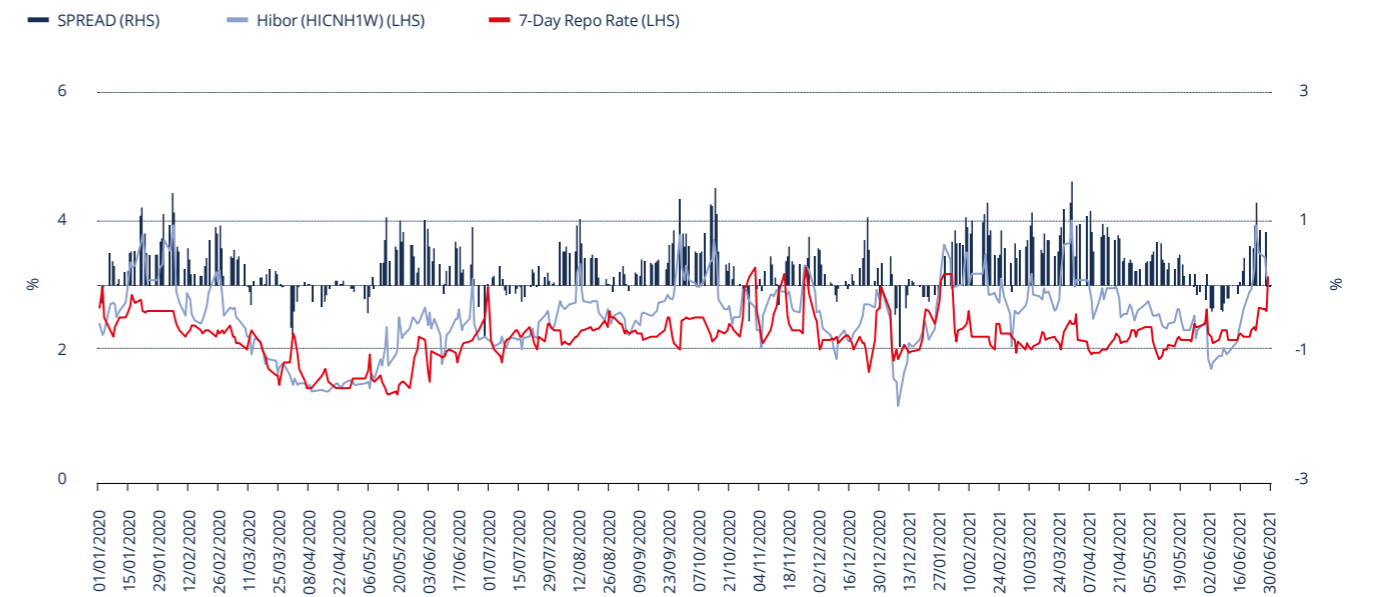
RMB Interest Rate

During Q2 2021, the PBoC maintained its sound monetary policy that is flexible, targeted, reasonable, and appropriate and maintained adequate liquidity in the banking system at a reasonable level. The interest rate of RMB funds fell in April. Due to the fiscal spending in the early stage, the Ministry of Finance (MOF) carried out a RMB70 billion treasury cash deposit operation to supplement market liquidity. In addition, the disturbance to interbank money supply from tax period was lower than expected, resulting a downward trend of interest rate in the money market. And the RMB interest rate rose very slightly in May and June. As the PBoC renewed the Medium Term

Lending facility("MLF") in equal amount of RMB100 bn, coupled with the fixed deposit of Treasury of RMB70 billion of MOF, market liquidity recovered. The pull of external demand on the economy was gradually weakening, while domestic demands from infrastructure, real estate and consumption were not yet strong enough to pull up the economic growth. At the same time, the cost impact was significant. Producer Price Index (PPI) has reached record highs continuously, and the growth rate of total social financing (TSF) has fallen back to the level before COVID-19. There was sufficient money in interbank market in Q2 2021.

The Onshore-Offshore Interest Rate Spreads as of June 2021

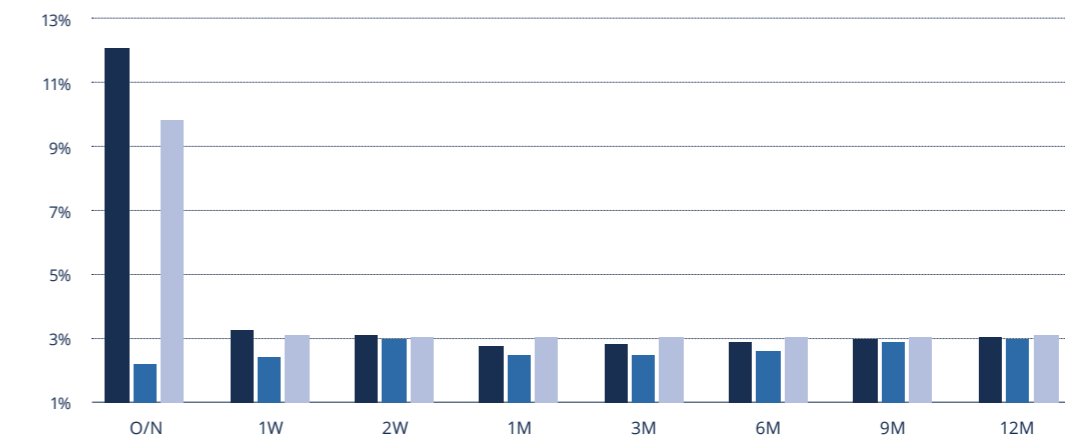
CNH Hibor and 7-Day Repo Rate Spreads



Source: Bloomberg, CCB

The Term Structure of RMB Offshore and Onshore Interest Rate in June 2021

Offshore Interest Rate (London) Onshore Interest Rate CNH Hibor



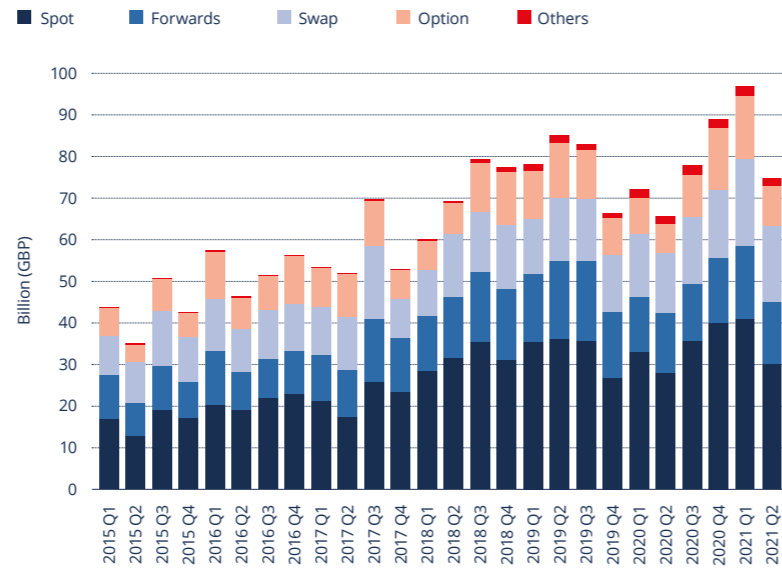
Source: Bloomberg, CCB

London RMB Foreign Exchange Market

The RMB FX volumes in the London market shrank for the first time after one-year rise. In Q2 2021, the average daily turnover volume stood at GBP74.38 billion, down 22.45% QoQ but was up 13.38% YoY. The distribution of RMB FX turnover by counterpart sectors remained almost unchanged with the biggest share being taken by RMB FX turnover with 'other sectors' (41.1%); followed by RMB FX turnover with non-resident deposit-taking corporations (38.8%); the smallest share went to RMB FX turnover with UK deposit-taking corporations (20.1%).

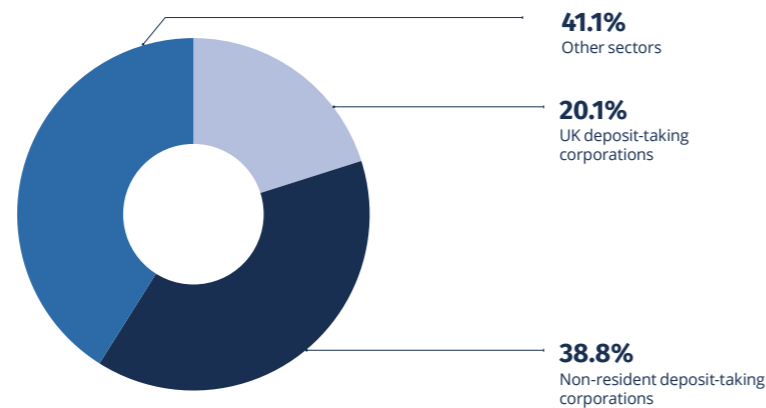
In June, the percentage of the offshore RMB FX trading in London market dropped QoQ. Trading data from EBS revealed that the proportion of spot CNH trading volume in EMEA trading hours was 34%, up 1% from June 2020. Specifically, Asia, EMEA and Americas trading hours stood at 59%, 34% and 7% of total CNH spot trading volumes, compared with a distribution of 52%, 39% and 9% in last December, and 61%, 33% and 6% a year ago.

Average Daily Turnover of RMB FX in London as of June 2021



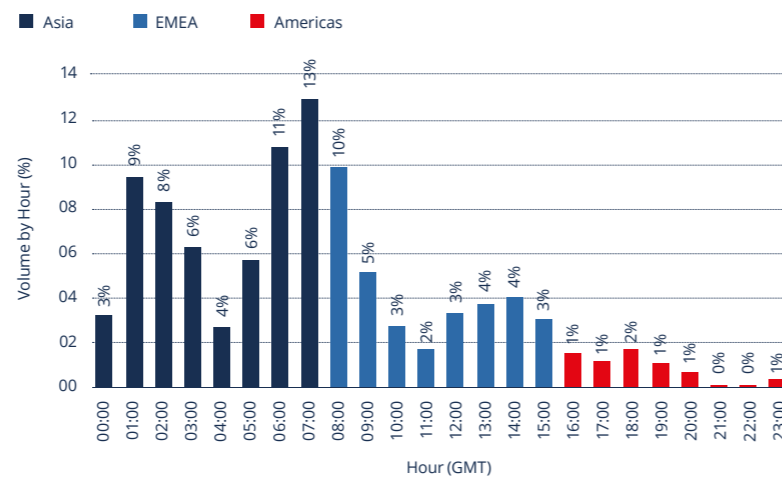
Source: Bank of England (BoE)

RMB FX Turnover by Counterpart Sector in Q2 2021



Source: Bank of England (BoE)

Spot CNY Volume Distribution by Hour on EBS in June 2021

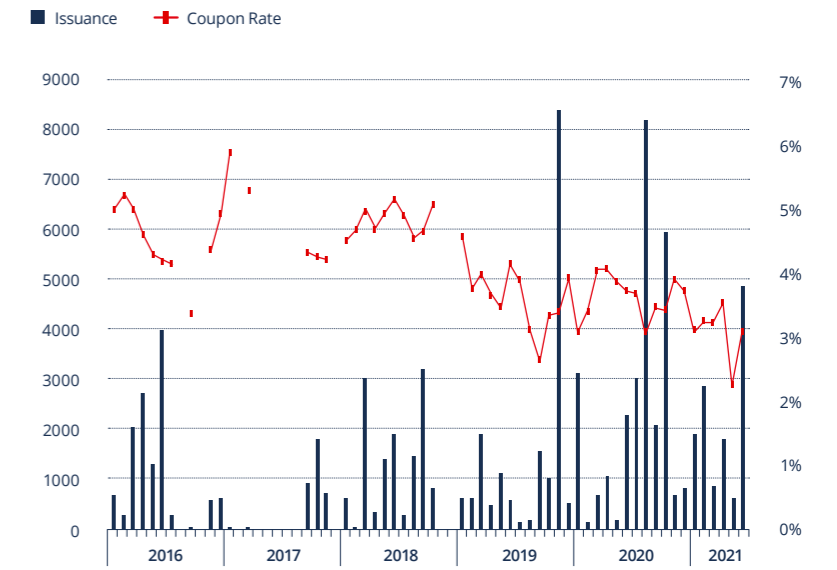


Source: EBS

London RMB Bond Market

During the three months to June 2021, ten Dim Sum bonds were newly listed on the London Stock Exchange, with a total issuance size of RMB7.21 billion, and weighted average coupon rate of 3.07%. The value of new Dim Sum bonds issued from April to June 2021 rose by 29% QoQ and 104.4% YoY. At the end of June 2021, there were 149 Dim Sum bonds listed on the London Stock Exchange with an outstanding value of RMB66.33 billion, and weighted average coupon rate of 3.44%.

Dim Sum Bond Issuance and Average Coupon Rate as of June 2021 on LSE

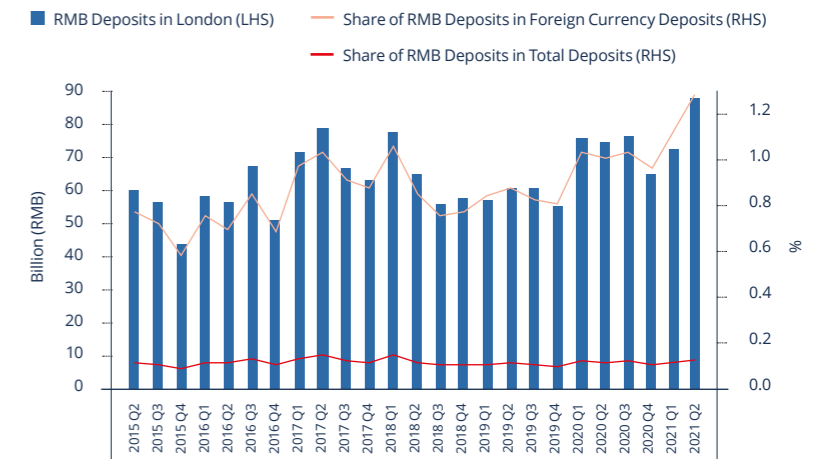


Source: LSE

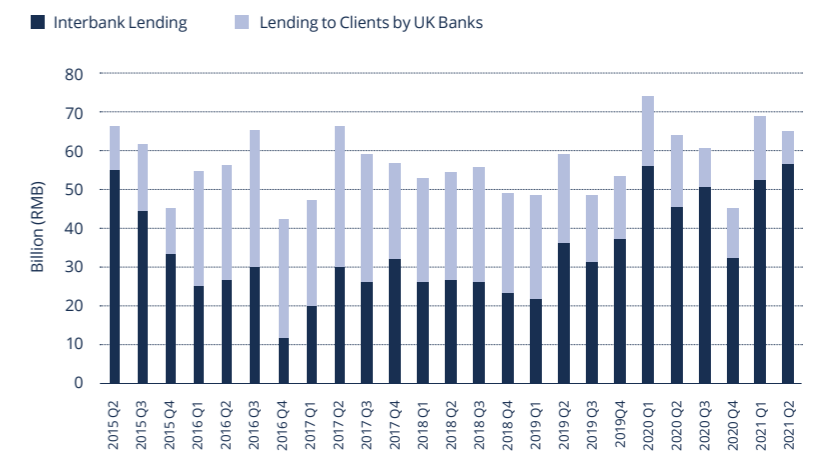
London RMB Credit Market

The outstanding RMB deposits in London hit record high in Q2 2021. Total London offshore RMB deposits balance jumped to RMB88.5 billion in Q2 2021, up 23.27% QoQ and 19.23% YoY, while the share of RMB deposits to total UK foreign currency deposits grew slightly from the previous quarter. The total value of London offshore RMB loans balance was RMB65.34 billion at Q2, down 6.13% QoQ and up 1.68% YoY, a remarkable shrink of lending to clients from the previous season by UK banks was the main reason for the drop in this quarter.

RMB Deposits in London as of Q2 2021



RMB Lending in London as of Q2 2021

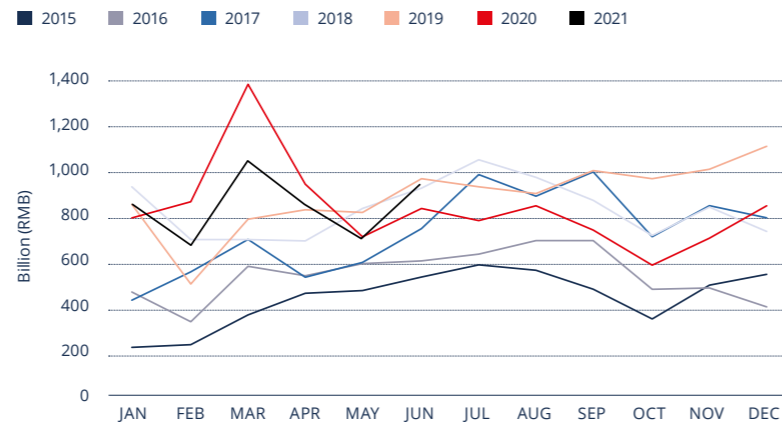


Source: Bank of England (BoE)

London RMB Clearing

In the three months ending June 2021, total clearing volume remained steady at RMB2.50 trillion, approximating to the volume in Q2 2020, with daily average clearing volume RMB42.33 billion. Accumulated transaction counts stood at 22,819. By the end of June 2021, the accumulative total RMB clearing volume reached RMB57.24 trillion since China Construction Bank (CCB) London Branch obtained its authorization to become the RMB clearing bank in the UK in June 2014, and the Bank remains the largest clearing bank outside Asia.

RMB Clearing Volume of the Designated UK Clearing Bank as of June 2021

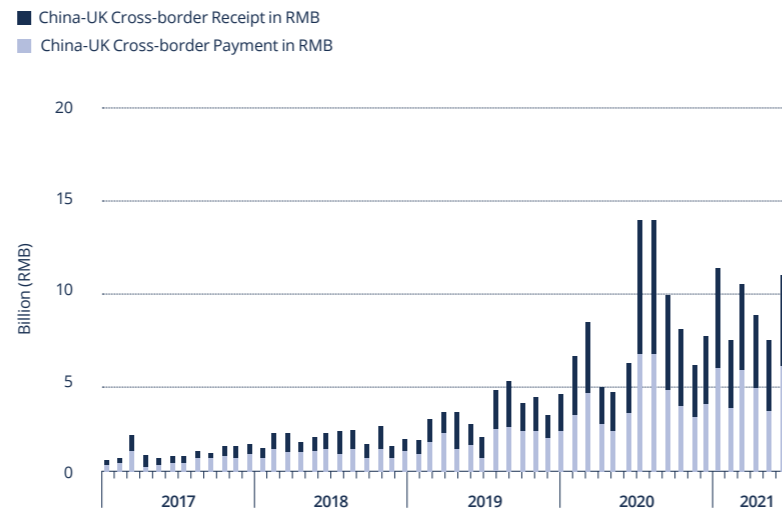


Source: CCB London Branch

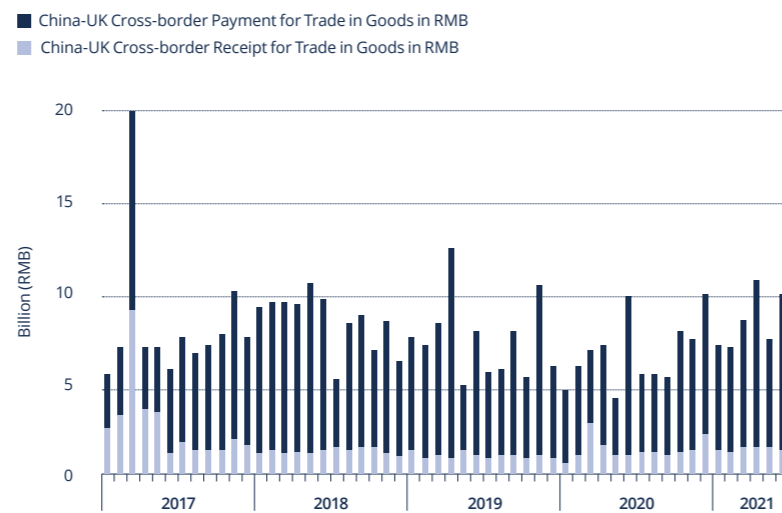
China-UK RMB Cross-Border Settlement

Cross-border RMB transactions between China and the UK kept a rising momentum, reaching RMB456.53 billion, up 79.1% YoY. Within this, cross-border RMB receipts were almost RMB221.30 billion while payments reached RMB235.23 billion, resulting in a net inflow of RMB13.93 billion (from China to UK). This was RMB4.53 billion ahead of the prior year period. Cross-border RMB receipts and payments of Sino-British bilateral goods trade grew to RMB27.81 billion, accounting 5.4% of the total amount of trade in goods during the same period.

China-UK Cross Border RMB Payment and Receipt as of June 2021



China-UK Cross Border RMB Payment and Receipt for Trade in Goods as of June 2021



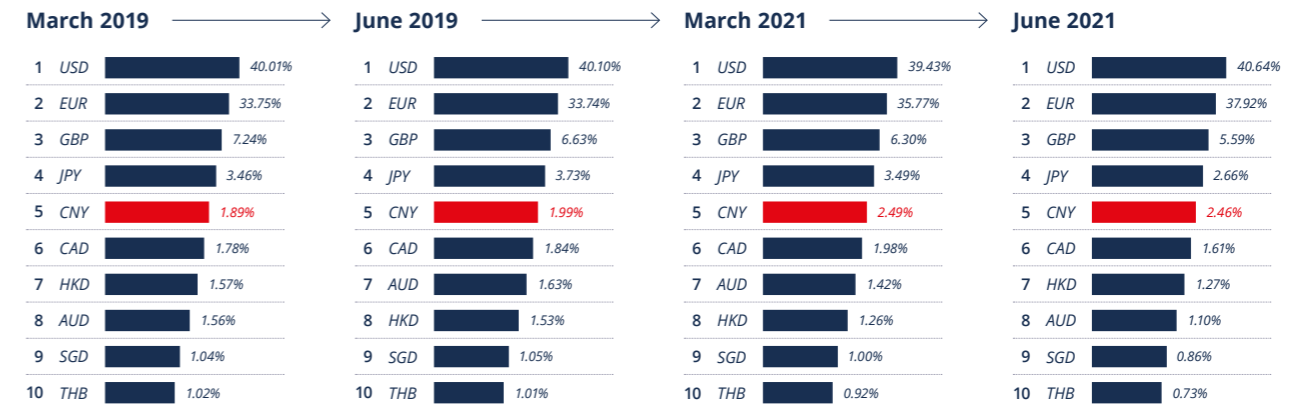
Source: PBoC

The International Status of the London Offshore RMB Market

According to SWIFT, the RMB share as a domestic and international payments currency (customer initiated and institutional payments) in June 2021 stood at 2.46%, down 0.03% from March 2021. RMB share as a global currency in trade finance market was 3.42%, up 1.48% from March 2021. RMB remained the fifth biggest global payment currency, and the UK kept its

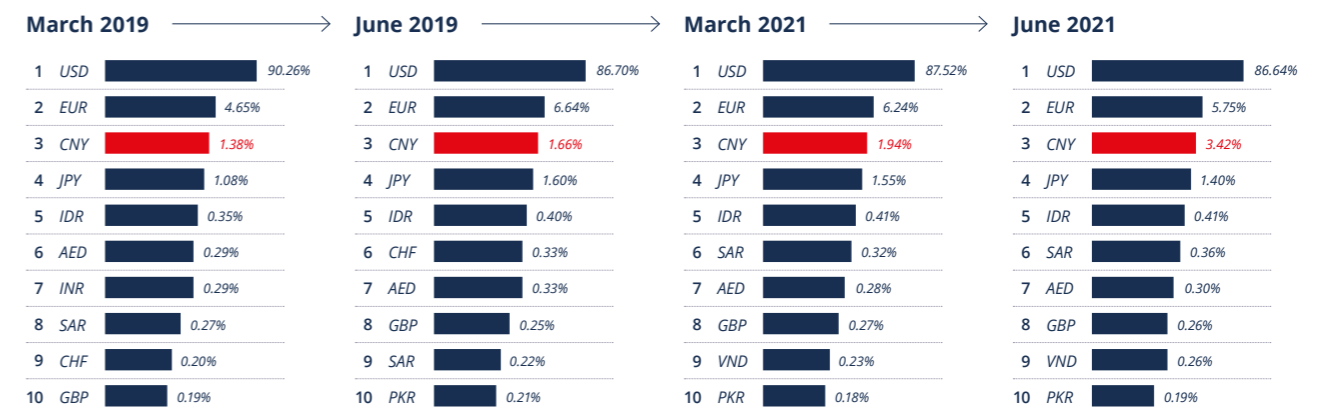
position of having the second largest share of RMB payments. The top three economies doing FX Spot transactions in RMB were the United Kingdom, the United States and China, the share of each country fell slightly. The United Kingdom accounted for 36.74% of the total, down 1.44% from March 2021.

RMB's share as a global payments currency (%)



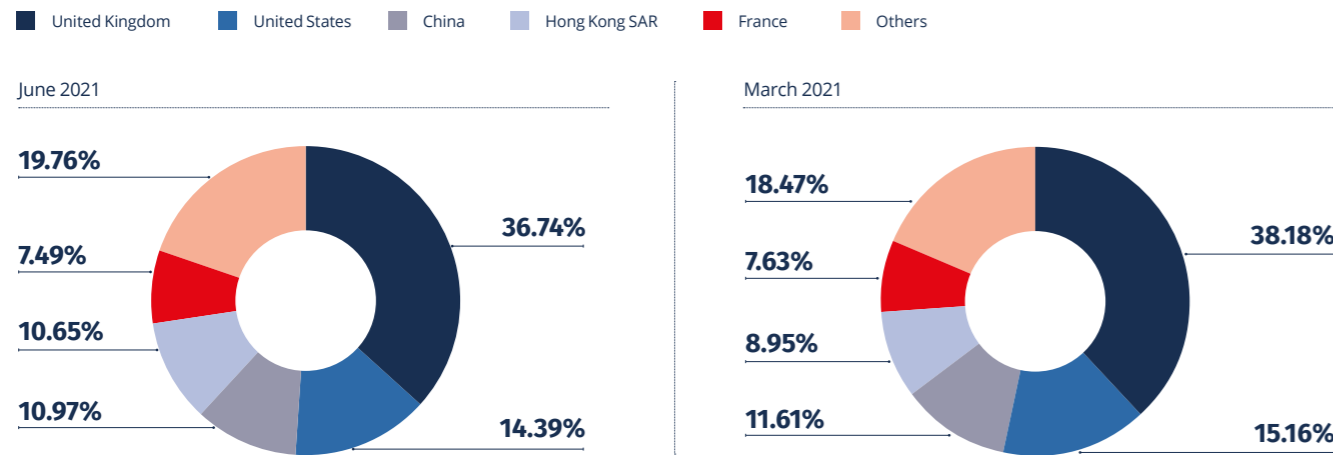
Source: SWIFT, watch

RMB's share as a global currency in trade finance market (%)



Source: SWIFT, watch

Top Economies doing FX Spot transactions in RMB



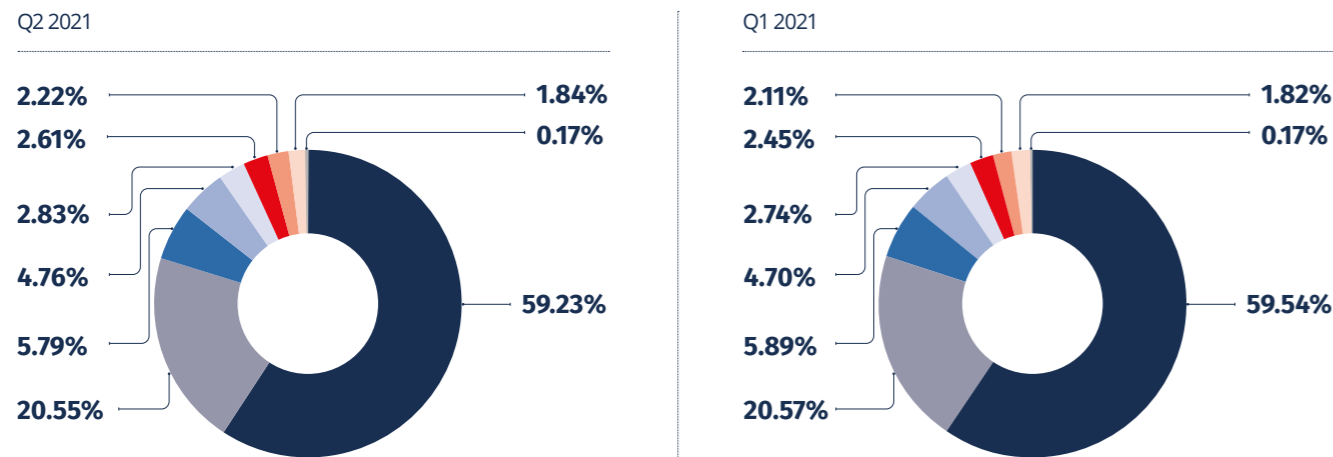
Source: SWIFT, watch

RMB in Global Currency Reserves

According to the IMF, RMB represented 2.61% of global currency reserves as of Q2 2021, up 0.16% from Q1 2021. When it was first included in the SDR basket, its initial share was 1.07% in Q4 2016. In Q2 2021, the

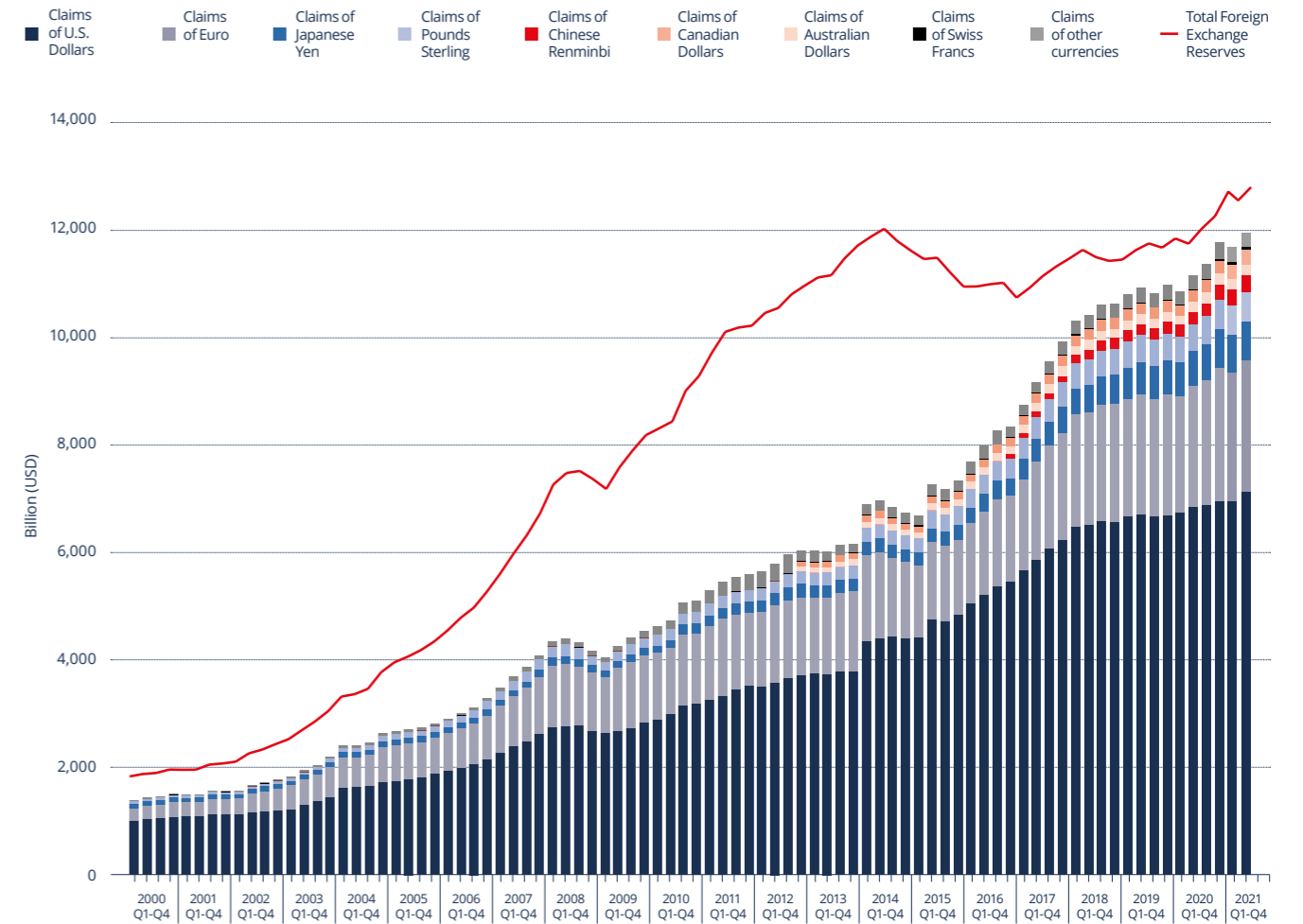
USD's share of global reserves dropped slightly from last quarter (from 59.54% to 59.23%); the share of Euro and JPY declined from 20.57% and 5.89% in the quarter before, to 20.55% and 5.79%.

Allocated Reserves by Currency



Source: International Monetary Fund

Official Foreign Exchange Reserves by Currency (USD billion) as of Q2 2021



Source: International Monetary Fund

The Role of Carbon Exchanges in Green and Sustainable Finance

Standard Chartered Bank

Introduction

The Paris Agreement¹ was adopted by nearly every nation in 2015 to address climate change and its negative impacts. The deal replaced the Kyoto Protocol² and aims to substantially reduce global greenhouse gas (GHG) emissions to limit the global temperature increase in this century to 2 °C above pre-industrial levels, while pursuing means to limit the increase to 1.5°C. But there is a long road between the pledges made by governments and the decisive action required to manage climate change.

By 2030, the world needs to cut emissions by 45% from 2010 levels.³ Such a transition requires substantial scaling of market and policy mechanisms that incentivise decarbonisation and emissions reductions. Global carbon dioxide emissions fell by 6.4% (2.3 billion tonnes) in 2020 due to the pandemic but need to fall at least 7.6% annually for the next decade to avoid warming greater than 1.5°C.⁴

The goal must be to reduce emissions in line with the science while allowing global economic growth that will support investment in new technology and allow all nations and people to prosper. Effective carbon markets are vital for this transition, with exchanges at the epicentre. Emissions reductions anywhere make identical contributions to helping alleviate the problem. The sheer number and variety of GHG emissions sources make it difficult to develop a comprehensive and effective command-and-control approach and magnifies the cost savings that could be achieved by enlisting the market to find the quickest and least costly abatement options.

As the world pushes for rapid decarbonisation, demand for carbon markets and pricing will expand. The United Kingdom and the European Union have vowed to be net-zero⁵ by 2050, with interim targets

of 68%⁶ and 55%⁷ by 2030 respectively, from a 1990 baseline. China is aiming to peak emissions by 2030 and reach net-zero by 2060.⁸ In addition, voluntary net-zero pledges from corporates doubled within the course of just twelve months.⁹ The Taskforce for Scaling the Voluntary Carbon Markets (TSVCM) estimated that voluntary carbon markets need to grow more than 15-fold by 2030 to support the investment required to deliver the 1.5°C pathway.¹⁰

Carbon markets can support new programmes to finance, structure, and deploy these critical solutions, so that in the future we can continue economic development in countries across the world, including those rapidly industrialising today. Robust international emissions markets under Article 6 of the Paris Agreement could stimulate up to USD1 trillion of new capital investment toward developing countries, improve local sustainability results, and provide incentives for further technological innovation, according to a new report by the International Emissions Trading Association and the University of Maryland.¹¹ The Article 6 rules remain outstanding but at the COP26 meeting in Glasgow there is hope they could finally be operationalised, releasing billions of dollars to fund carbon emissions reductions around the world.

Carbon Trading

Market-based carbon pricing policy, including cap-and-trade, carbon taxes and crediting schemes, all aim to make emitters internalise the external costs of their greenhouse gas (GHG) emissions — the principle of the “polluter pays”.

Most mandatory carbon markets use the “cap and trade” model, which puts limits on the amount of GHG that can be emitted within the economy and reduces them to net-zero over time. This of course is the goal.

Voluntary Carbon Markets, on the other hand, are project-based and use of the principle of baseline and credit, where a project is put in place to reduce GHG emissions below a projected business-as-usual path of increasing emissions — referred to as a baseline. Reductions below the baseline earn carbon credits, which can be sold to other emitters whose costs of reducing emissions are higher.

Linking carbon markets, both mandatory national Emissions Trading Scheme (ETS) and voluntary project-based ones, can magnify the gains from carbon trading but care needs to be taken to ensure integrity is not lost. A liquid, transparent and well supervised market for carbon supports innovation and investment in decarbonisation efforts but to get there will need standardised marketplaces, regulations, and deep cooperation. This is where exchanges can contribute. The Paris Agreement offers the opportunity for market-based mechanisms to develop internationally but much work remains to be done to allow them to fully contribute to the goal of reducing net carbon emissions to zero by 2050. Defining the relationship between the mandatory and the voluntary carbon markets will be an important part of that.

The emergence of ETS in several countries, including China, is an important step forward that will encourage others to follow. Exchanges can develop the rules, infrastructure, and co-operative agreements to bring voluntary and compliance markets together internationally. Direct emissions reductions must be the priority, driven by mandatory carbon markets, complemented by project-based voluntary markets that will accelerate funding for climate mitigation action.

A number of countries are in the midst of formulating or ramping up their own ETS, with carbon exchanges being the main trading venues. According to the World Bank Group¹², 64 carbon pricing initiatives have been implemented or are scheduled for implementation, covering 46 national jurisdictions worldwide, mostly through cap-and-trade systems. These initiatives are gaining momentum, with China announcing the implementation of its own national ETS. This would bring a total of 12Gt CO₂e of emissions (22.3% of the world's total GHG emissions in 2020) under some form of carbon pricing¹³ around the world.

Carbon pricing, along with complementary measures, can also drive innovation, investment, and substantial

growth in some sectors. The investment opportunities that arise from decarbonisation are considerable, as is the potential for the development of new industries and innovation within existing ones. Carbon pricing can also generate revenues to further national sustainability objectives and to support those who might be negatively impacted.

A global carbon market is needed such that a single price is put on carbon, sending the right signal to companies and individuals around the world to reduce emissions.

Conclusion

Looking ahead, carbon finance is set to drive two main streams of financial innovation: (1) the decarbonisation of financial assets relating to the transition of carbon-intensive economic activities to low-carbon alternatives, in line with the science; and (2) the design and functioning of a sustainable financial system where economic growth is compatible with the socio-economic changes necessary to mitigate climate emergencies and enable a balanced cycle of production and consumption of natural resources.

There is now a “race to zero” in which all countries, sectors and companies need to participate. Investment needs to be made now in technologies that are currently not scalable and cost competitive. Carbon markets can support the commercialisation of such technologies by giving companies the opportunity to support the path to decarbonisation. Without finance for innovation now, it will be impossible to reach our decarbonisation goals before we run out of time. While carbon markets cannot deliver all of these goals alone, well-organised markets can create the right environment for everyone to reduce emissions so that we can continue to enjoy the benefits of economic development in countries across the world, including those rapidly industrialising today.

¹ See webpage on the United Nation's Climate Change website (<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>).

² See webpage on the United Nation's Climate Change website (https://unfccc.int/kyoto_protocol).

³ See webpage on the website of the Intergovernmental Panel on Climate Change (IPCC) (<https://www.ipcc.ch/sr15/>).

⁴ This analysis draws on the work of the IPCC by using a remaining carbon budget of 570 metric gigatonnes (Gt) CO₂ as of 1 January 2018. Remaining within this budget would equate to a 66% chance of limiting warming to 1.5°C.

⁵ Net-zero (carbon emissions) is a state where the anthropogenic emissions of GHG to the atmosphere are balanced by anthropogenic removals over a specified period.

⁶ Source: “UK sets ambitious new climate target ahead of UN Summit”, press release of the UK Government on its website, 3 December 2020.

⁷ See “2030 climate & energy framework” webpage on the EU's website (https://ec.europa.eu/clima/policies/strategies/2030_en).

⁸ Source: “China pledges to achieve CO₂ emissions peak before 2030, carbon neutrality before 2060 - Xi”, Reuters, 22 September 2020.

⁹ Source: “Commitments to net zero double in less than a year”, press release on United Nation's Climate Change Website, 21 September 2020.

¹⁰ See TSVCM's website (<https://www.iif.com/tsvcm>).

¹¹ https://www.ieta.org/resources/Resources/Net-Zero/Final_Net-zero_A6_working_paper.pdf

¹² Source: World Bank Group. (2020). State and Trends of Carbon Pricing 2020. Washington, DC: World Bank.

¹³ Source: The “Carbon Pricing Dashboard” webpage on the World Bank's website (https://carbonpricingdashboard.worldbank.org/map_data), viewed on 5 May 2021.

China Carbon Market Development

Bank of China London Research Centre

Overview

After a decade of operating the regional pilot ETS's (emissions trading schemes), on 16th July 2021, China officially launched the world's largest national carbon emissions trading scheme (China ETS). The scheme aims to serve as a promising policy instrument to help China implement its 2060 carbon neutral target and meet the UN Sustainable Development Goals (SDGs) and Paris Agreement goals.

The Ministry for Ecology and Environment (MEE) is the prime authority for regulating China ETS, and the national ETS Registry and Clearing Centre in Hubei and the National ETS Exchange in Shanghai provide the operational support.

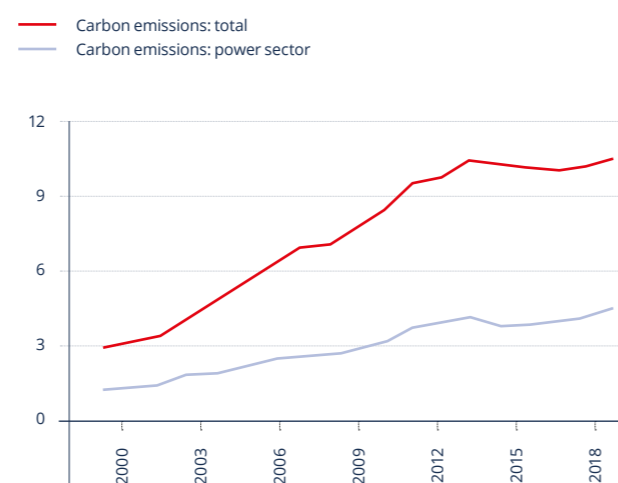
The initial phase of the China ETS covers only the power generation sector, which accounts to 4.4 billion tonnes of annual emission, or 40% of China's total annual emissions (see charts). The full scheme coverage will expand by 2025 to include 7 further carbon intensive sectors including petrochemicals, chemicals, steel, building materials, metal, paper, and aviation which cumulatively account for 72% of the China's emissions.

Between 16th July to 18th October, more than 186 million tonnes of Carbon Emission Allowances (CEA) were traded, which amounts to 43% of the 2020 combined total of 8 regional pilot ETSs. This in dollar turnover terms amounted to USD1.252 million representing 67% of the 2020 combined total. The carbon price started from USD7.5 per tonne, reached the peak at USD9.38, and now is around USD6.52.

Footprint

2011	Plans to develop trading systems for carbon emissions announced
2013-2016	8 regional pilots ETS launched in Beijing, Tianjin, Shanghai, Chongqing, Hubei, Guangdong, Shenzhen, and Fujian
Dec. 2017	National ETS development launched, roadmap outlined and endorsed by the State Council
2018	Responsibility for climate change and the ETS transferred from the NDRC (National Development and Reform Commission) to MEE (Ministry of Ecology and Environment)
Aug. 2020	'Master Plan for the China (Beijing) Pilot Free Trade Zone' – Support to set up voluntary emission market
Dec.2020	'Administrative Measures for Carbon Emission Trading (Trial)' published (effective Feb. 2021)
Feb. 2021	'Interim Regulation for the Management of Carbon Emissions Trading (Draft)' published
Apr. 2021	Guangzhou Futures Exchange kicked off the emission derivative product and service development for the future financialised carbon market

China's Carbon Emissions (Billion Ton)



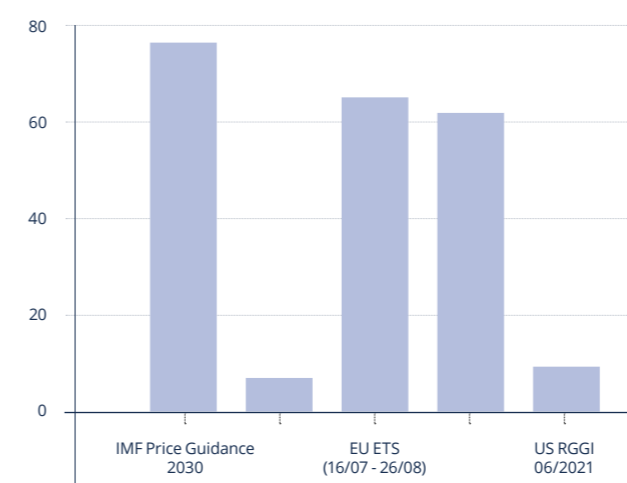
Source: Wind, Bank of China

Features and Outlook

China ETS is in its early development stage. It operates under a compliance scheme and is only open to regulated firms which have voluntary offsetting limits up to 5%. Currently, the only ETS product is carbon emission allowance (CEA) spot, and the CEA is allocated to regulated firms free of charge. China's ETS system design is in its pilot stage and gradually will move to the mature stage, which is the approach adopted by most of ETSs in the world such as EU ETS. In time, a CEA auction will be established, and more market participants, such as financial institutions, voluntary emitters, and investors, will be included in the scheme. This will make the market mechanism more effective for carbon pricing.

China ETS performs a vital role of price discovery, serving as a powerful mechanism forcing the market to set a price on carbon that in turn would drive emissions reduction, and help hit the Net-Zero target. According to the International Monetary Fund (IMF), in order to achieve the 2-degree Paris Agreement goal, the price of carbon has to be at least USD75 by 2030. As of 30th September 2021, there are around 30 active ETSs in the world, each operating independently with prices set ranging between USD1.2 up to USD68. From the price-gap chart above, we can see that the major challenge for the China ETS is on how to progress to a powerful carbon price discovery instrument, which sets incentive carbon prices to attract more emission firms' market participation, so to achieve the nation's emission reduction targets.

Carbon Price (Unit: USD)



Few areas addressed at below are within perspective:

I. Improving the Monitoring, Reporting and Verification (MRV) Scheme

China's existing ETS system architecture covers allowance allocation function; trade management; MRV scheme, and a regulatory mechanism. MRV is the core function. It is clear that accurate allowance data generated by a 'fit for purpose' MRV scheme a prerequisite to arriving at an appropriate carbon price. China regulators has given a great focus over this area by setting up a Carbon Emission Statistical Account Working Group in this August. This is jointly led by the National Development and Reform Commission (NDRC) and the National Bureau of Statistics. Its aim is to accelerate the establishment of a unified and standardized MRV and emission accounting system. Regulators also issued 'Guidance on the Corporate Greenhouse Gas Emission Accounting Methods and Reporting for Power Generation Facilities' proposing a trial scheme for the Guidance.

II. Opening-up of the Voluntary Offsetting Market to Investors

China ETS is designed to be a financial market that offers market access to financial institutions, voluntary emitters, and investors, and facilitates the trading of various derivative emissions products such as CERs, CCERs, spots, futures, and swap etc. This transition is being impeded by the current legal framework, as there is yet a legislation setting out legal definitions and descriptions of carbon emission products. This prevents CEA being considered legal financial market products as there is a grey area around the underlying legal owner of the carbon emission products. Regulators are in the process of including carbon derivatives in the 'China Futures Law' and furthermore, the government launched the Guangzhou Futures Exchange in April 2021 to kick off the development of emissions derivatives, as well as trying out pilot voluntary offsetting market in Beijing, Shenzhen, Guangzhou, Hainan, and Hong Kong. The estimated annual volume of China ETS voluntary market is around USD15 billion dollars once it is in operation.

III. International Linkage

China's carbon market is set to establish links to the global carbon market in the future. China's government had started on creating these links some time ago. In 2018, it issued a discussion document supporting the establishment of the international carbon trading exchange in Hainan free trading zone. In September this year, Guangdong province and Hong Kong announced discussion of a potential

unified Guangdong - Hong Kong - Macau Greater Bay Area (GBA) carbon market for cross-border carbon trading. The GBA market is set by governments including PBOC to be a world-class economic zone, granting access to global investors who specializing in green financial products to China's financial market. However, the global linkage of carbon markets has been a challenge to all ETS operating countries given the absence of unified standards, accounting rules, emission data measures, market guidance, and carbon products taxonomy etc. This issue is reflected in the lack of agreement on Paris Agreement Article 6 at COP25. Article 6 governs the carbon market trading between countries, because the lack of carbon market standards on the accounting methods and emission targets setting, countries found it

difficult to sign the agreement on Article 6. On top of China regulators' current work on the preparation, works and support at the international level are the key determining elements to the carbon market international linkage. We look forward to the outcome on the UN and governments' negotiation over the Article 6 in this COP26.

Another major carbon market convergence initiative is the Taskforce on Scaling Voluntary Carbon Market (TSVCM) core carbon principle, it aims to provide carbon market standards, so to improve market transparency, reduce transaction cost, and market integrity. It would be interesting to see how this initiative will be addressed and discussed in the COP26.



Shanghai Skyline

China Strides Toward Carbon Neutrality Amid Market-based Explorations, Opening Possibilities to Boost Cooperation with EUETS

London Stock Exchange (LSE)

China's long-awaited national Emission Trading System ("ETS"), which was announced in 2017 and operationally launched this year, finally saw transactions take place starting in July 2021. Meanwhile, the eight longstanding regional ETS's continued in parallel with most seeing increased traded volume.

The legal basis for China's national ETS, which had been working its way through various government institutions for years, was completed in the first half of 2021 with various policy documents being published and taking effect.

- The regulation Measures for the Administration of Carbon Emissions Trading (Trial) took effect from 1 February, marking the establishment of the programme. It includes provisions related to allowance allocation and registration, emissions monitoring, compliance and penalties, well as supervision and management. It is a departmental regulation, which is subject to future review and revision.
- In May, China's Ministry of Ecology and Environment (MEE) published three other key policy documents
- Rules for the Registration and Management of Carbon Emission Rights (Trial),
- Rules for the Management of Carbon Emission Rights Trading (Trial) and
- Rules for the Settlement and Management of Carbon Emission Rights (Trial) that were necessary for the start of trading.
- Interim Regulations for the Management of Carbon Emissions Trading are on the list of policies to be approved by China's state council. Once that is completed, the MEE will have authority to impose stricter sanctions on compliance entities that violate the regulations.

The ETS's first compliance cycle only covers the power sector, and this includes combined heat and power as well as captive power generation facilities in other (industry) sectors: in total, 2162 entities have a compliance obligation. These collectively emit roughly 4.5 billion tonnes CO₂e annually, making the Chinese national ETS the largest in the world by emissions covered. According to the IEA, the covered emissions account for over one-seventh of the world's fossil-fuel-related CO₂ emissions.

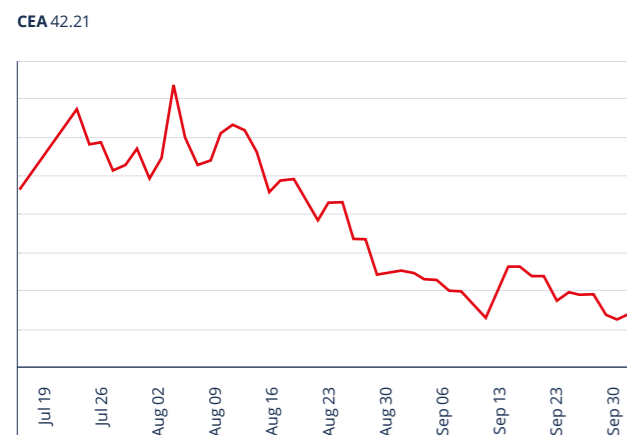
The national ETS is supported by two platforms: the Shanghai Environment and Energy Exchange (serves as the national interim ETS trading platform) and the China Hubei Carbon Emissions Exchange (serving as an interim registry). Trades are conducted electronically, and only spot transactions are allowed. Transactions are referred to as 'listing trading by agreement,' with bulk trading (minimum batches of 100,000 allowances) by agreement also taking place. Currently, only 2000+ covered entities are eligible to trade - investors are not yet allowed to participate in the market. The Chinese government has indicated this may change at a later stage.

Meanwhile, trading continued in the existing regional ETS's which acted as pilot programmes for the national market over the past decade. The ETS policies passed in May foresee the regional ETS continuing, but entities covered by the national programme (for now only those in the power sector) leaving the pilots so as not to face two separate compliance requirements. For those pilots, in which power sector entities make up the bulk of covered facilities, this will strongly affect trading - especially in terms of liquidity

Price Development Since the Launch of the National ETS

At the start of trading on 16 July, 2021, allowance prices and traded volume exceeded expectations, with allowances reaching 52.8 CNY/t and a total of 4.1 million allowances changing hands. However, both traded volume and price gradually declined after that. Two months saw around 8.5 million allowances traded, with volume tapering to a few thousand tons per day after that. Prices experienced a short-term increase with daily average reaching 58.70 CNY/t immediately after the first trading day, then fluctuated and declined to daily averages of 45.09 CNY/t. The weighted average price was 49.3 CNY/t during the two months. We expect to see at least a slight boost in both volume and price as the compliance deadline of 31 December comes closer.

China Emission Allowance Spot Price



Source: Refinitiv Eikon

Modelling results from Refinitiv China ETS Fundamental Model show that China national carbon market should see small surpluses in the beginning due to generous allocation rules for the power sector. There after, market balance is expected to gradually tighten with more industry sectors being included and benchmarks turning stricter. In the Base Case, the China ETS allowance price is projected to rise from an average of 40 CNY/t in 2021 to 160 CNY/t in 2030. Overall, the carbon market could contribute to reduce China's emissions additionally by 200-300Mt per year in the base case.

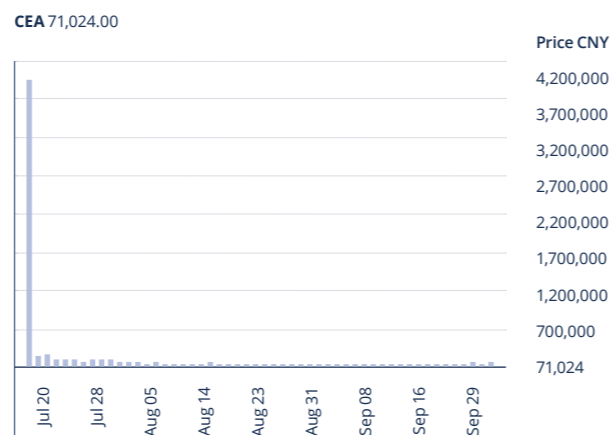
Choice of ETS as a tool to reach climate ambition

In October, China published its "Action Plan for Carbon Dioxide Peaking Before 2030", a roadmap on how it intends to reach peak emissions before 2030 and carbon neutrality before 2060 in its Sectoral 14th Five Year Plan. China's cabinet has set up a Neutral Working Group that is devising initial plans before COP26 in November. President Xi has announced coal will be strictly controlled until 2025, and has committed to halting the construction of coal-fired power stations abroad.

Though current Carbon Emission Allowance ("CEA") price levels are not high enough to favor gas power and renewable power over coal power (compared to the price level €60+ of EUA recently), we expect that the China's national ETS will be a core policy instrument in achieving its climate goals.

It is expected that 60% of China's total CO2 emissions will be regulated by the national carbon market by 2025, with emission benchmarks for each of the eight sectors. By 2030, more enterprises of each sector will be covered by the national market, making over seventy percent of total emissions be finally regulated. We expect a rising price signal that will continuously contribute to the gradual decline of China's coal power and divert more investments towards clean energy for the decarbonization pathway.

China Emission Allowance Spot Trading Volume



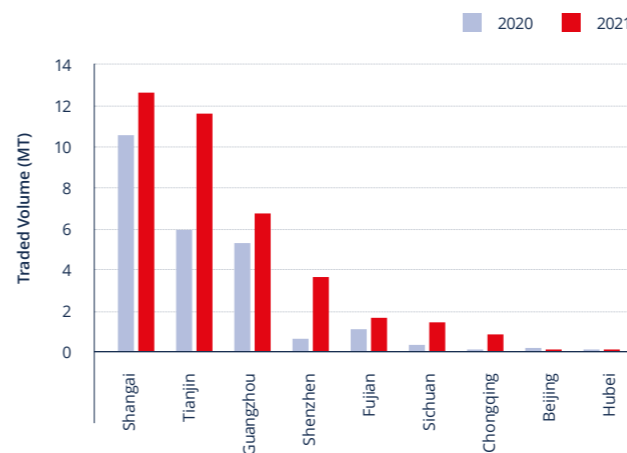
Revival of Chinese Certified Emissions Reduction (CCER)

Before the national ETS was established, China had been running pilot ETS projects in eight major cities in China since 2011, experimenting with various carbon trading activities at a smaller scale. For example, Hubei province's ETS was the first in China to use a Chinese Certified Emissions Reduction (the "CCER") program, which created an offsetting system for certifying carbon emissions reduction projects in poor rural areas. No new CCER projects have been approved since 2017, when the CCER program was suspended.

Enterprises covered by national ETS have also been allowed to use CCERs. The national ETS official rules state CCERs can meet up to 5% of compliance obligations. This will increase demand for CCERs in the longer term. Meanwhile, China Beijing Green Exchange will set up a registry and trading system for the national offset market - it launched tenders for this in August.

In the first half of 2021, six months prior to the introduction of the national ETS, the trading of offsets eligible in China increased compared to 2020 by 62%. 38 million CCERs were traded, which went for about 30 yuan each. The Shanghai Environment and Energy Exchange, the most active CCER trading venue, saw more than 12.6 million of these units change hands in H1 2021, up from about 10.4 million in H1 2020. This increased traded volume suggests a trend of the revival of the trading of the Chinese offsets.

CCER traded volume in regional markets in H1 2020 and H1 2021



Source: Refinitiv Eikon

We expect that the new measures of the management for CCER trading will be disclosed in the upcoming months and that this system will restart soon. This may include forest sinks, renewable energy, and methane utilization CCER credits.

Linkage with Global Markets

In late November 2021, at the International Finance Forum, the former People's Bank of China (PBoC) governor Zhou Xiaochuan proposed the idea of linking the national carbon market to the EU emissions trading scheme (EU ETS) in order to improve liquidity. Currently a significant price gap between the China ETS and EUETS. Therefore the future aligning of the China national carbon market and the EUETS under current circumstances will be possible only when the main issues of how the voluntary carbon market, product carbon footprint standard related to the carbon border adjustment mechanism (CBAM) and carbon finance capital investment are agreed.

Specifically, the voluntary carbon market ("VCM") credit issue is the first and foremost to be discussed. The VCM is an important transitional tool for mitigation. According to David Antonioni, CEO of the Verified Carbon Standard (VCS) or VERRA on September 2021, 0.21 Gt CO2e will be covered by VCM in 2021, issuances projected in VCM is approximately 3Gt CO2e. However, there still stands a huge gap of the goal that UNEP has pointed, which 27.4Gt CO2e of overall mitigation need to be reached. Incentivizing, sufficient governmental action, and most importantly a clearer guidance of how the voluntary carbon market could better joint and work with the compliance market (ETS) needs to be solved.

In the case of the China voluntary carbon market, there stands the huge challenge and opportunity of linking the China GHG Voluntary Emission Reduction Program, or CCER with the existing global voluntary carbon market. Currently, CCER credits are generally used in the pilot ETS for compliance and also reaching

the companies' carbon neutral goals outside the ETS system. However, though the new regulations of the CCER restarting awaits, no other global carbon credits such as the gold standard or Verra could be used in China national ETS, the world's largest ETS.

Furthermore, from the perspective of the CCER credits in the aviation sector, the China GHG Voluntary Emission Reduction Program is among the six approved programmes of Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) under International Civil Aviation Organization (ICAO) eligible credit systems- others are American Carbon Registry (ACR), Clean Development Mechanism (CDM), Climate Action Reserve (CAR), The Gold Standard (GS) and Verified Carbon Standard (VCS). Specifically, despite CORSIA, VCS is involved in only four existing voluntary carbon market credits mechanisms that is used in compliance markets globally (Columbia, Africa and California) but there has been 6 under development compliance market that will be added soon (Chile, Singapore, Mexico, Washington state, the Transportation Climate Initiative, and the UNFCCC article 6 with corresponding adjustments). There also lacks the policy or official guidance of how Global Voluntary Emission Reductions or Verified Emission Reductions (VERs) could be transferred and aligned with the China GHG voluntary Emission program credit accounts, and whether credits from VCS, GS could be used in the China national ETS.

Meanwhile, The Carbon Border Adjustment Mechanism ("CBAM") regulation proposal confirms the expected scope (iron/steel, aluminium, cement, fertiliser, electricity (Article 2, Annex 1). The system will be based on the use of 'certificates' that will have to be surrendered to account for the GHG emitted to produce imported goods within the five listed sectors. It confirms a gradual phasing out free allocation (2026-2035). It also confirms importers' right to take into account carbon price paid in third countries. CBAM shall apply from January 2023, but initially with reporting-only obligations. The main bulk of the provisions will come into effect in January 2026.

Documents revealed earlier this year suggest that the European Commission was at some point planning for a relatively quick phase-out of free allocation once the CBAM would become operational. A leak from early July, however, suggested a ten-year phase-out from 2026 to 2035. Note that the interplay between CBAM and free allocation will have to be coordinated between the two policy files (CBAM regulation and ETS directive) as they will be processed by lawmakers. Though there stands great uncertainty of how this would effect the linkage of China national ETS and the EUETS, CBAM might accelerate the discussion of the ETS topic globally and unify the product carbon footprint verification methodologies based on the European official guide and create great opportunities in the ETS sector.

A Primer on CFETS Interbank Green Bond Index and CFETS Interbank Carbon-Neutral Bond Index

China Foreign Exchange Trade System (CFETS)

The history of green bonds dates back to 2007, when the World Bank first proposed the concept and the European Investment Bank issued the first of its kind. China's green bond market, despite a late start, has since entered the fast lane of development with the recent establishment of a comprehensive green finance framework.

I. China's Green Bond Market

The steady growth of the global green bond market, especially its rise in Europe and the U.S., has prompted China to expedite green bond development.

China introduced top-level plans for green bonds at the end of 2015, which marked the birth of the domestic green bond market. The period from 2016 to 2019 saw the release and gradual improvement of various measures and supporting policies, allowing the domestic market and volume of outstanding green bonds to grow steadily. In 2020, China officially unveiled its strategic goal to peak carbon emissions by 2030 and become carbon neutral by 2060, demonstrating its resolve to build a green, low-carbon circular economy. In 2021, the People's Bank of China, together with the National Development and Reform Commission and the China Securities Regulatory Commission, issued the *Green Bond Endorsed Projects Catalogue (2021 Edition)*, setting uniform and rigorous guidelines for certifying domestic green bonds, bringing them closer to the international standards.

The launch of innovative green bond, such as carbon-neutral bonds and blue bonds has boosted the vitality of the domestic market.

II. CFETS Interbank Green Bond Index and CFETS Interbank Carbon-Neutral Bond Index

In July 2021, China Foreign Exchange Trade System (CFETS) officially released the CFETS Interbank Green Bond Index and the CFETS Interbank Carbon-Neutral Bond Index. Answering the call of China's carbon pledge, the two indices aim to promote innovation and development of the domestic green finance market by providing performance benchmarks and investment targets for investors at home and abroad.

(I) Compilation methodology

Compilation of the CFETS Interbank Green Bond Index and the CFETS Interbank Carbon-Neutral Bond Index mainly involves the following five aspects:

1. Selection of constituents

Constituents must comply with the Green Bond Endorsed Projects Catalogue (2021 Edition) in the use of proceeds. In particular, constituents for the CFETS Interbank Carbon-Neutral Bond Index should also apply the proceeds toward projects with carbon emission reduction benefits. The Green Bond Endorsed Projects Catalogue (2021 Edition) converged with the international standards in regard to the specific requirements for green bonds, which helps the domestic bond market become more international and more appealing to overseas institutional investors.

2. Source of data

Both indices preferentially select market prices such as reasonable market maker quotations and transaction prices or, in their absence, bond valuations. Internationally, the requirements on the source data for benchmark calculations have become increasingly stringent. For instance, international standards such as the IOSCO Principles for Financial Benchmarks and the EU Benchmark Regulation all require the preferential use of reasonable market prices to ensure the accuracy and fairness of the calculation results.

3. Rebalancing frequency

Both indices rebalance constituents on a monthly basis, in line with the frequency adopted by most domestic and foreign index providers. An overly high or overly low frequency will be less effective at reflecting market conditions and make it harder for the managers of index products to track the indices.

4. Reinvestment of cash inflows

As a fixed-income instrument, bonds may generate cash income from interest payments and principal repayment during the holding period. Both indices invest such cash inflows in demand deposits and reinvest them in the bond portfolio at the end of each month. This approach is closer to how index products are actually managed and facilitates index tracking.

5. Weighting

Both indices assign weight to each constituent based on its circulation volume. This approach can reflect the composition of the market, ensure stable weighting, and accurately measure the market trends.

(II) Application

As the bond market evolves, bond indices are no longer merely a barometer of market trends. Instead, they possess more and more investment utilities and can be found in an ever-wider and more extensive set of scenarios. The CFETS Interbank Green Bond Index and the CFETS Interbank Carbon-Neutral Bond Index are no different, mainly serving the following four purposes:

1. Gauging market performance

A bond index, computed based on the prices of a basket of bonds, serves fundamentally to reflect the risk-return profile of the aggregate bond market or one of its sectors. Because the two indices are calculated based on an expanded range of constituents and reasonable market prices, they can better reflect the risk-return profile of the interbank green bond market and the interbank carbon-neutral bond market, respectively.

2. Serving as performance benchmark

As funds and other wealth management products continue to grow, indices have been increasingly created to measure excess returns. The CFETS Interbank Green Bond Index and the CFETS Interbank Carbon-Neutral Bond Index, with their well-documented compilation rules and the public nature of their and the constituents' historical values, can help investors measure the performance of their green or carbon-neutral bond portfolios.

3. Developing linked products

As publicly released benchmarks, the two indices provide open, clear, and transparent information on the compilation methodologies and constituents. This enables financial institutions to develop a variety of linked products such as segregated accounts, publicly offered funds, and ETFs. Some interbank participants have already begun to trade total return swaps linked to the CFETS Interbank Carbon-Neutral Bond Index.

4. Supporting research and analysis

Investors can use bond indices to analyze the historical price changes of a certain type or types of bonds. As China's bond market opens wider to the world, more and more overseas institutional investors are hoping to tap into its opportunities. By examining the historical values and durations of the two indices, they can glean insight into the risk-return profile of China's green and carbon-neutral bond markets and make informed investment decisions.

(III) Release channels and information released

Information released as part of the CFETS Interbank Green Bond Index and the CFETS Interbank Carbon-Neutral Bond Index includes price indicators such as total return index, dirty price index, and clean price index; risk indicators including duration, convexity, and basis point value; as well as yield-to-maturity, price fluctuations, and total market value. Such a rich dataset can help investors better understand the indices and the corresponding bond markets.

All information about CFETS bond indices is released through the official website of CFETS (www.chinamoney.com.cn). Institutional market participants, domestic and overseas investors, and the public can also obtain this information from CFETS-approved data vendors. Institutional participants may additionally subscribe for this information through the APIs of the CFETS Market Data Service (CMDs). The indices are calculated and released at around 6:00 p.m. Beijing time each trading day of the interbank market.

Latest Policies and Major Events

On 16th July 2021, the Shanghai Stock Exchange (SSE) released No. 3 Guide for Review Business of Issuance and Listing on SSE STAR Market – Business Consultation and Communication, aiming to further improve the consultation and communication mechanism, improve review transparency, and serve the needs of market participants. It is an important measure for the SSE to do practical work for market participants and promote transparent review.

On 30th July 2021, the People's Bank of China (PBoC) held the conference on work in H2 2021 to summarize the work in H1 2021, and set major tasks including green finance system development, opening up of China's financial sector and RMB internationalisation in the second half of this year. It would enhance coordination in quickening up the pace to improve the system of green finance, further promoting financial opening-up in an orderly manner. Pressing ahead with RMB internationalization in a stable and prudent manner is also on the list, as well as deepening international monetary cooperation, and developing offshore RMB markets.

On 2nd September 2021, Beijing stock exchange was launched in Beijing, which would be a major base for innovative small-and medium-sized enterprises (SMEs) and high-tech industries. It is the Chinese mainland's third bourse after the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE), which were established in 1990. The Beijing Stock Exchange opened its doors for registration of investors on September 17th.

On September 5th and 6th, two separate plans to further develop the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone and build the new zone for Guangdong-Macao in-depth cooperation in Hengqin were launched, the new plans mark the country's latest move to further deepen reforms and opening-up, providing ample opportunities for the long-term development of the Bay Area.

On 10th September 2021, the Cross-boundary Wealth Management Connect (WMC) pilot scheme was launched. The pilot scheme allows Hong Kong, Macao and Mainland residents in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) to invest in diversified wealth management products across the boundary.

On 18th September 2021, the PBoC published the "2021 RMB Internationalization Report". The Report shows various breakthroughs in a number of RMB business indicators. In 2020, the total amount of RMB cross-border payments reached a record high



Shanghai Skyline

of RMB28.39 trillion, a YoY increase of 44.3%; RMB cross-border receipts and payments were generally balanced, with a total net outflow of RMB185.786 billion in the year.

On 18th September 2021, the PBoC and the State Administration of Foreign Exchange (SAFE) jointly published draft guidelines to regulate overseas lending by Chinese banks, which stood at RMB4.4 trillion as of the end of August, to solicit public feedback which broaden the scope of businesses accessible to domestic banks' overseas yuan loans and set a ceiling on overseas loan balances. The new rules relax such restrictions, allowing domestic banks to directly lend to overseas companies within the approved business scope. Overseas lenders are no longer limited to "going out" projects.

On 24th September 2021, Southbound Trading under the scheme of Bond Connect between the Mainland and Hong Kong was officially launched. It offers Mainland institutional investors convenient access to the Hong Kong and global bond markets. On the first trading day of Southbound Bond Connect, over 40 Mainland institutional investors conducted more than 150 transactions with 11 Hong Kong market makers, with the turnovers amounting to approximately RMB4 billion and covering major bond categories on the Hong Kong market.

On 15th October 2021, the China Securities Regulatory Commission (CSRC) announced that it would allow qualified foreign institutions to trade more types of onshore derivatives. Starting 1st November 2021, investors under the Qualified Foreign Institutional Investor (QFII) scheme will be allowed to trade commodity futures, commodity options and stock index options.

China Onshore RMB Market Events

On 24th September 2021, the PBoC and the Hong Kong Monetary Authority (HKMA) jointly held a launch ceremony for the Southbound Trading under mutual bond market access between Hong Kong and Mainland China (South Bond Connect). On the same day, China Foreign Exchange Trade Systems (CFETS) rolled out efficient trading services for the South Bond Connect, providing domestic institutions with one-stop services to invest global bonds with multiple choices in currencies and mechanisms.

On 24th September 2021, National Association of Financial Market Institutional Investors (NAFMII) and the International Capital Market Association (ICMA) jointly released Panda Bonds: Raising Finance in China's Bond Market (Case Studies) (Chinese and English version) and Investing in China's Interbank

Bond Market: A Handbook (English version), providing guidance for overseas issuers and investors on financing and investment in China interbank bond market respectively.

On 27th September 2021, CFETS introduced MarketAxess as the third overseas electronic trading platform under both China Interbank Bond Market (CIBM Direct) and Bond Connect channel, with guidance from the PBoC, to further facilitate global investors to access China bond market. This significantly improves the trading experience of overseas investors, satisfies overseas institutional investors' investment demand for RMB bonds and plays a positive role in promoting the high-quality development of the opening-up of CIBM.

London Offshore RMB Market Events

On 21st July 2021, the Financial Conduct Authority (FCA) and the Bank of England supported and encouraged liquidity providers in the London Interbank Offered Rate (LIBOR) cross-currency swaps market to adopt new quoting conventions for interdealer trading based on risk-free rates (RFRs) instead of LIBOR from 21 September this year, following close engagement with authorities across LIBOR jurisdictions and with market participants.

This was to facilitate a further shift in market liquidity toward RFRs, bringing benefits for a wide range of users as they move away from LIBOR.

On 13th August 2021, London RMB Business Quarterly Report Vol.10 was released. This report which was jointly produced by the City of London Corporation and the PBoC Representative Office for Europe, revealed that London experienced a booming offshore RMB market in the first quarter of 2021.

On 21st September 2021, The City of London Corporation launched their third green horizon perspectives episode, The Next Frontier: Investing in a Nature Positive Economy looked at the role of the financial sector in directing capital flows towards supporting the preservation and restoration of nature. With a varied agenda of panel discussions, videos and keynote messages, it included an opening speech from Professor Dasgupta, who led the HM Treasury review on the economics of biodiversity. During the event, the Policy Chair announced the City Corporation is joining the Race to Zero and committing to the UK100 membership pledge.

On 21st October 2021, the London RMB Market Infrastructure Sub Working Group held an Online Workshop to discuss China's National Emissions Scheme (ETS) and its linkage to International Carbon Markets. The workshop was held in partnership with IHS Markit a member of the London RMB Business Monitoring Working Group.

HK Offshore RMB Market Update

RMB deposits remained unchanged, breakthrough was achieved in mainland and HK connectivity

According to HKMA, renminbi deposits in Hong Kong remained unchanged at RMB821.2 billion at the end of June. The total renminbi for cross-border trade settlement increased from RMB482.3 billion in May to RMB650.0 billion in June. The HKMA has suggested that the changes in Renminbi deposits were due to a wide range of factors, such as interest rate movements and fund-raising activities and so on. The market is required to read this more appropriate by observing the longer-term trends, but not to over-interpretation the fluctuations in a single month.

On 6th September 2021, the Plan for Comprehensive Deepening Reform & Opening Up of the Qianhai Shenzhen-Hong Kong Modern Service Industry Co-operation Zone was announced. According to the Plan, the total area of the Qianhai zone will be expanded to 120.56 square km from 14.92 square km. The expansion will cover many important areas, including the port business, logistic industry and exhibition industry. Qianhai plan will foster Hong Kong-Shenzhen co-operation at a higher level under which the two cities can serve as dual engines to drive development in the Greater Bay Area. There will be more favorable opportunities for business and

individuals in involvement in Qianhai.

On 20th August 2021, The Securities and Futures Commission (SFC) of Hong Kong approved the launch of an A shares index futures contract by the Hong Kong Exchanges and Clearing Limited (HKEX), providing a significant new risk management tool for the growing number of global investors who participate in China's A shares market, including those trading through Stock Connect mechanism between Chinese mainland and Hong Kong SAR.

On 20th August 2021, the PBoC issued RMB25 billion RMB-denominated central bank bills in Hong Kong, including RMB10 billion with a term of three months and a rate of 2.60%, and RMB15 billion with a term of one year and a rate of 2.75%. The issuance was well received by overseas investors, with a total bid amount of about RMB73 billion, more than 2.9 times the issued amount.

On 22nd September 2021, China's Ministry of Finance announced that it will issue RMB8 billion (USD1.24 billion) worth of renminbi-denominated sovereign bonds in Hong Kong's offshore market, marking the first issue of a total of RMB20 billion renminbi-denominated treasury bonds in Hong Kong in 2021, and the primary auction would start on 23rd September 2021.

On 24th September 2021, the PBoC issued RMB5 billion RMB-denominated central bank bills in Hong Kong, with a term of six months and a rate of 2.50%. The issuance was well received by overseas investors, with a total bid amount of about RMB27.8 billion, more than 5.5 times the issued amount.

On 24th September 2021, the Macao SAR government said that Guangdong province will issue offshore RMB local government bonds in Macao in October, the amount of bonds is estimated to be RMB2.2 billion, with a maturity of 3 years. On the same day, the Shenzhen municipal government announced that it will issue up to RMB5 billion offshore local government bonds in Hong Kong in October, and will be listed on the Stock Exchange of Hong Kong. The issuance term will be 2/3/5 years, of which 3/5 years will be green bonds.

Green Finance

China

On 16th July 2021, China officially launched the world's largest national carbon emissions trading scheme (China ETS). The scheme aims to serve as a promising policy instrument to help China implement its 2060 carbon neutral target, and meet the UN SDGs and Paris Agreement goals.

On 16th July 2021, China Central Depository & Clearing Co., Ltd (CCDC) released ChinaBond Carbon Emissions Allowance (CEA) Spot Price Index and the ChinaBond CEA Composite Price Index.

On 24th July 2021, a senior official from the Ministry of Finance said that fiscal policy can play a key role in driving green development in China, through adopting tax and subsidies to support low-carbon production and lifestyle. By the end of June 2021, 4,156 projects of the PPP model in the pollution prevention and green low-carbon fields had been signed in China, with total investment of RMB4.1 trillion (USD632.6 billion).

On 18th August 2021, the PBoC issued China's first batch of green finance standards, which opened the prelude to the compilation of China's green finance standards. The first batch of green finance standards included two industry standards, the "Guidelines for Financial Institutions' Environmental Information Disclosure" (JR/T 0227-2021) and "Environmental Equity Financing Instruments" (JR/T 0228-2021).

On 16th September 2021, the PBoC released the English version of the "Green Bond Endorsed Projects Catalogue (2021 Edition)."

On 17th September 2021, CCDC launched the ChinaBond Green Bond Environmental Benefits Database and the Description Specifications for the ChinaBond Green Bond Environmental Benefit Disclosure Indicator System (the 'Indicator System') on a trial basis, in an aim to help achieve the goals of emission peak and carbon neutrality.

On 24th September 2021, China Green Bond Standard Committee released the Detailed Rules for Market-based Evaluation of Green Bond Evaluation and Certification Institutions (Trial Version) and supporting documents such as evaluation standards and material list.

UK

On 21st September 2021, the UK launched its inaugural Green Gilt which is a 12-year bond, maturing on 31st July 2033. The Green Gilt has raised GBP10 billion and will support green projects across the country, which will help drive progress to net zero and create jobs across the UK.

On 21st September 2021, the Task Force on Scaling Voluntary Carbon Markets a private sector-led initiative, announced the formation of an independent governance body for carbon markets and credits that will aim to set a global benchmark in proving the social value and carbon reduction potential of carbon credits and offsetting. Led by 22 representatives on a board, the body will be global in scope, with more than 12 countries represented, almost half of which come from the Global South. An executive secretariat, expert panel and member consultation group of over 250 organisations will all feed into the body with support the creation of a global standard.

On 19th October 2021, the British government published a Net Zero Strategy aimed at ending the country's contribution to climate change. The key

pledges and policies set out in the document include the following: to fully decarbonise the power system by 2035, to deliver 5GW of hydrogen production capacity by 2030 whilst halving emissions from oil and gas, to deliver four carbon capture usage and storage clusters by 2030, to set a path to all new heating appliances in homes and workplaces from 2035 being low carbon, to remove all road emissions at the tailpipe and kickstart zero emissions international travel, and an ambition to deploy at least 5 MtCO₂/year of engineered GGRs by 2030.

Reserve Currencies

On 2nd June 2021, the European Central Bank published the 20th annual review of the international role of the euro, finding that the trend towards gradual diversification of global reserve portfolios continued in 2020. At constant exchange rates, the share of currencies other than the euro and the US dollar increased by 0.7 percentage points over the review period. The increase largely reflected purchases of official reserve assets denominated in Chinese renminbi, the share of which increased by 0.3 percentage points, and in Canadian dollars, with an increase of 0.2 percentage points. The share of other major reserve currencies was broadly stable.

On 29th July 2021, the Bank of England, in coordination with the European Central Bank, announced that in light of sustained improvements in funding market conditions it will suspend the Liquidity Facility in Euros (LiFE) at the end of September 2021. The final operation is scheduled to take place on 29th September 2021, but the facility could be rapidly reactivated at any stage if justified by market conditions.

Digital Currency

China

On 16th July 2021, the PBoC released Progress of Research & Development of E-CNY in China. It launched a task force to study digital fiat currency in 2014, and established its Digital Currency Institute in 2016.

UK

On 30th September 2021, seven central banks and the BIS took forward their work on retail central bank digital currencies and analyse policy options and practical implementation issues. New set of reports explored how central bank digital currencies (CBDCs) could best meet users' future needs through developing interoperable systems that support private innovation while preserving public trust. These were the main conclusions of a new set of reports issued by seven central banks and the Bank for International Settlements (BIS) that looked into users' needs, technological design options and financial stability implications of retail or "general purpose" CBDCs.

Appendix I

List of Dim Sum Bond (RMB Bond) Issuance in London as of June 2021

Issuer	Amount Issued (CNY)	Coupon (%)	Issue Date	Maturity
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	650MM	2.200%	29/06/2021	06/12/2023
HSBC HOLDINGS PLC	2750MM	3.400%	29/06/2021	29/06/2027
NORDIC INVESTMENT BANK	500MM	2.300%	18/06/2021	18/06/2024
STANDARD CHARTERED BANK	750MM	2.800%	11/06/2021	11/06/2024
QNB FINANCE LIMITED	150MM	3.410%	02/06/2021	01/06/2026
INTERNATIONAL FINANCE CORPORATION	635MM	2.200%	18/05/2021	01/09/2023
QNB FINANCE LIMITED	130MM	3.420%	28/04/2021	27/04/2024
QNB FINANCE LIMITED	1100MM	3.500%	22/04/2021	22/04/2024
QNB FINANCE LIMITED	400MM	3.520%	21/04/2021	21/04/2023
QNB FINANCE LIMITED	140MM	3.180%	09/04/2021	09/04/2026
QNB FINANCE LIMITED	220MM	3.500%	31/03/2021	31/03/2026
QNB FINANCE LIMITED	150MM	3.200%	12/03/2021	12/03/2023
QNB FINANCE LIMITED	500MM	3.280%	11/03/2021	11/03/2023
QNB FINANCE LIMITED	150MM	3.300%	26/02/2021	25/02/2026
QNB FINANCE LIMITED	130MM	2.800%	24/02/2021	24/02/2028
QNB FINANCE LIMITED	150MM	3.280%	23/02/2021	23/02/2024
QNB FINANCE LIMITED	500MM	3.280%	18/02/2021	18/02/2024
QNB FINANCE LIMITED	405MM	3.300%	05/02/2021	05/02/2026
QNB FINANCE LIMITED	1500MM	3.150%	04/02/2021	04/02/2026
FIRST ABU DHABI BANK P.J.S.C.	1500MM	3.150%	29/01/2021	29/01/2026
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	200MM	2.000%	21/01/2021	21/01/2025
QNB FINANCE LIMITED	176MM	3.300%	13/01/2021	13/01/2026
QNB FINANCE LIMITED	240MM	3.730%	23/12/2020	23/12/2025
QNB FINANCE LIMITED	200MM	3.970%	11/12/2020	11/12/2030
QNB FINANCE LIMITED	240MM	3.100%	04/12/2020	04/12/2023
QNB FINANCE LIMITED	150MM	4.001%	02/12/2020	02/12/2030
INTERNATIONAL FINANCE CORPORATION	20MM	2.350%	27/11/2020	27/11/2027
QNB FINANCE LIMITED	500MM	3.950%	17/11/2020	17/11/2027
QNB FINANCE LIMITED	150MM	3.670%	06/11/2020	04/11/2023
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2200MM	3.050%	28/10/2020	27/10/2023
AGRICULTURAL DEVELOPMENT BANK OF CHINA	1500MM	3.250%	28/10/2020	27/10/2025
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2000MM	3.800%	28/10/2020	27/10/2030
QNB FINANCE LIMITED	140MM	3.000%	16/10/2020	16/10/2025
QNB FINANCE LIMITED	138MM	3.630%	24/09/2020	24/09/2023

Issuer	Amount Issued (CNY)	Coupon (%)	Issue Date	Maturity
INTERNATIONAL FINANCE CORPORATION	1400MM	2.550%	16/09/2020	18/09/2023
QNB FINANCE LIMITED	750MM	3.800%	15/09/2020	15/09/2025
QNB FINANCE LIMITED	750MM	3.500%	09/09/2020	09/03/2026
QNB FINANCE LIMITED	140MM	3.400%	18/08/2020	18/08/2025
FIRST ABU DHABI BANK P.J.S.C.	3600MM	3.400%	18/08/2020	18/08/2025
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2500MM	2.600%	12/08/2020	11/08/2023
AGRICULTURAL DEVELOPMENT BANK OF CHINA	1800MM	2.850%	12/08/2020	11/08/2025
FIRST ABU DHABI BANK P.J.S.C.	189MM	3.500%	15/07/2020	15/07/2025
QNB FINANCE LIMITED	1200MM	3.850%	10/07/2020	10/07/2025
FIRST ABU DHABI BANK P.J.S.C.	200MM	3.300%	02/07/2020	02/07/2025
FIRST ABU DHABI BANK P.J.S.C.	1400MM	3.500%	02/07/2020	02/07/2025
QNB FINANCE LIMITED	1200MM	3.800%	17/06/2020	17/06/2025
QNB FINANCE LIMITED	235MM	3.900%	17/06/2020	17/06/2025
FIRST ABU DHABI BANK P.J.S.C.	350MM	3.100%	12/06/2020	12/06/2023
QNB FINANCE LIMITED	445MM	3.600%	05/06/2020	05/06/2025
NATWEST MARKETS PLC	40MM	3.500%	04/06/2020	04/06/2023
NATWEST MARKETS PLC	75MM	3.460%	27/05/2020	27/05/2023
QNB FINANCE LIMITED	130MM	4.000%	06/05/2020	05/05/2025
QNB FINANCE LIMITED	250MM	4.080%	24/04/2020	24/04/2025
WELLS FARGO FINANCE LLC	100MM	4.050%	07/04/2020	07/04/2025
WELLS FARGO FINANCE LLC	70MM	4.000%	07/04/2020	06/04/2025
WELLS FARGO BANK N.A.	100MM	3.950%	07/04/2020	06/04/2025
WELLS FARGO FINANCE LLC	70MM	4.350%	02/04/2020	01/04/2025
WELLS FARGO BANK N.A.	260MM	4.220%	02/04/2020	01/04/2025
WELLS FARGO BANK N.A.	200MM	4.300%	02/04/2020	01/04/2025
WELLS FARGO FINANCE LLC	100MM	3.150%	25/03/2020	25/03/2023
WELLS FARGO & COMPANY	145MM	2.720%	13/03/2020	12/03/2027
QNB FINANCE LIMITED	200MM	3.315%	11/03/2020	11/03/2025
QNB FINANCE LIMITED	200MM	3.350%	11/03/2020	11/03/2027
FIRST ABU DHABI BANK P.J.S.C.	139MM	3.350%	13/02/2020	13/02/2025
COMMONWEALTH BANK OF AUSTRALIA	200MM	3.255%	22/01/2020	22/01/2025
QNB FINANCE LIMITED	500MM	4.000%	21/01/2020	21/01/2030
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	1000MM	2.600%	15/01/2020	15/01/2023
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	1735MM	2.600%	15/01/2020	15/01/2023
QNB FINANCE LIMITED	135MM	3.910%	14/01/2020	14/01/2025
QNB FINANCE LIMITED	219MM	3.885%	10/01/2020	10/01/2025
NATWEST MARKETS PLC	35MM	3.480%	31/12/2019	31/12/2024
FIRST ABU DHABI BANK P.J.S.C.	150MM	3.500%	12/12/2019	12/12/2024
QNB FINANCE LIMITED	350MM	4.053%	04/12/2019	04/12/2026

Issuer	Amount Issued (CNY)	Coupon (%)	Issue Date	Maturity
FIRST ABU DHABI BANK P.J.S.C.	240MM	3.500%	29/11/2019	29/11/2024
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	200MM	3.212%	21/11/2019	21/11/2024
FIRST ABU DHABI BANK P.J.S.C.	458MM	3.420%	20/11/2019	20/11/2024
QNB FINANCE LIMITED	140MM	3.570%	13/11/2019	13/11/2021
AGRICULTURAL DEVELOPMENT BANK OF CHINA	4500MM	3.400%	07/11/2019	06/11/2024
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2500MM	3.180%	07/11/2019	06/11/2022
NATWEST MARKETS PLC	200MM	3.685%	05/11/2019	05/11/2024
FIRST ABU DHABI BANK P.J.S.C.	845MM	3.220%	23/10/2019	23/10/2024
QNB FINANCE LIMITED	165MM	3.600%	22/10/2019	22/10/2024
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	490MM	2.440%	19/09/2019	19/09/2022
FIRST ABU DHABI BANK P.J.S.C.	140MM	3.440%	19/09/2019	19/09/2024
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	700MM	2.315%	03/09/2019	03/09/2022
LLOYDS BANK PLC	200MM	3.310%	03/09/2019	03/09/2024
COMMONWEALTH BANK OF AUSTRALIA	200MM	3.050%	01/08/2019	01/08/2022
QNB FINANCE LIMITED	155MM	3.815%	03/07/2019	03/07/2024
QNB FINANCE LIMITED	140MM	4.300%	20/06/2019	20/06/2024
LLOYDS BANK PLC	70MM	3.450%	19/06/2019	19/06/2022
WESTPAC BANKING CORPORATION	140MM	3.600%	18/06/2019	18/06/2026
NATWEST MARKETS PLC	108MM	4.350%	10/06/2019	10/06/2024
NATWEST MARKETS PLC	105MM	4.390%	10/06/2019	10/06/2024
AGRICULTURAL DEVELOPMENT BANK OF CHINA	1000MM	3.230%	30/05/2019	29/05/2022
HITACHI CAPITAL (UK) PLC	100MM	3.650%	08/05/2019	08/05/2023
QNB FINANCE LIMITED	200MM	3.800%	25/04/2019	25/04/2022
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	150MM	3.535%	24/04/2019	24/04/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	3.470%	23/04/2019	23/04/2022
QNB FINANCE LIMITED	100MM	4.180%	29/03/2019	28/03/2024
WESTPAC BANKING CORPORATION	150MM	3.680%	27/03/2019	27/03/2024
FIRST ABU DHABI BANK P.J.S.C.	140MM	3.955%	26/03/2019	26/03/2024
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	135MM	3.675%	25/03/2019	25/03/2024
WESTPAC BANKING CORPORATION	150MM	3.670%	22/03/2019	22/03/2024
NATWEST MARKETS PLC	40MM	4.620%	20/03/2019	20/03/2024
FIRST ABU DHABI BANK P.J.S.C.	300MM	4.000%	19/03/2019	19/03/2024
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	300MM	3.700%	18/03/2019	18/03/2024
COMMONWEALTH BANK OF AUSTRALIA	250MM	3.805%	11/03/2019	11/03/2024
COMMONWEALTH BANK OF AUSTRALIA	150MM	3.805%	05/03/2019	05/03/2024
WESTPAC BANKING CORPORATION	150MM	3.760%	04/03/2019	04/03/2024
FIRST ABU DHABI BANK P.J.S.C.	200MM	4.120%	11/02/2019	11/02/2024

Issuer	Amount Issued (CNY)	Coupon (%)	Issue Date	Maturity
QNB FINANCE LIMITED	500MM	4.350%	29/01/2019	29/01/2022
QNB FINANCE LIMITED	135MM	4.600%	23/01/2019	23/01/2024
HITACHI CAPITAL (UK) PLC	200MM	4.750%	29/10/2018	29/04/2022
WESTPAC BANKING CORPORATION	200MM	4.700%	12/10/2018	12/10/2022
HITACHI CAPITAL (UK) PLC	600MM	4.600%	27/09/2018	27/09/2021
BANK OF MONTREAL	200MM	4.530%	19/09/2018	19/09/2021
BANK OF MONTREAL	155MM	4.720%	19/09/2018	19/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	270MM	4.795%	14/09/2018	14/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	4.610%	13/09/2018	13/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	145MM	4.620%	11/09/2018	11/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	137MM	4.600%	11/09/2018	11/09/2023
FIRST ABU DHABI BANK P.J.S.C.	650MM	4.500%	10/09/2018	10/09/2021
ROYAL BANK OF CANADA	160MM	4.480%	07/09/2018	07/09/2023
WESTPAC BANKING CORPORATION	190MM	4.600%	07/09/2018	07/09/2023
WESTPAC BANKING CORPORATION	160MM	4.621%	07/09/2018	07/09/2023
COMMONWEALTH BANK OF AUSTRALIA	80MM	4.520%	07/09/2018	07/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	4.600%	04/09/2018	04/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	4.300%	24/08/2018	24/08/2021
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	138MM	4.630%	24/08/2018	24/08/2023
WESTPAC BANKING CORPORATION	270MM	4.650%	23/08/2018	23/08/2023
WESTPAC BANKING CORPORATION	140MM	4.350%	15/08/2018	15/08/2023
WESTPAC BANKING CORPORATION	627MM	4.420%	14/08/2018	14/08/2023
WESTPAC BANKING CORPORATION	140MM	4.510%	01/08/2018	01/08/2028
ROYAL BANK OF CANADA	135MM	4.300%	17/07/2018	17/07/2023
WESTPAC BANKING CORPORATION	200MM	4.770%	30/05/2018	30/05/2023
CREDIT AGRICOLE CORP & INV BANK	200MM	4.720%	29/05/2018	29/05/2023
COMMONWEALTH BANK OF AUSTRALIA	340MM	4.615%	26/04/2018	26/04/2023
HITACHI CAPITAL (UK) PLC	50MM	4.600%	27/02/2018	22/02/2022
INTERNATIONAL FINANCE CORPORATION	75MM	3.910%	11/10/2017	11/10/2022
LLOYDS BANK PLC	30MM	5.230%	31/03/2017	31/03/2022
COMMONWEALTH BANK OF AUSTRALIA	70MM	5.810%	18/01/2017	18/01/2022
COMMONWEALTH BANK OF AUSTRALIA	120MM	4.650%	07/12/2016	07/12/2021
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	130MM	4.350%	23/11/2016	23/11/2021
COMMONWEALTH BANK OF AUSTRALIA	90MM	4.060%	02/11/2016	02/11/2021
LLOYDS BANK PLC	54MM	4.530%	24/07/2015	24/07/2025
CHINA DEVELOPMENT BANK	900MM	4.350%	10/10/2014	19/09/2024
LLOYDS BANK PLC	200MM	4.620%	17/01/2014	17/01/2024
LLOYDS BANK PLC	100MM	4.610%	24/09/2012	24/09/2022

Source: London Stock Exchange

Appendix II

List of Bond Issuance by Oversea Issuers in China Interbank Bond Market as of June 2021

Issuer	Amount Issued (RMB100M)	Coupon (%)	Issue Date	Maturity
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	650MM	2.20%	29/06/2021	06/12/2023
HSBC HOLDINGS PLC	2750MM	3.40%	29/06/2021	29/06/2027
NORDIC INVESTMENT BANK	500MM	2.30%	18/06/2021	18/06/2024
STANDARD CHARTERED BANK	750MM	2.80%	11/06/2021	11/06/2024
QNB FINANCE LIMITED	150MM	3.41%	02/06/2021	01/06/2026
INTERNATIONAL FINANCE CORPORATION	635MM	2.20%	18/05/2021	01/09/2023
QNB FINANCE LIMITED	130MM	3.42%	28/04/2021	27/04/2024
QNB FINANCE LIMITED	1100MM	3.50%	22/04/2021	22/04/2024
QNB FINANCE LIMITED	400MM	3.52%	21/04/2021	21/04/2023
QNB FINANCE LIMITED	140MM	3.18%	09/04/2021	09/04/2026
QNB FINANCE LIMITED	220MM	3.50%	31/03/2021	31/03/2026
QNB FINANCE LIMITED	150MM	3.20%	12/03/2021	12/03/2023
QNB FINANCE LIMITED	500MM	3.28%	11/03/2021	11/03/2023
QNB FINANCE LIMITED	150MM	3.30%	26/02/2021	25/02/2026
QNB FINANCE LIMITED	130MM	2.80%	24/02/2021	24/02/2028
QNB FINANCE LIMITED	150MM	3.28%	23/02/2021	23/02/2024
QNB FINANCE LIMITED	500MM	3.28%	18/02/2021	18/02/2024
QNB FINANCE LIMITED	405MM	3.30%	05/02/2021	05/02/2026
QNB FINANCE LIMITED	1500MM	3.15%	04/02/2021	04/02/2026
FIRST ABU DHABI BANK P.J.S.C.	1500MM	3.15%	29/01/2021	29/01/2026
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	200MM	2.00%	21/01/2021	21/01/2025
QNB FINANCE LIMITED	176MM	3.30%	13/01/2021	13/01/2026
QNB FINANCE LIMITED	240MM	3.73%	23/12/2020	23/12/2025
QNB FINANCE LIMITED	200MM	3.97%	11/12/2020	11/12/2030
QNB FINANCE LIMITED	240MM	3.10%	04/12/2020	04/12/2023
QNB FINANCE LIMITED	150MM	4.00%	02/12/2020	02/12/2030
INTERNATIONAL FINANCE CORPORATION	20MM	2.35%	27/11/2020	27/11/2027
QNB FINANCE LIMITED	500MM	3.95%	17/11/2020	17/11/2027
QNB FINANCE LIMITED	150MM	3.67%	06/11/2020	04/11/2023
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2200MM	3.05%	28/10/2020	27/10/2023
AGRICULTURAL DEVELOPMENT BANK OF CHINA	1500MM	3.25%	28/10/2020	27/10/2025
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2000MM	3.80%	28/10/2020	27/10/2030
QNB FINANCE LIMITED	140MM	3.00%	16/10/2020	16/10/2025
QNB FINANCE LIMITED	138MM	3.63%	24/09/2020	24/09/2023

Issuer	Amount Issued (RMB100M)	Coupon (%)	Issue Date	Maturity
INTERNATIONAL FINANCE CORPORATION	1400MM	2.55%	16/09/2020	18/09/2023
QNB FINANCE LIMITED	750MM	3.80%	15/09/2020	15/09/2025
QNB FINANCE LIMITED	750MM	3.50%	09/09/2020	09/03/2026
QNB FINANCE LIMITED	140MM	3.40%	18/08/2020	18/08/2025
FIRST ABU DHABI BANK P.J.S.C.	3600MM	3.40%	18/08/2020	18/08/2025
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2500MM	2.60%	12/08/2020	11/08/2023
AGRICULTURAL DEVELOPMENT BANK OF CHINA	1800MM	2.85%	12/08/2020	11/08/2025
FIRST ABU DHABI BANK P.J.S.C.	189MM	3.50%	15/07/2020	15/07/2025
QNB FINANCE LIMITED	1200MM	3.85%	10/07/2020	10/07/2025
FIRST ABU DHABI BANK P.J.S.C.	200MM	3.30%	02/07/2020	02/07/2025
FIRST ABU DHABI BANK P.J.S.C.	1400MM	3.50%	02/07/2020	02/07/2025
QNB FINANCE LIMITED	1200MM	3.80%	17/06/2020	17/06/2025
QNB FINANCE LIMITED	235MM	3.90%	17/06/2020	17/06/2025
FIRST ABU DHABI BANK P.J.S.C.	350MM	3.10%	12/06/2020	12/06/2023
QNB FINANCE LIMITED	445MM	3.60%	05/06/2020	05/06/2025
NATWEST MARKETS PLC	40MM	3.50%	04/06/2020	04/06/2023
NATWEST MARKETS PLC	75MM	3.46%	27/05/2020	27/05/2023
QNB FINANCE LIMITED	130MM	4.00%	06/05/2020	05/05/2025
QNB FINANCE LIMITED	250MM	4.08%	24/04/2020	24/04/2025
WELLS FARGO FINANCE LLC	100MM	4.05%	07/04/2020	07/04/2025
WELLS FARGO FINANCE LLC	70MM	4.00%	07/04/2020	06/04/2025
WELLS FARGO BANK N.A.	100MM	3.95%	07/04/2020	06/04/2025
WELLS FARGO FINANCE LLC	70MM	4.35%	02/04/2020	01/04/2025
WELLS FARGO BANK N.A.	260MM	4.22%	02/04/2020	01/04/2025
WELLS FARGO BANK N.A.	200MM	4.30%	02/04/2020	01/04/2025
WELLS FARGO FINANCE LLC	100MM	3.15%	25/03/2020	25/03/2023
WELLS FARGO & COMPANY	145MM	2.72%	13/03/2020	12/03/2027
QNB FINANCE LIMITED	200MM	3.32%	11/03/2020	11/03/2025
QNB FINANCE LIMITED	200MM	3.35%	11/03/2020	11/03/2027
FIRST ABU DHABI BANK P.J.S.C.	139MM	3.35%	13/02/2020	13/02/2025
COMMONWEALTH BANK OF AUSTRALIA	200MM	3.26%	22/01/2020	22/01/2025
QNB FINANCE LIMITED	500MM	4.00%	21/01/2020	21/01/2030
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	1000MM	2.60%	15/01/2020	15/01/2023
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	1535MM	2.60%	15/01/2020	15/01/2023
QNB FINANCE LIMITED	135MM	3.91%	14/01/2020	14/01/2025
QNB FINANCE LIMITED	219MM	3.89%	10/01/2020	10/01/2025
NATWEST MARKETS PLC	35MM	3.48%	31/12/2019	31/12/2024
FIRST ABU DHABI BANK P.J.S.C.	150MM	3.50%	12/12/2019	12/12/2024
QNB FINANCE LIMITED	350MM	4.05%	04/12/2019	04/12/2026
FIRST ABU DHABI BANK P.J.S.C.	240MM	3.50%	29/11/2019	29/11/2024

Issuer	Amount Issued (RMB100M)	Coupon (%)	Issue Date	Maturity
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	200MM	3.21%	21/11/2019	21/11/2024
FIRST ABU DHABI BANK P.J.S.C.	458MM	3.42%	20/11/2019	20/11/2024
QNB FINANCE LIMITED	140MM	3.57%	13/11/2019	13/11/2021
AGRICULTURAL DEVELOPMENT BANK OF CHINA	4500MM	3.40%	07/11/2019	06/11/2024
AGRICULTURAL DEVELOPMENT BANK OF CHINA	2500MM	3.18%	07/11/2019	06/11/2022
NATWEST MARKETS PLC	200MM	3.69%	05/11/2019	05/11/2024
FIRST ABU DHABI BANK P.J.S.C.	845MM	3.22%	23/10/2019	23/10/2024
QNB FINANCE LIMITED	165MM	3.60%	22/10/2019	22/10/2024
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	490MM	2.44%	19/09/2019	19/09/2022
FIRST ABU DHABI BANK P.J.S.C.	140MM	3.44%	19/09/2019	19/09/2024
EUROPEAN BANK FOR RECONSTRUCTION & DEVELOPMENT	700MM	2.32%	03/09/2019	03/09/2022
LLOYDS BANK PLC	200MM	3.31%	03/09/2019	03/09/2024
COMMONWEALTH BANK OF AUSTRALIA	200MM	3.05%	01/08/2019	01/08/2022
QNB FINANCE LIMITED	155MM	3.82%	03/07/2019	03/07/2024
QNB FINANCE LIMITED	140MM	4.30%	20/06/2019	20/06/2024
LLOYDS BANK PLC	70MM	3.45%	19/06/2019	19/06/2022
WESTPAC BANKING CORPORATION	140MM	3.60%	18/06/2019	18/06/2026
NATWEST MARKETS PLC	108MM	4.35%	10/06/2019	10/06/2024
NATWEST MARKETS PLC	105MM	4.39%	10/06/2019	10/06/2024
AGRICULTURAL DEVELOPMENT BANK OF CHINA	1000MM	3.23%	30/05/2019	29/05/2022
HITACHI CAPITAL (UK) PLC	100MM	3.65%	08/05/2019	08/05/2023
QNB FINANCE LIMITED	200MM	3.80%	25/04/2019	25/04/2022
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	150MM	3.54%	24/04/2019	24/04/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	3.47%	23/04/2019	23/04/2022
QNB FINANCE LIMITED	100MM	4.18%	29/03/2019	28/03/2024
WESTPAC BANKING CORPORATION	150MM	3.68%	27/03/2019	27/03/2024
FIRST ABU DHABI BANK P.J.S.C.	140MM	3.96%	26/03/2019	26/03/2024
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	135MM	3.68%	25/03/2019	25/03/2024
WESTPAC BANKING CORPORATION	150MM	3.67%	22/03/2019	22/03/2024
NATWEST MARKETS PLC	40MM	4.62%	20/03/2019	20/03/2024
FIRST ABU DHABI BANK P.J.S.C.	300MM	4.00%	19/03/2019	19/03/2024
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	300MM	3.70%	18/03/2019	18/03/2024
COMMONWEALTH BANK OF AUSTRALIA	250MM	3.81%	11/03/2019	11/03/2024
COMMONWEALTH BANK OF AUSTRALIA	150MM	3.81%	05/03/2019	05/03/2024
WESTPAC BANKING CORPORATION	150MM	3.76%	04/03/2019	04/03/2024
FIRST ABU DHABI BANK P.J.S.C.	200MM	4.12%	11/02/2019	11/02/2024
QNB FINANCE LIMITED	500MM	4.35%	29/01/2019	29/01/2022

Issuer	Amount Issued (RMB100M)	Coupon (%)	Issue Date	Maturity
QNB FINANCE LIMITED	135MM	4.60%	23/01/2019	23/01/2024
HITACHI CAPITAL (UK) PLC	200MM	4.75%	29/10/2018	29/04/2022
WESTPAC BANKING CORPORATION	200MM	4.70%	12/10/2018	12/10/2022
HITACHI CAPITAL (UK) PLC	600MM	4.60%	27/09/2018	27/09/2021
BANK OF MONTREAL	200MM	4.53%	19/09/2018	19/09/2021
BANK OF MONTREAL	155MM	4.72%	19/09/2018	19/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	270MM	4.80%	14/09/2018	14/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	4.61%	13/09/2018	13/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	145MM	4.62%	11/09/2018	11/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	137MM	4.60%	11/09/2018	11/09/2023
FIRST ABU DHABI BANK P.J.S.C.	650MM	4.50%	10/09/2018	10/09/2021
ROYAL BANK OF CANADA	160MM	4.48%	07/09/2018	07/09/2023
WESTPAC BANKING CORPORATION	190MM	4.60%	07/09/2018	07/09/2023
WESTPAC BANKING CORPORATION	160MM	4.62%	07/09/2018	07/09/2023
COMMONWEALTH BANK OF AUSTRALIA	80MM	4.52%	07/09/2018	07/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	4.60%	04/09/2018	04/09/2023
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	140MM	4.30%	24/08/2018	24/08/2021
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	138MM	4.63%	24/08/2018	24/08/2023
WESTPAC BANKING CORPORATION	270MM	4.65%	23/08/2018	23/08/2023
WESTPAC BANKING CORPORATION	140MM	4.35%	15/08/2018	15/08/2023
WESTPAC BANKING CORPORATION	627MM	4.42%	14/08/2018	14/08/2023
WESTPAC BANKING CORPORATION	140MM	4.51%	01/08/2018	01/08/2028
ROYAL BANK OF CANADA	135MM	4.30%	17/07/2018	17/07/2023
QNB FINANCE LIMITED	142MM	5.32%	05/07/2018	06/07/2021
WESTPAC BANKING CORPORATION	200MM	4.77%	30/05/2018	30/05/2023
CREDIT AGRICOLE CORP & INV BANK	200MM	4.72%	29/05/2018	29/05/2023
COMMONWEALTH BANK OF AUSTRALIA	340MM	4.62%	26/04/2018	26/04/2023
HITACHI CAPITAL (UK) PLC	50MM	4.60%	27/02/2018	22/02/2022
INTERNATIONAL FINANCE CORPORATION	75MM	3.91%	11/10/2017	11/10/2022
LLOYDS BANK PLC	30MM	5.23%	31/03/2017	31/03/2022
COMMONWEALTH BANK OF AUSTRALIA	70MM	5.81%	18/01/2017	18/01/2022
COMMONWEALTH BANK OF AUSTRALIA	120MM	4.65%	07/12/2016	07/12/2021
AUSTRALIA & NEW ZEALAND BANKING GROUP LD	130MM	4.35%	23/11/2016	23/11/2021
COMMONWEALTH BANK OF AUSTRALIA	90MM	4.06%	02/11/2016	02/11/2021
LLOYDS BANK PLC	54MM	4.53%	24/07/2015	24/07/2025
CHINA DEVELOPMENT BANK	900MM	4.35%	10/10/2014	19/09/2024
LLOYDS BANK PLC	200MM	4.62%	17/01/2014	17/01/2024
LLOYDS BANK PLC	100MM	4.61%	24/09/2012	24/09/2022

Source: Wind (compiled by NAFMI)

Appendix III

Agreements on RMB Business Between China and the UK

Currency swap

In June 2013, the PBoC and BoE signed a bilateral currency swap agreement of RMB200 billion/GBP20 billion. In October 2015, the PBoC and BoE renewed the swap agreement and increased the size to RMB350 billion/GBP35 billion, effective for three years. In November 2019 and November 2021, the PBoC and BoE renewed the swap agreement again and the scale remained unchanged, effective for three years and five years respectively.

Clearing bank

In March 2014, the PBoC and BoE signed a Memorandum of Understanding to establish RMB clearing arrangements in London. In June 2014, the PBoC authorized China Construction Bank (London) to serve as the RMB clearing bank in London. In July 2016, the PBoC approved the transfer of clearing functions from China Construction Bank (London) to China Construction Bank, London Branch. By the end of June 2021, Cross-Border Inter-Bank Payments System (CIPS) had 1197 direct participating banks, 18 participating banks were from the UK, accounting for 1.54% of the total. In March 2020, CCB London Branch became the first direct CIPS participant in the UK and in the Europe.

RQFII

In October 2013 China announced the RQFII program for UK with a quota of RMB80 billion.

On 10th September, 2019, PBOC & SAFE removed QFII / RQFII Investment Quotas to promote Further opening-up of China's Financial Market.

London RMB Business Monitoring Group

The London RMB Business Monitoring Group is an industry-led working group co-chaired by City of London Corporation and the People's Bank of China Representative Office for Europe. This working group acts as a platform for financial institutions in the UK to discuss how to drive the London RMB business and encourage further innovation and diversification for offshore RMB products.

The working group members consists of the leading financial institutions, with HM Treasury, UK Department for International Trade and Bank of England joining as observer:

Agricultural Bank of China Ltd London	International Swaps and Derivatives Association (ISDA)
Bank of China Limited London Branch	KPMG
Bank of Communications Co Ltd. (London Office)	Legal and General Investment Management
Bloomberg	London Clearing House
China Central Depository & Clearing Co., Ltd (London Representative Office)	London Metal Exchange
China Construction Bank (London Branch), UK RMB Clearing Bank	London Stock Exchange Group
China Development Bank (London Branch)	National Association of Financial Market Institutional Investors (NAFMII)
ChinaFICC	Ninety One
China Financial Futures Exchange (CFFEX)	People's Bank of China Representative Office for Europe
China Foreign Exchange Trade System (CFETS)	PwC
China International Capital Corporation (UK)	R5FX
China Minsheng Banking Corporation (London Representative Office)	Refinitiv
Cross-Border Inter-Bank Payments System (CIPS)	Shanghai Clearing House (London Representative Office)
DBS	Shanghai Pudong Development Bank (London Branch)
EBS	Shanghai Stock Exchange London Office
EVIA	Standard Chartered Bank
HSBC	SWIFT
ICBC London Branch	TheCity UK
ICBC Standard Bank	Tradeweb
IHS Markit	Wind Financial

