

CHINA BUSINESS

THE FINANCIAL CENTRE DEVELOPMENT AGENCY

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EXECUTIVE SUMMARY

In 2021 we stand at a crossroads for globalisation. The global pandemic has highlighted to us that we are more than ever living in an highly connected, planetwide ecosystem, where what happens in one part of the world has an impact on everyone. The same can be said looking forward at the shared challenge of climate change, which requires global cooperation, capital and coordination.

Over the last couple of years, a substantial challenge to the globalisation paradigm has emerged in the form of the US-China trade war. Frictions between the world's largest and second largest economies have reverberated around the world, bringing to the fore the risk of "decoupling," and leading to ramifications elsewhere, including within the EU single market.

And yet, from a financial services perspective, the economies of the EU, US and China are more intertwined now than at any point previously. Opening up of Chinese capital markets has continued apace, with the removal of quotas in June 2020, and the subsequent merging of the RQFII and QFII schemes in November 2020 substantially easing access to China's capital markets for foreign institutional investors. This access channel is complemented ongoing easing of direct

access to the Chinese Interbank bond market for foreign institutional investors, as well as an increasing array of "connect" schemes, linking Hong Kong and other international financial centres with onshore Chinese capital markets.

Luxembourg is a pre-eminent hub within the European Union for financial services activity connected to Chinese capital markets, and the country is well positioned to act as a bridge into the RMB investment pool, as it has been doing for many years.

Seven Chinese banks have already established their European hubs in Luxembourg. These banks serve China based clients helping them invest into Europe, as well as European clients looking to invest in China. In addition to corporate banking services, the banks have expanded into capital market activities in Europe.

In the field of asset management as well, China and Luxembourg enjoy a strong connection. Over 40% of global investment funds tapping mainland China's capital markets are domiciled in Luxembourg, managing close to €75 bn in assets. The Grand Duchy is also home to international funds from many Chinese

asset managers, including China's largest, China AMC, and its role as a launchpad for Chinese asset managers looking to develop in Europe is on the increase. As an example, Ping An launched its first UCITS umbrella fund in Luxembourg in September 2020.

Turning to capital markets, 2021 marks the 10th anniversary of the first Dim Sum bond listing in Luxembourg. the continuous opening of the Chinese bond market, the second largest in the world, continues to provide opportunities for Luxembourg RMB bond listing. In September 2020, FTSE Russell announced that it would begin adding Chinese government bonds to its flagship World Government Bond Index from October 2021, building on previous inclusions in the Bloomberg Barclays Global Aggregate Index and JPMorgan's Government Bond Index- Emerging Markets. Moves of this nature will drive further international participation in the Chinese interbank bond market. When Chinese companies plan to list RMB bonds in continental Europe, the Luxembourg Stock Exchange (LuxSE) is a natural choice, as it is the primary stock exchange for Dim Sum Bond listings globally.

A strong international consensus is emerging on the need for urgent action on climate change, with the European Green Deal announced as a keystone initiative of the Von Der Leyen presidency of the European Commission, and with President Xi Jinping pledging in September 2020 that China would achieve carbon neutrality by 2060. Luxembourg is well-positioned to play a key role in this area due to its expertise in the field of green finance. China is already a leading issuer of green bonds with a cumulative issuance of US\$ 117 bn, but reaching carbon neutrality will require many times this investment. Luxembourg is the preferred gateway for Chinese issuers to tap European markets – offering both a dedicated platform, the Luxembourg Green Exchange, and operating a special linkage with the Shanghai Stock exchange to provide information on Chinese Green bonds in English to international investors.

Luxembourg is also playing a growing role in the internationalization of Chinese Fintech firms. In 2017, Chinese Fintech startup Ping Pong established its European base in Luxembourg to provide cross-border payments services. Subsequently, Ant Financial, the payments arm of Alibaba, obtained an Electronic Money License in Luxembourg in 2018. A private equity innovation fund set up by Tuspark in 2019 also looks to link European innovation to the Chinese market.

LUXEMBOURG, A LEADING EUROPEAN RMB CENTRE















Chinese banks have chosen Luxembourg as the location of their **EU continental hub**



It is possible to use **RQFII quotas** with a Luxembourg fund structure (e.g. UCITS)

Luxembourg Stock Exchange is the global leading exchange for the listing of **Dim Sum Bonds**



80.3%

of European funds investing in Mainland China **are domiciled in Luxembourg**



Largest global domicile of funds investing in Mainland China



Preferred hub for Mainland China and Hong Kong **fund promoters**

 $Sources: CSSF, LuxSE, PwC\ Market\ Research\ Centre\ based\ on\ LIpper\ LIM, February\ 2021$

EUROPEAN FINANCIAL CENTRE WITH AN INTERNATIONAL OUTLOOK

Europe's leading investment fund centre, with +€5 tn of assets (February 2021) and second largest investment fund centre in the world after the United States



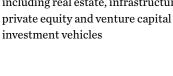
Premier cross-border wealth management centre in the Eurozone



world leader in the cross border distribution of retail investment funds and a leading domicile for alternative investment vehicles including real estate, infrastructure, private equity and venture capital



Highly internationalised insurance industry, with over 90% of life insurance premiums distributed on a cross-border





Home to the first dedicated Green Bond exchange platform in the world, the

Leading centre for cross-border fund distribution, representing 58% of all funds distributed on a cross-border basis





120+ banks from 29 countries

Sources: CSSF



A STABLE ECONOMY

Consistently rated AAA by all major credit-rating agencies.

Foreign nationals make up of 73% the workforce (62% of foreign nationals are cross-border employees and 38% are resident foreigners)



Financially strong, with GDP growth above the EU average

26.5% of GDP(2020)



Strategically located at the heart of **Europe**, allowing to travel around Europe with ease



DEVELOPMENT OF THE CHINA ECOSYSTEM IN LUXEMBOURG

June: Bank of China (BoC) opens its first overseas subsidiary, after the creation of People's Republic of China, in Luxembourg. **December:** Industrial and Commercial Bank of China (ICBC) opens its Luxembourg branch. February: Signing of an MoU between the Commission de Surveillance du Secteur Financier (CSSF) and the China Banking Regulatory Commission (CBRC). It allows Qualified Domestic Institutional Investors (QDIIs) to invest on behalf of their clients in financial products regulated by the CSSF. 2008 The MoU makes Luxembourg one of a few financial centres to have such an agreement in place. This agreement also makes it possible to distribute Undertakings for Collective Investment in Transferable Securities (UCITS) in mainland China through the QDII scheme. May: Volkswagen launches the first European RMB denominated bond on the Luxembourg Stock Exchange (LuxSE). September: Signing of an MoU between the LuxSE and the Shenzhen Stock Exchange (SZSE). The two signatories agree to optimise the exchange of information and to work closely together to develop the listing of financial instruments. 2013 October: China Construction Bank (CCB) opens its Luxembourg branch. November: Luxembourg regulator authorises first RQFII UCITS. January: British Columbia is the first foreign government to issue an RMB bond. The bond is listed on the LuxSE. April: The CSSF confirms its acceptance of investments into the CIBM as fulfilling the requirements of UCITS for regulated

May: Listing of BoC's first offshore RMB "Schengen" bond on the LuxSE. This is the first RMB bond by a Mainland Chinese company

2014

markets.

to be listed in the Eurozone.

June: MoU between the Luxembourg Fund Industry (ALFI) and the Asset Management Association of China (AMAC), focusing on developing activities to create mutually beneficial opportunities for the fund industry in both countries.

September: Designation of ICBC as RMB clearing bank by the People's Bank of China.

September: LuxSE signs an MoU with Taiwan's GreTai Securities Market. The MoU intended to strengthen both parties' role as gateways for foreign investment between Asia and Europe, especially in the context of RMB internationalisation, but also to facilitate securities listings and the exchange of information between them.

November: CSSF grants the first authorisation to a Luxembourg UCITS to trade through the Shanghai-Hong Kong Stock Connect.

November: Agricultural Bank of China (ABC) Luxembourg receives a full banking licence.

December: Signing of an MoU between the LuxSE and ICBC. Both parties intend to cooperate on a range of market activities that are linked to the internationalisation of RMB, particularly the listing of RMB denominated securities in Luxembourg.

December: Official launch of ICBC as the RMB clearing bank.

March: Opening of China Merchants Bank (CMB) Luxembourg branch. April: ¥50 bn RQFII quota granted to Luxembourg.

October: First global use of the Cross-Border Interbank Payment System (CIPS) for a RMB clearing transaction completed in Luxembourg.

December: Launch of the first China fund using Luxembourg's RQFII quota.

July: BoC lists US\$2.8 bn Green Bond on the LuxSE. It is the first Green Bond issued by a Chinese financial institution in continental Europe.

October: China Everbright Bank and Shanghai Pudong Development Bank confirm their intention to set up branches in Luxembourg.

October: Signing of an MoU between the Luxembourg Insurance and Reinsurance Association (ACA) and the Insurance Association of China (IAC) to strengthen international exchange and cooperation in the insurance industry.

October: LuxSE signs an MoU with Bank of Communications (BoComm) to establish a framework of cooperation and a strategic partnership between both parties.

October: MoU between China Merchants Bank (CMB), Qianhai Financial Holdings and the LuxSE to strengthen cooperation in financial market activities and to exchange information on the best practices for each market.

November: Official opening of BoComm's Luxembourg branch.

2014

2015

2016

March: Partnership between the LuxSE and SZSE in order to launch the CUFE-CNI Green Bond Index Series, the first Chinese Green Bond index to provide synchronous quotes between China and Europe.

April: Chinese FinTech startup Ping Pong opens its office in Luxembourg.

June: Enhancement of the cooperation between the Shanghai Stock Exchange and the Luxembourg Stock Exchange with the signing of an agreement to launch a green bond index.

2017

September: China Everbright Bank (Europe) S.A. and China Everbright Bank Luxembourg Branch officially start their business operations.

September: China UnionPay announces to set up operations in Luxembourg in order to expand operations in the European market.

September: The China Banking Association and the Luxembourg Bankers' Association sign a MoU to establish regular communication and information sharing between the two banking associations.

January: LuxSE signs a MoU with Agricultural Development Bank of China (ADBC), the second largest policy bank in China. The purpose of the MoU is to set up an access scheme to

display ADBC's green, poverty alleviation and sustainability bonds on the Luxembourg Green Exchange (LGX).

March: Signing of a MoU between the LuxSE and Shanghai Clearing House (SHCH). The MoU provides an information channel to facilitate CIBM access to international investors, enhancing the international visibility and transparency of Chinese green bonds.

2018

April: Bank of China lists its first Belt and Road themed bond on LuxSE.

June: LuxSE launches Green Bond Channel with Shanghai Stock Exchange in order to provide relevant information in English about Chinese green bonds to overseas investors.

September: Chinese AI firm DeepBlue signs agreement with LHoFT to establish EU hub in Luxembourg.

November: LuxSE signs MOU with Industrial Bank of China (CIB) to establish cooperation in the green bond debt market.

December: Alipay Europe obtains an Electronic Money Institution License from Luxembourg.

January: The Hong Kong Securities and Futures Commission (SFC) and the Luxembourg Commission de Surveillance du Secteur Financier (CSSF) sign an MOU on Mutual Recognition of Funds (MRF), allowing eligible Hong Kong public funds and Luxembourg UCITS funds to be distributed in each other's market through a streamlined process.

April: TUS Science and Technology Service Group launch the first Chinese equity fund domiciled in Luxembourg, the China Luxembourg Innovation Investment Fund (CLIIF).

May: ICBC Luxembourg Branch admitted as a trading member of LuxSE.

2019

June: LuxSE signs MOU with China Construction Bank facilitate cooperation between the two institutions with regards to financial market activities in the context of the internationalisation of Renminbi.

June: LuxSE lists China Merchants Bank's first ever Eurodenominated bond.

September: LuxSE signs MOU with CICC to develop a mutually beneficial framework for listing and trading activities.

September: China Construction Bank, LuxSE and the Shanghai Clearing House sign a tripartite MOU to facilitate access to the China Interbank Market.

September: Banque Internationale à Luxembourg (BIL) opens representative office in Beijing.

January: LuxSE signs MOU with Chongwa (Macao) Financial Asset Exchange Co. Ltd (MOX) to promote cross-border investment and liquidity for offshore RUB-denominated financial products.

July: China Development Bank lists its first domestic Green Bond on the Luxembourg Green Exchange.

2020

September: China Merchant Bank's first sustainability bond is

listed on the Luxembourg Green Exchange.

September: Ping An Asset Management launches its first UCITS umbrella fund.

December: Fintech PingPong secures E-Money License in Luxembourg.

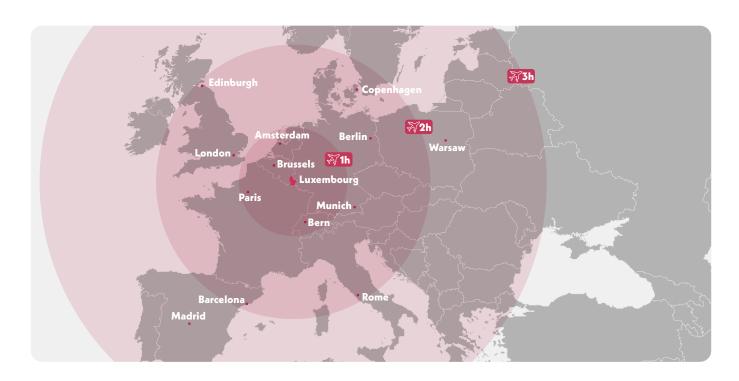


CONNECTING CHINA AND EUROPE

World financial markets have been presented with an extraordinary opportunity with the opening up of China's RMB market for international trade. Luxembourg, with its status as a global financial centre, has positioned itself as a key link in the RMB trading network and as the ideal gateway to the European Union Single Market.

Managing the complexities of cross border financial services within the 27 member states of the European Union and connecting non-EU actors with the Single Market is at the core of Luxembourg's financial services offer. With 70% of EU wealth concentrated within a 700 km radius of the country, financial services companies from around the world use Luxembourg as a location to access the European Single Market. Companies that choose Luxembourg as their gateway to Europe enjoy all the advantages that come with being in a highly developed economy at the heart of the continent, while benefiting from a dynamic business environment similar to that of an emerging country.

Luxembourg is one of the three official capitals of the EU and home to EU institutions such as the European Court of Justice, the Court of Auditors, the Secretariat of the European Parliament, the European Investment Bank, the European Investment Fund and the European Stability Mechanism.



Seven major Chinese banks, including Bank of China (BoC), Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Agricultural Bank of China (ABC), Bank of Communications (BoComm), China Merchants Bank (CMB), China Everbright Bank (CEB) have chosen Luxembourg as their principal European domicile. Bank of Singapore has also opened a wealth management subsidiary in Luxembourg. This is a strong testimony to Luxembourg's role as the main node

connecting Europe with the RMB market and Chinese financial actors with European countries. Setting up their European hubs in the Grand Duchy has enabled them to leverage the EU passport to branch out and accompany their corporate clients across the continent. The Chinese banks are also active in serving European corporations who want to invest into China by guiding them through the regulatory requirements as well as complexities of the Chinese market.

"We want to be a bridge between China and Europe from a business, culture, communication, and social aspect. We want to support Luxembourg as an RMB financial centre."

Longjian Chen,

Deputy General Manager, Bank of China Luxembourg

The Grand Duchy is the global leading cross-border fund hub, supported by an innovative and longstanding ecosystem and the prime EU banking hub for corporate, custody, and private banking. It is also the leading EU centre of expertise in the field of cross-border wealth management. Furthermore, financial actors have access to a vast market infrastructure of essential services; such as the Luxembourg Stock Exchange (LuxSE) with its globally leading capital markets system for international securities listings, post trade service providers such as

Clearstream, insurance and reinsurance companies, family offices, lawyers, tax experts, consultants, auditors, and accountants. Luxembourg's unique legal framework also permits the outsourcing of operational processes to regulated IT service providers, supported by state-of-the-art ICT infrastructure. Moreover, access to the 'European Passport for Credit Institutions' is a driving factor for foreign banks to choose Luxembourg as a base from which to branch out into Europe.

The financial authorities are renowned for being responsive. As the only European institutional capital that is also a global financial centre, Luxembourg is a gateway that offers a unique insight and understanding of pan- European business opportunities, requirements, and challenges.

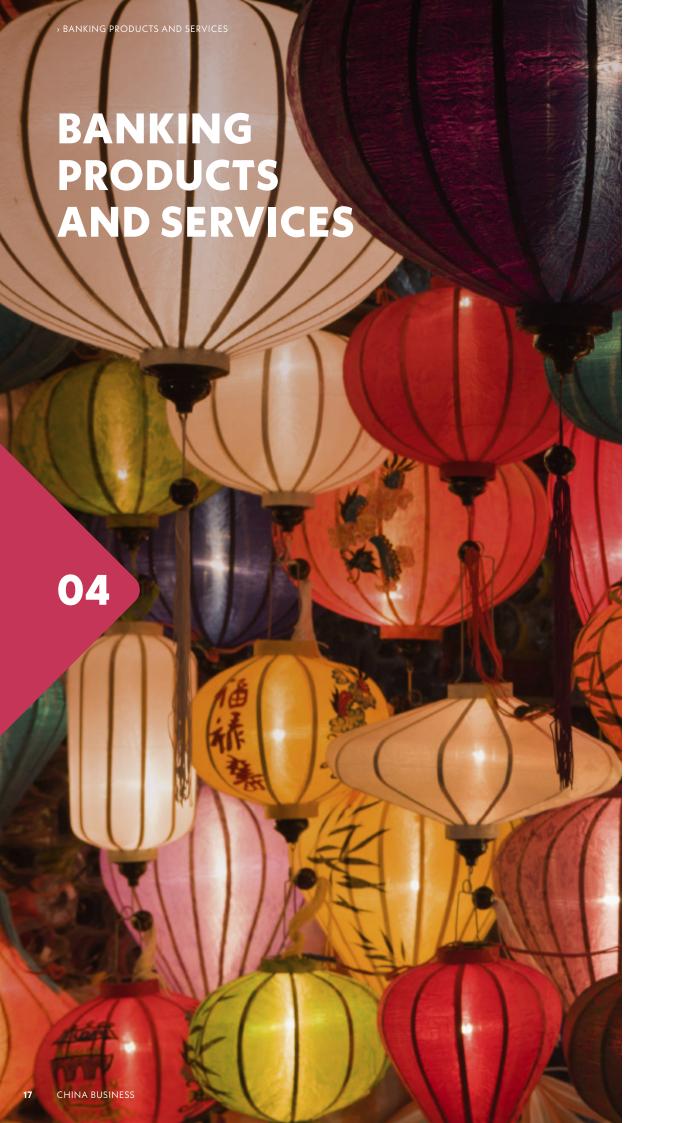
BANK OF CHINA: THE FIRST CHINESE BANK TO ENTER THE EUROPEAN MARKET

BoC opened its Luxembourg branch in 1979, as its first overseas branch after the creation of the People's Republic of China. The Grand Duchy was chosen for several reasons: its openness to China in general and to BoC in particular, its suitable geographical location in the centre of Europe, its stable political and regulatory environment, as well as the country's responsive regulatory regime.

BoC Luxembourg serves as the European hub for the group. While in the past half of BoC Luxembourg's clients were based in China, today approximately 80% of its clients are based outside China. As the first Chinese bank entering the European market, BoC Luxembourg branch started its business by accompanying Chinese corporations doing business with Europe.

BoC Luxembourg has three main business lines; corporate banking, financial markets, and personal banking. Furthermore, the bank has designated the Luxembourg HQ to be the regional centre for asset management, private banking, and custody business. As the regional fund centre of the bank, the Luxembourg branch launched its first UCITS fund which gives European investors unprecedented access to the third largest fixed income market in the world. Moreover, BoC Luxembourg is advising and supporting corporate and sovereign clients that wish to diversify their funding needs by issuing

RMB denominated bonds listed in China.



BANKING PRODUCTS AND SERVICES

Luxembourg acts as a bridge between Europe and China, connecting businesses and clients in both regions. RMB is increasingly being used in international trade and payments. This represents an important signal that the internationalisation of the currency is well on its way. Due to its position as a European financial hub, Luxembourg is well placed to facilitate these developments.

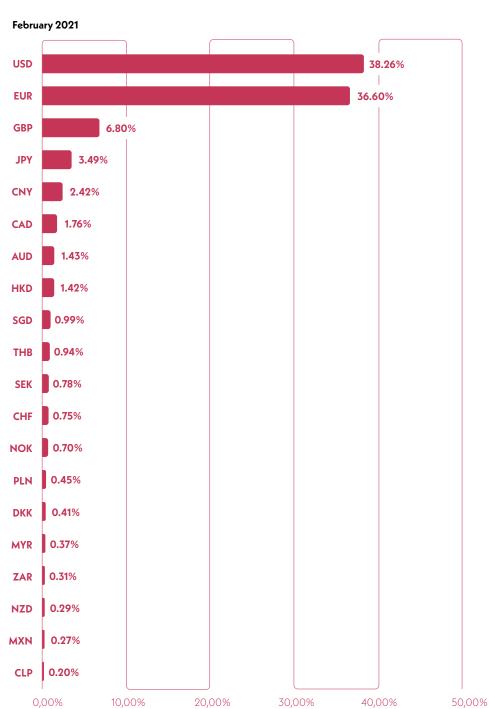
SETTLING TRADE IN RMB

Trade has been one of the major factors in the internationalisation of the RMB. Using RMB as a trade finance currency has many advantages for both Chinese and European business partners. CNH accounts enable both sides to avoid foreign exchange (FX) transactions and therefore currency risk. RMB-denominated trade finance is an on-going activity in Luxembourg. Its activities include import and export financing, as well as letters of credit and other loan guarantees. RMB trade finance activities include import and export financing, as well as letters of credit and other loan guarantees.

RMB PAYMENTS

Offshore RMB deposits have been available for over a decade, since 2004, when residents in Hong Kong were allowed to hold RMB in offshore accounts. After the implementation of a number of liberalisation measures in the following years, a turning point was reached in 2010/2011. RMB business in Hong Kong increased considerably and the door to the international use of the currency opened further.

International payment currency share



Source: SWIFT Watch

RMB payments have noticeably increased in the past decade. In 2013, RMB was ranked as the 10th world payment currency. In June 2019, it was ranked as the fifth most used currency for international payments, with a global market share of 2.42%. The internationalisation of the currency continues, especially since China's Crossborder Inter-bank Payment System (CIPS) was launched to facilitate cross-border clearing. Additionally, in 2016, an MoU was signed between CIPS and SWIFT to grow payment traffic outside China.

LOANS AND DEPOSITS

In 2010, when Hong Kong banks were allowed to offer settlement facilities for trade transactions denominated in RMB, lending facilities were introduced as well. Within a short time, demand for these facilities increased rapidly.

The introduction of the revised RMB/US\$ central parity quotation mechanism by the PBoC, in August 2015, triggered a market reaction and RMB depreciated. The central parity became more market driven and more exchange rate fluctuation was allowed. In reaction to the depreciation pressure of the RMB, the development of offshore RMB has slowed down, as some investors sold their offshore assets. As the offshore RMB deposit pool decreased and the offshore liquidity shortage rose up, RMB funding costs increased and activities in loans and deposits have decreased accordingly.

Despite the decreasing offshore RMB deposit pool, Luxembourg continues to hold the largest pool of offshore RMB deposits in the Eurozone. This can be explained as Chinese banks use Luxembourg as a centre for granting RMB denominated commercial loans to European customers. While the initial focus was put on trade finance activities and commercial loans, a number of banks, in 2012, expanded their product range to the syndicated loan market, and established Asset and Wealth Management services in recent years. Luxembourg banks providing RMB products are in a transformation process, with their focus moving from the traditional corporate banking business to more client-centric services, e.g. building a connection between European and Chinese investors, as well as accompanying their Chinese client base in their European ventures, and serving their European customers looking to capture business opportunities in China.

RMB'S INCLUSION IN THE SDR BASKET

In October 2016, RMB was officially included in the IMF's Special Drawing Rights (SDR) basket. An important milestone for the currency, signalling it's on its way to becoming a more international currency. The initial weight of RMB in the SDR basket was 10.92%, which ranks it third, after the US Dollar and Euro.

Weights of currencies in SDR basket

CURRENCY	Weights determined in the 2015 Review	Fixed Number of Units of Currency for a 5-year period Starting Oct 1, 2016	
U.S. Dollar	41.73	0.58252	
Euro	30.93	0.38671	
Chinese Yuan	10.92	1.0174	
Japanese Yen	8.33	11.900	
Pound Sterling	8.09	0.085946	

Source: IMF

After joining the SDR basket, demand for RMB assets has increased, as SDR-denominated assets managed by international organisations such as IMF, BIS, and World Bank needed to be reallocated to reflect the change of the SDR basket currencies. Large inflows in RMB assets were observed. In addition, international institutions that hold SDR-denominated debt securities might need to hedge the FX risks of SDR basket

currencies and adjust their asset allocation in RMB assets.

The IMF's decision sends a clear sign that RMB should have a similar global standing to that of the other four currencies in the basket. It is also a recognition of the reforms that the Chinese government has made to liberalise its currency and financial system.

"The client base of our Luxembourg office has always been international, as Luxembourg is famous for its cross-border financial services. Labelling Luxembourg as our regional headquarters can help us further serve other European clients."

Qian Li,

Head of Financial Institutions at ICBC

Following the inclusion into the SDR basket, RMB is also gaining ground as an FX reserve currency. RMB assets held by governments and central banks around the world should increase in the following years. This clearly positive signal should increase the acceptance of RMB for cross-border trade and investment.

ICBC: SERVING AN INTERNATIONAL CLIENT BASE FROM LUXEMBOURG

ICBC's first years of business in Luxembourg focused on core banking services, such as loans and deposits, remittances, trade finance, and treasury services, targeting mainly corporate clients with business ties to China and some retail clients. After years of preparation, in 2012, ICBC decided to leverage the strength of Luxembourg's financial centre and set up new business lines, including private banking, cash management, investment banking, and asset management.

In January 2014, ICBC (Europe) S.A. established a dedicated team responsible for promoting fund ideas, structuring investment funds, and monitoring the operations of funds domiciled in Luxembourg. The first investment fund, launched in December 2014, was an RQFII UCITS fund and it enabled ICBC to tap the European investment fund industry through its European arm. It also marked the first of its kind that could invest up to 100% of its assets into CIBM as a regulated market by Luxembourg-domiciled UCITS funds.

The second fund was a Global Private Banking SIF fund which was launched in March 2015 and was followed by the new sub-funds launched in 2016 and 2017. Shortly after Luxembourg received its national RQFII quota of ¥50 bn, ICBC (Europe) S.A., in November 2015, became the first authorised RQFII holder in Luxembourg with an RQFII quota of ¥4 bn.

In September 2014, ICBC Luxembourg was appointed the official RMB clearing bank in Luxembourg by the Chinese central bank, indicating a major step in expansion of the global RMB clearing network across different time zones. ICBC Luxembourg offers a clearing service with an increasing STP (straight through payment) rate of above 95% for intergroup payments and 90% for overall payments on average.



INVESTMENT FUNDS

Luxembourg is the global hub for crossborder investments and a gateway for Chinese investment flows. With over €5 tn in assets under management (AuM), Luxembourg is the largest investment fund centre in Europe and the second largest in the world. Fund promoters use Luxembourg as a platform to domicile funds that are then subsequently distributed to retail, high net worth, and institutional investors. There are over 3,600 investment funds representing over 14,500 fund units in Luxembourg.

Numerous funds have an investment policy that is focused on global emerging markets, the Asian region or, specifically, on China. This is why RMB-denominated assets have accumulated in the portfolios of many Luxembourg-based funds. These international RMB fund promoters include many of the most prestigious names in the industry, such as Aberdeen, BlackRock, Fidelity, First State, HSBC, JPMorgan, Schroders, and Deutsche Bank. These, and other institutions, are eager to further develop the scope of their RMB business. Over 40% of international funds

globally investing into Chinese capital markets are domiciled in Luxembourg. ¹

Chinese asset managers that have opted to launch a range of European investment funds via their Hong Kong subsidiaries, have selected Luxembourg as the domicile for those funds, including China AMC, GF Fund Management, ICBC Credit Suisse Asset Management, Prax Capital, China Universal, Ping An Asset Management and E Fund Management. Moreover, in April 2019, Tus Science & Technology Services Group launched the China-Luxembourg Innovation Investment Fund, the first Chinese equity fund domiciled in Luxembourg to support innovative and fast growing businesses.

Chinese investment channels are open to international investors, as well as to Chinese investors looking to invest abroad. In fact, Chinese authorities have created several investment schemes to support the opening up of the Chinese currency and to diversify offers for investors. Chinese investors looking to invest abroad can use the Qualified Domestic Institutional Investor (QDII) scheme.

 $^{^{\}rm 1}\,{\rm PwC}$ Analysis based on Lipper LIM database

There are multiple schemes available to international investors who wish to access the Chinese onshore capital market, and these channels are undergoing a continual process of evolution. Clear evidence in this respect was the decision firstly in June 2020 to remove all quotas from the QFII

and RQFII schemes, which was followed in November 2020 by the formal merging of these schemes into a single Qualified Foreign Investor (QFI) scheme, relaxing and broadening access via this channel. The scope of investable assets has also increased over time.

Breakdown of investment channels 2

	QFI	Stock Connect	Bond Connect	CIBM Direct
Eligible Investor	Selected institutional investors	For Northbound trades, all foreign investors including individuals (but only institutional professional investors for SZSE ChiNext shares and SSE STAR shares). SSE / SZE Members in Mainland for Southbound trades. Individual investors must have a balance of at least ¥500,000 in their cash and securities accounts	Selected institutional investors	Selected institutional investors
Regulatory Approval	CSRC License	None	Pre-filing with PBOC	Pre-filing with PBOC
Quota	None	Daily aggregate quotas apply to market as a whole	None	None

² ASIFMA

QFI

	Qri	Stock Connect	Bona Connect	CIBM Direct
Eligible Investments	All securities listed on SSE/SZSE/NEEQ > Securities investment funds, including close-ended, openended and ETFs > Private investment funds issued by securities futures operating institutions or AMAC-registered private fund managers > Financial futures, commodity futures and options traded on approved exchanges > IPOs, securities lending and margin trading and margin trading and securities financing > FX derivatives (for hedging purpose only) > CIBM: Products and derivatives on bonds, interest rates and FX > Exchange market: government bonds, enterprise bonds, corporate bonds, convertible bonds, etc. > Financial futures (e.g. CGB futures) traded on CFFEX	Approximately 1460 stocks as of 15 January 2021: > 574 SSE shares: constituents of SSE 180 Index and 380 Index and dual SSE- HKEX listed shares: constituents of SZSE Component Index and SZSE Small/Mid Cap > Innovation Index with market cap ≥ ¥6 bn and dual SZSE- HKEX listed shares	All cash bonds	Foreign reserves institutions: all cash bonds, repos, bond borrowing and lending, bond forwards, IRS, FRA, etc. > Other foreign institutions: all cash bonds and engage, for hedging purposes only, in bond borrowing and lending, bond forwards, IRS, FRA, etc.
Investment Currency	CNY or CNH	CNH, HKD and USD	CNY or CNH	CNY or CNH

Stock Connect

Bond Connect

CIBM Direct

THE "CONNECTS"

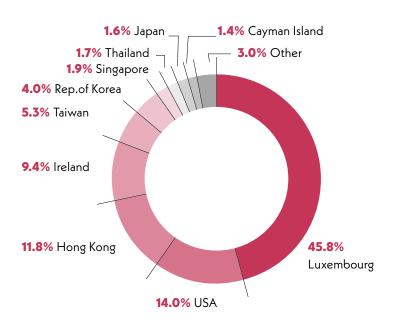
Since 2014, schemes have been set up to link the Hong Kong and mainland China capital markets. The first was the Shanghai–Hong Kong Stock Connect which was established in 2014, followed by Shenzhen– Hong Kong Stock Connect established in 2016, and Bond Connect in 2017 for fixed income instruments.

The "connect" schemes offer an alternative access channel to QFI, for investment funds looking to invest in shares listed on the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE), or cash bonds. On 28 November 2014, Luxembourg's financial regulator, the CSSF, granted the first authorisation allowing a Luxembourg UCITS to trade through Stock Connect. A fast-track procedure for filing these

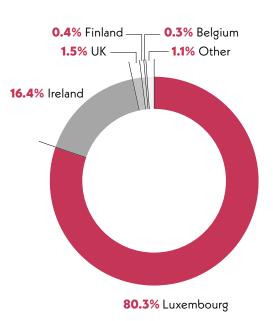
applications with the CSSF applies to all Luxembourg UCITS whose investment policy already permit exposure to A-shares. These UCITS need only to adapt their prospectus and Key Investor Information Document (KIID) to meet CSSF requirements for authorisation in order to access the Stock Connect.

Luxembourg has been successful in attracting asset managers to domicile their China-focused investment funds in the country. Excluding Chinese domestic funds, it represents the largest domicile for investment funds investing into Chinese capital markets in terms of assets under management, attracting 45.8% of assets globally, and 80.3% of assets in a European context.

Origin of global investment funds invested in Mainland China (% by AuM, end of December 2020)



Origin of European investment funds invested in Mainland China (% by AuM, end of December 2020)



Note: The charts include mutual funds and ETFs with a geographic focus on China (excluding China domiciled funds).

Sources: PwC Market Research Centre, Lipper

SHANGHAI-HONG KONG STOCK CONNECT

The Stock Connect was jointly developed by the Hong Kong Stock Exchange (HKEx), SSE, China Securities Depository, Clearing Corporation Limited (ChinaClear), and the Hong Kong Securities Clearing Company Limited (HKSCC). Through the HKEx, all Hong Kong and foreign investors now have access to the constituent stocks of the SSE 180 Index and SSE 380 Index, as well as all SSE-listed stocks that are dual-listed in Hong Kong (Northbound trading). As of March 2021, 587 stocks are listed on the Shanghai-Hong Kong Stock

Connect. Starting from 1 February 2021, institutional professional investors are also eligible to invest in stocks in SSE's STAR Board through the northbound Stock Connect.

Similarly, through the SSE, Mainland Chinese institutional investors and individuals have access to the constituent stocks of the Hang Seng Composite LargeCap Index and Hang Seng Composite MidCap Index, and all companies listed simultaneously in Shanghai and Hong Kong (Southbound Trading).

Northbound

Total trade value

2020 ¥9,035.9 bn

よ決談券文易所

HKEX

香港交易所

Southbound

2020 ¥2,954.6 bn

Total trade value

SHENZHEN-HONG KONG STOCK CONNECT

In addition to the Shanghai–Hong Kong stock connect program, Chinese authorities launched Shenzhen-Hong Kong Stock Connect in December 2016, which opens more channels for foreign investors to invest in Mainland China. The Shenzhen stock exchange is different from the Shanghai stock exchange: mostly small/medium sized and highly-innovative companies are listed here, as opposed to large state-owned companies and blue chips listed in Shanghai.

The Shenzhen-Hong Kong stock connect program offers foreign investors access to the Chinese high-technology industry. It further opens China's capital market to international investors and improves the two-way flow mechanism between the offshore and onshore RMB market. As international investors invest through

stock connect, demand for RMB increases which in turn promotes cross-border RMB flows.

Similar to the Shanghai-Hong Kong stock connect, Hong Kong and foreign investors are allowed to buy constituent stocks of the Shenzhen Stock Exchange Composite Index, Shenzhen Stock Exchange Small/ Mid Cap Innovation Index as well as China-A shares listed on the Shenzhen stock exchange. Simultaneously, Mainland China investors can invest through the Shenzhen stock exchange in constituent stocks of the Hang Seng Composite LargeCap Index and Hang Seng Composite MidCap Index, and China H-shares listed on the Hong Kong stock exchanges of March 2021, there are 882 stocks listed on the Shenzhen-Hong Kong scheme.

Northbound

Total trade value

2020 ¥12,052.7 bn



Southbound

2020 ¥2,553.4 bn

Total trade value

 $Source: Shanghai\: Stock\: Exchange\: and\: Hong\: Kong\: Stock\: Exchange$

BOND CONNECT

Bond Connect was launched in 2017 providing a mutual market access channel between Hong Kong and Mainland China for fixed income instruments, currently available for northbound investments into Mainland China. International

investors can make use of international trading platforms such as Bloomberg and Tradeweb to make use of the Bond Connect channel. In 2020, total trading volume via Bond Connect totalled ¥4.812.8 bn.

OTHER "CONNECTS"

The offshore access model model powering the Hong Kong Stock and Bond Connect programmes continues to internationalise and widen in scope. A Stock Connect programme linking the Shanghai Stock Exchange and the London Stock Exchange was launched in 2019, under which Global Depositary Receipts listed in London from SSE listed companies are available for investment by foreign investors, while eligible LSE-listed companies can list Chinese Depositary Receipts in Shanghai. The programme operates with an aggregate quota, and at the end of 2020, there are 4 Global

Depositary Receipts making use of the scheme to list in London. Currently no Chinese Depositary Receipts are listed.

Work is also underway to build a "Wealth Management Connect" scheme to simplify investment by individual residents of the Greater Bay Area (which includes Hong Kong, Macao and the Guangdong province of China). Under this scheme, individual residents will be able to invest into wealth management products operating in the Greater Bay Area. Implementation details of this scheme are still in the process of being developed.

CIBM DIRECT

In 2015 and 2016, the Chinese government simplified access to the Chinese interbank bond market for institutional international investors, as well as broadening the scope of eligible investors. In 2016, in addition to foreign central banks, international financial organisations and sovereign wealth funds, other financial institutions and long term institutional investors such as pension funds have been allowed to invest

in the Chinese interbank bond market without the need for approval or a quota, following a simplified pre-filing process with the PBOC. The scope of eligible instruments via this scheme has increased over time, with FX derivative products becoming available in February 2017, and a consultation being issued in September 2020 to further expand the investment scope to include wider derivatives, bond funds and other instruments.

QDII

The QDII scheme launched in 2006 and was amended for the first time in 2012. The QDII allows domestic Chinese investors to invest into foreign markets via approved commercial banks, fund managers, securities companies, and insurance companies.

Due to an MoU signed between the CSSF and the CBRC in 2008, QDIIs are allowed

to invest in Luxembourg investment vehicles regulated by the CSSF. In 2012, the CSSF also signed an MoU with the CSRC.

Luxembourg is one of only few financial centres to benefit from such an agreement and it allows Chinese investors to use Luxembourg vehicles to invest into foreign markets through the QDII scheme.

QDLP/QDIE

In 2012, a Qualified Domestic Limited Partner (QDLP) scheme was launched in Shanghai allowing foreign managers to set up an onshore wholly owned foreign enterprise to raise capital from mainland China qualified investors, and invest this capital in overseas securities. The scheme is again subject to a quota, and QDLP managers need to register with AMAC and comply both with stipulations

under QDLP regulation and general rules that apply to private fund managers in China. A similar scheme was launched in the Qianhai region of Shenzhen in 2014, known as the Qualified Domestic Investment Enterprise program (QDIE). The scheme has since establishment been expanded to cover additional free trade zones in China, including in Tianjin and Qingdao.

RMB and the Luxembourg toolbox Through its longstanding experience and expertise in investment funds, the Luxembourg financial sector offers a whole range of investment vehicles that can be used by QFII and RQFII quota holders. INVESTMENT LUXEMBOURG UCITS / PART II FUND / SIF / SICAR / SOPARFI / RAIF CHINA'S CAPITAL MARKETS

³ PwC Market Research estimates based Lipper LIM database

UCITS

CITS is the acronym for Undertaking for Collective Investment in Transferable Securities. The term refers back to EU Directive 85/611/CE of 20 December, 1985, the objective of which was to create a single market European market for retail investment funds, while at the same time ensuring a high level of investor protection. Luxembourg was the first country to implement the UCITS Directive.

The Directive exclusively targets collective investment schemes (UCI) that invest in transferable securities (such as shares and bonds) quoted on a recognised stock exchange. Furthermore, UCITS must be open ended, so that the investor can redeem his holdings at least twice per month. The investment policy must also respect a number of rules relating to portfolio diversification, asset liquidity and the use of hedging.

The European passport allows a UCITS, once approved by its Home State regulatory authority, to be sold to the general public and registered for distribution in all EU Member States. The fact that a UCITS is no longer obliged to follow an authorisation process in each EU market has considerably accelerated the process of launching a UCITS and reduced related costs. Luxembourg UCITS have a large market share in a number of Asian and Latin American countries. For this reason, an increasing number of fund managers create UCITS for global distribution. The Luxembourg financial centre is the uncontested leader in this field. 61% of all the authorisations for cross-border distribution taking into account funds registered in at least three countries (including home country) are coming from Luxembourg domiciled funds.4

ALTERNATIVE FUNDS / NON-UCITS FUNDS

"Alternative funds" (AIFs) include all investment funds that are not covered by the UCITS Directive e.g. hedge funds, funds of $\,$ hedge funds, venture capital and private equity funds and real estate funds. In the past, alternative investment funds were generally created under Part II of the Law on retail investment funds ("non UCITS"). Subsequently, two new laws were passed, creating vehicles designed for the professional market.

RESERVED **ALTERNATIVE INVESTMENT FUNDS (RAIF)**

The Reserved Alternative Investment Funds (RAIF) law of 23 July 2016 created a new investment vehicle in Luxembourg. RAIF is based on the SIF and SICAR regimes and is not subject to authorisation or supervision by the CSSF. As it is compliant with the Alternative Investment Fund Manager Directive (AIFMD), it can be distributed across Europe. RAIFs have a minimum capital requirement of €1.25 million, which has to be reached within a year after its creation. By February 2021, there were 1,266 RAIFs registered in Luxembourg

 $^{^4}$ Source: PwC Luxembourg GFD Poster 2019

SPECIALISED INVESTMENT FUNDS (SIF)

Specialised investment funds (SIF) are characterised by the flexibility of investment policies and a lighter supervisory regime. A SIF may invest in any type of assets and is suitable for establishing anything from a traditional securities or money market fund, real estate investment, hedge funds or private equity vehicles through to commodities or passion investments. The SIF must have active portfolio management. SIFs can be created as multiple compartment funds. They can issue an unlimited number of different share classes, which allows each to be tailored to the needs and preferences of particular target investors.

RISK CAPITAL INVESTMENT COMPANY (SICAR)

The risk capital investment company (SICAR) was created to provide a tailor-made vehicle for private equity and venture capital investment. By investment in risk capital is meant the direct or indirect contribution of capital to companies with a view to their launch, development or listing on a stock exchange. The investments made by a SICAR are required to meet two criteria: they must be opportunistic or high risk (which might be due to poor liquidity, since the company is not listed) and there must be an underlying intention to develop the company. The second criterion can be satisfied in many different ways, such as restructuring, modernisation, product development or by measures aimed at improving the allocation of resources. The law does not impose any investment diversification rules. Hence, a SICAR may focus its investments on one company operating in a particularly narrow sector such as biotechnology or geological prospecting.

Since July 2013, AIFs have also benefitted from a single market regime. Following the transposition into Luxembourg Law of Directive 2011/61/EU on Alternative Investment Fund Managers (the "AIFMD"), funds managed by an AIFMD compliant manager may be distributed for sale throughout the EU.

FINANCIAL PARTICIPATION COMPANY – SOPARFI

The Soparfi is an efficient vehicle for managing holdings in a group of businesses. It is also the preferred vehicle for financing and holding venture capital and private equity investments. A Soparfi is not a special type of company but an ordinary commercial entity governed by commercial law. It does not enjoy any special tax regime and is fully taxable. There are no restraints on its field of activity. A Soparfi can, however, significantly reduce its tax burden by limiting its activity to holding investments and structuring these so that it can benefit from the rules in the EU Directive on the tax regime applicable to Parent-Subsidiary companies. This regime notably allows, under well- defined conditions, a tax exemption on dividends paid by companies in which the parent company has a holding and on capital gains on the sale of its holdings. By contrast, all commercial activity undertaken by a Soparfi is subject to corporation income tax and VAT. Since the Soparfi is liable to tax like any other commercial company, it benefits from double tax treaties agreed by Luxembourg.

"The rise in fund assets shows more investors want onshore exposure to China, and more of them want a disciplined, stock-picking approach."

Soraya Hashimzai,

Head of Product Management at Aberdeen Luxembourg

ABERDEEN: A GLOBAL FUND RANGE DOMICILED IN LUXEMBOURG

Aberdeen started to invest in Chinese financial assets through the RQFII scheme in March 2015, five months after Aberdeen Group's Asia arm was granted their first ¥600 million in RQFII quota. The "Aberdeen Global – China A Share Equity Fund" is domiciled in Luxembourg and managed by Aberdeen's Asian Equities Team in Singapore. The team now has access to a total of ¥7.3 bn in RQFII quota.

Luxembourg was chosen as the location for domiciliation, as the China RQFII fund was required to be part of Aberdeen's flagship Aberdeen Global fund range, which includes cross-border funds registered for distribution around the world. Luxembourg has been able to provide Aberdeen with a first class ecosystem for the domiciliation and administration of cross-border funds for a number of years.

The Aberdeen Global - China A Share Equity Fund mainly targets institutional investors, private bank clients, as well as receives internal funds. Following a period of establishment, the fund size has increased significantly, reaching US\$700.5 million as at the end of April 2017. Since launch the fund has outperformed the MSCI China A benchmark by 9.19 % on an annualised basis.

Using the RQFII quota, the Fund is able to invest in more than 2,000 Chinese companies listed on the Shanghai and Shenzhen stock exchanges. As at end April 2017, it had selected 33 companies with compelling long-term growth potential. The largest holdings are concentrated in Consumer Discretionary, Industrials, and Financial sectors with more than a 10% portfolio share, respectively.

In addition to RQFII funds, Aberdeen already has funds utilising its QFII quota to invest in China assets. For instance, funds investing globally with partial Chinese exposure are using the QFII quota to get access to China's onshore market.

LUXEMBOURG IS EUROPE'S PREMIER DIM SUM BONDS LISTING VENUE

Dim Sum Bonds (also called offshore RMB bonds or CHN bonds) are fixed income instruments denominated in offshore RMB that trade and settle outside of Mainland China. These relatively new instruments, created in 2007, represent a growing portion of China's total currency debt. The Dim Sum Bond market is attractive to both issuers and investors for reasons such as diversification of funding sources and portfolio investments.

The first issue was made by the China Development Bank in July 2007. Since then the Dim Sum Bond market has become more international as Chinese authorities relaxed the rules for issuance in 2010, opening the door for other foreign financial institutions and corporates to raise RMB on the offshore markets. This move offered a momentum for international stock exchanges to list Dim Sum Bonds. As a result of the internationalisation of RMB, the Dim Sum Bond market has grown since its inception and the LuxSE is a one of the leading exchanges for the listing and trading of these instruments. LuxSE helped establish the Eurobond market in 1963 and has since become the leading Exchange for international capital market transactions.

The LuxSE ranks first globally in terms of global Dim Sum Bond listings, ahead of London and Hong Kong, confirming its strong position as the leading exchange for international debt securities.

Evolution of RMB listed bonds in Luxembourg (as of December 31, 2020)



Source: Luxembourg Stock Exchange

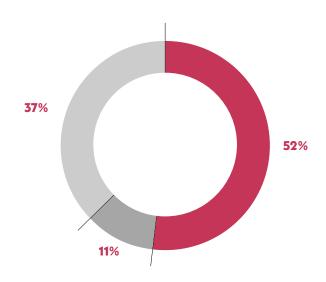
Today, many established international companies are issuing Dim Sum Bonds as part of their global fund programmes, thereby diversifying their investor base. As many of them already list debt securities in other currencies on the LuxSE, they continue to use the quick and efficient process of the LuxSE for their RMB denominated listings.

The first RMB denominated fixed income security to be listed in Europe was issued by Volkswagen in May 2011 on the LuxSE. Since then, the amount of Dim Sum Bonds listed on the exchange has grown substantially.

PANDA BONDS

Panda bonds are RMB-denominated debt securities issued on the Chinese onshore market by non-domestic entities. Since its first issuance in 2005, the pace of development has been slow. However, in the last two years, the Panda bond market experienced substantial growth. In January 2021, Panda bonds issuance reached US\$ 35.84 bn (total outstandings)⁵. Sovereigns, supranational agencies, and foreign corporates are active issuers on this market. Non-financial institutions had the largest share of the issuance amount of Panda bonds with 52%.

Panda bonds market outstandings by issuer type



Source: ICMA analysis using Bloomberg data (January 2021)



With RMB's inclusion in the SDR basket and the internationalisation of RMB, diversification needs by foreign investors for RMB assets should further stimulate the demand for Panda bonds. For domestic investors, Panda bonds provide them with possibility of gaining foreign exposure by investing in the onshore Chinese bond market.

 $^{^{5}}$ The Internationalisation of the China Corporate Bond Market, ICMA 2021

LUXEMBOURG AND CHINA'S GREEN REVOLUTION

Green Bonds are debt instruments where the funding proceeds are only used for green investments and environment improving projects. Investors can use Green Bonds to balance investment returns and environmental benefits, while issuers can enhance reputation and provide funding sources for green finance.

In the past 30 years, China's economy and social development reached tremendous success. However, this success is at a considerable environmental cost. China has recognised the importance of environmental protection and points out that governmental funding could only cover 15% of the total funding need to solve environmental and climate issues.

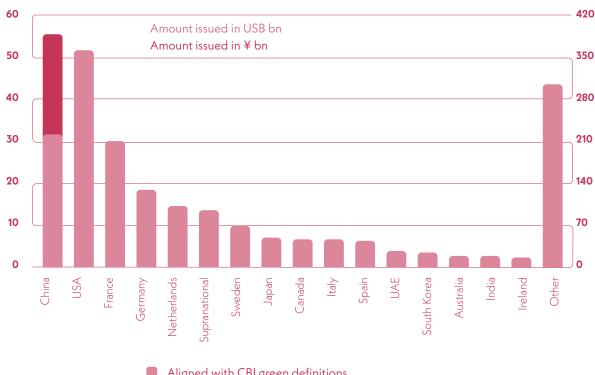
China needs to access the international investor community for around 50% of its funding of green bonds and requires innovative global partnerships to do so. Therefore, in 2017, Luxembourg

and China decided to build bridges through the launch of the Green Bond Index Series. The green bond indexes are displayed simultaneously on the Shanghai, Shenzhen and Luxembourg stock exchanges and are important for raising awareness about the performance of Chinese green bonds.

The relationship has been deepened with the development of an additional Green Bond Channel. The Green Bond Channel is an information channel which bridges the information gap between Chinese issuers and international investors. Green bonds listed on the Shanghai exchange can be traded via existing channels and the cooperation with LuxSE focuses on providing exhaustive information in English to offshore investors.

As of February 2021, 19 green bonds of Chinese issuers are displayed on the LGX (Luxembourg Green Exchange), representing an amount of €6.27 bn.

2019 global green bond issuance: top 15 countries



- Aligned with CBI green definitions
- China's issuance (only aligned with Chinese definitions)

Green Bonds are becoming a powerful financial tool fulfilling the market funding need for green investments. Since the first Chinese Green Bond issuance in 2015, China has grown to be the largest source of labeled green bonds issued worldwide, with US\$55.8 bn (¥386.2 bn) green bonds issued. With the increase in market size, the variety of Green Bonds becomes more diverse as well, for example Green Asset Backed Securities and Green guaranteed debt.

Among Chinese Green Bonds issued in 2018, 23% of them were issued outside China. Luxembourg is a premier choice for Chinese institutions listing Green Bonds in Europe. In 2016, LuxSE launched Luxembourg Green Exchange focusing exclusively on green securities. In July 2016, the US\$2.8 bn multiple tranche Green Bond issued by BoC was listed on the exchange. In March 2017, LuxSE cooperated with Shenzhen stock exchange to launch the Green Bond Series.

LUXEMBOURG STOCK EXCHANGE: LEADING IN DIM SUM AND GREEN BONDS

LuxSE helped establish the Eurobond market in 1963 and has since become the leading Exchange for international capital market transactions. LuxSE continues to innovate, for instance acting as the first mover in the listing of Dim Sum Bonds.

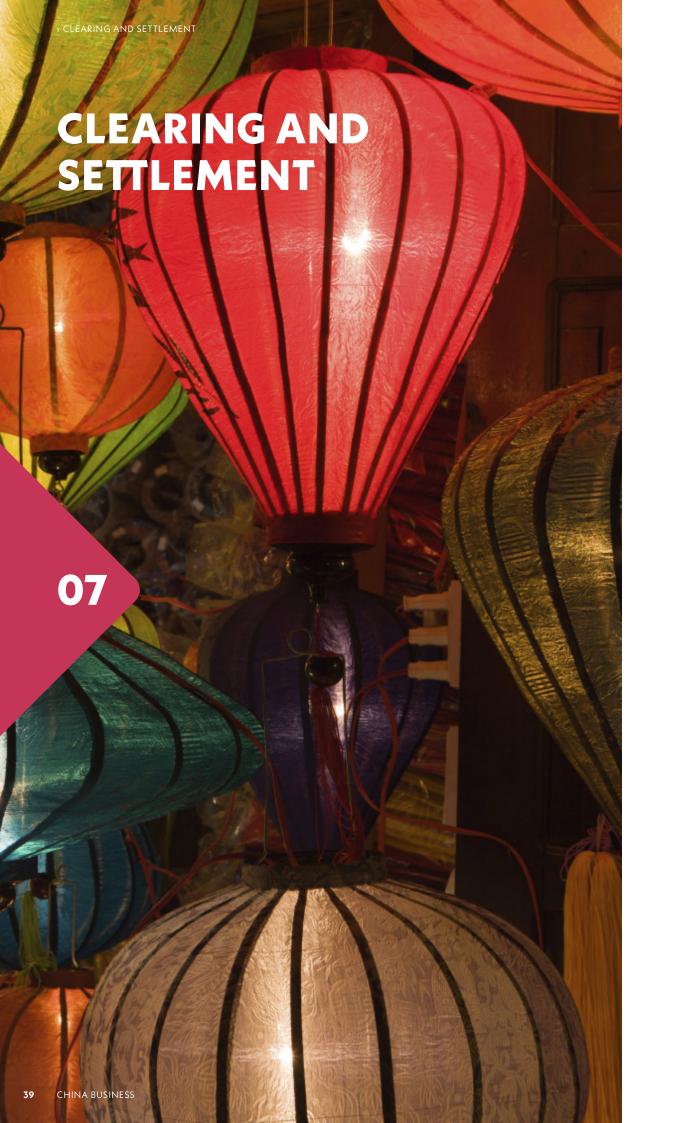
The first Dim Sum Bond issued in Europe was listed on LuxSE in 2011. The label "Listed in Luxembourg" has long been recognised by international traders and investors as a brand indicating high quality pre- and post-listing services. As of May 2017, there are 106 Dim Sum Bonds listed on LuxSE with a total issuance amount of ¥34.3 billion.

LuxSE admits all listed securities for trading on its market platform, allowing for effective market transparency. It offers to issuers with less exposure to international capital markets a window for promotion to European and international investors. The exchange's highly qualified and experienced listing department is committed to supporting issuers throughout the listing-process, as well as assisting in the development of new products.

The exchange is also the premier location for Green Bond listing. The first Green Bond, issued by the European Investment Bank, the "Climate Awareness Bond", was listed on LuxSE in 2007. Currently, there are more than 100 Green Bonds in 20 currencies issued by 25 different entities.

In 2016, LuxSE launched the Luxembourg Green Exchange (LGX) which is the first platform dedicated exclusively to green securities. In July, BoC Luxembourg branch listed Green Bonds in four tranches on LuxSE. The instruments are denominated in US\$ and € with a total issuance amount of US\$2.8 bn. The increasing awareness and demand for environmental projects in China is clearly indicated by the large issuance amounts of Chinese Green Bonds.

LuxSE together with the Shenzhen Stock Exchange launched the CUFE-CNI Green Bond Index Series in March 2017. It is the first Chinese Green Bond index to provide synchronous quotes between China and Europe.



CLEARING AND SETTLEMENT

Currently there are three systems in place for the clearing of RMB following a crossborder trade.

The first system, China National Advanced
Payment System (CNAPS), functions as the domestic payment system for the clearing of RMB in the Mainland China. To have direct access to CNAPS, a bank must have a settlement account at a branch of

The current national payment system is not yet fully developed. This is why Chinese authorities have announced that CNAPS will be updated in order to make the

processing of domestic Renminbi payments

the PBoC, China's central bank. All banks

RMB services are eligible for direct access.

in China that are approved to provide

more efficient. This "new CNAPS" should be in line with international standards, in particular SWIFT.

The second system is the one set up by banks located offshore: firstly in Hong Kong, Macau, Singapore, and Taiwan and later expanded to further locations in Europe and Asia Pacific. These banks have been designated by the PBoC to perform the clearing of RMB. From 2004 to 2012, BoC Hong Kong (BoCHK) was the main RMB clearing bank in the world. The clearing bank plays the role of the intermediary, for the exchange of RMB against euro or dollars, between banks located in Mainland China and participating banks located in Hong Kong and overseas.

"Luxembourg's main advantage in the context of RMB settlement is that you have an extensive and mature ecosystem of financial services providers."

Jan Willems,

Head of Product Management, Global Markets at Clearstream

Since 2013, the PBoC began to designate overseas subsidiaries of Chinese banks to act as offshore RMB clearing banks. In Luxembourg, ICBC Luxembourg Branch functions as the official RMB clearing bank.

In Mainland China, the clearing bank maintains a settlement account with the PBoC and is a member of CNAPS. Additionally, it has access to the interbank lending market, the interbank bond market, and the Shanghai foreign exchange market.

However, this current set-up presents bottlenecks. Offshore settlement was done outside the purview of Chinese FX and capital controls, on the books of BoCHK. Concerns about credit concentration risk were addressed by introducing a nightly sweep for unused funds to a fiduciary account maintained with PBoC, giving access to central bank credit. But this mechanism lacked transparency and was operationally cumbersome.

All transactions in the offshore currency were settled with commercial bank money (a claim on BoCHK) rather than with central bank money. This feature alone disbarred the RMB from eligibility for settlement through the Continuous Linked Settlement (CLS) system, which handles the majority of international settlement in eligible currencies in central bank money.

Thus, a third system was launched in October 2015 to mitigate the shortcomings of the current two systems in place, the international payment system CIPS. CIPS is based on a modern electronic system operated by the PBoC, separate from the domestic CNAPS but linked to this through permit transfers between the two. Most importantly, it allows the settlement of transactions in the offshore currency backed directly by central bank money. The first yuan clearing transaction through CIPS took place from China to Luxembourg.

CIPS will play an important role as the RMB grows as an international payments currency. CIPS has a number of advantages in this respect, including the fact that payment messages can be supported in both English and Chinese, and the fact that it operates based on the ISO20022 messaging standard. This means that cross-border payments made through CIPS can achieve higher levels of straight through processing.

Since May 2018, CIPS has been operating 24 hours a day during working days in China, which also supports internationalisation of payment flows in different time zones.

CLEARSTREAM: CONNECTING CHINESE AND INTERNATIONAL INVESTORS AND ISSUERS

Clearstream has been offering the offshore RMB as a settlement currency since September 2010. Since then, Clearstream has expanded its Cash Correspondent Bank (CCB) network internationally, with three located in Asia and two in Europe, providing liquidity access across different time zones. In November 2012, Clearstream acted as the sole and exclusive International Central Securities Depository (ICSD) for the primary issuance of an offshore RMB-denominated Eurobond, which was the first Dim Sum Bond issued by a Chinese bank outside of China and Hong Kong. In 2016, Clearstream supported the Chinese ministry of finance in issuing its first offshore RMB bond.

Recently, Clearstream has been growing its access to the Chinese onshore market for its RMB settlement business. In 2014, Clearstream set up the first connections to the Shanghai-Hong Kong Stock Connect program. Following that the access was extended to the CIBM. In October 2016, Clearstream launched its China Bond Link, providing unique ICSD access to eligible institutional investors to enter CIBM without any quota restrictions. Later in 2016, Clearstream added its connection to the Shenzhen-Hong Kong Stock Connect program. In 2017, Clearstream successfully launched access to the Bond Connect program, allowing foreign investors to invests in the Chinese onshore bond market via Hong Kong. In addition to the core RMB settlement services, Clearstream also provides collateral management, funds order routing (Vestima) services for all asset classes denominated in CNH.

The recent incorporation of RMB into the SDR basket has led to increased demand from central banks for RMB-denominated products. Regulatory approval for UCITS funds to invest in Chinese instruments, coupled with developments like CIBM access and the Mutual Recognition for Funds programme, increased the interest certain fund managers have with regard to RMB products. Clearstream is beginning to see a move from offshore instruments to onshore instruments as access restrictions are lifted on a gradual basis.

In April 2016 and March 2017, Clearstream signed MOUs with Shanghai Clearinghouse (SCH) and China Central Depository and Clearing Company (CCDC) to tighten the cross-border corporation partnership. According to Shui Ruqing, Chairman of CCDC, it provides opportunities "for both institutions to provide better cross-border depository and settlement services for RMB fixed-income products based on their respective platforms". The link will also facilitate the CIBM investment process for international investors.

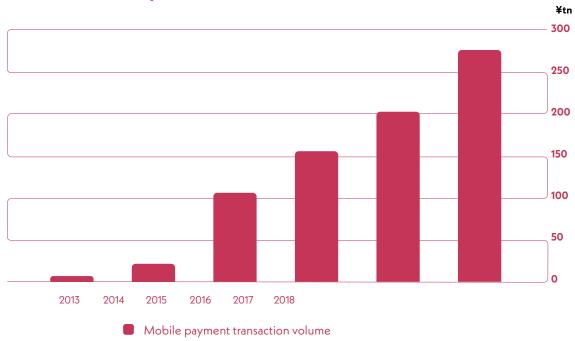
Overall, China, especially the onshore market, remains relatively untapped by foreign investors and so Clearstream expects substantial volume increases over the coming years.



PAYMENTS

China is home to the world's largest and most developed retail e-commerce market, and accounts for 47% of digital retail sales. This, coupled with widespread mobile penetration in urban areas in China has led to the rapid development since the turn of the millennium of a vibrant internet and mobile payments industry. The total number of transactions made via mobile transactions in China in 2018 reached 60.53 bn, with a transaction volume of \$277.4 tn (US\$ 41.51 tn)6.

The Rise of Mobile Payments



Source: People's Bank of China, Caixin Data, CEIC

 $^{^6}$ Caixin

Alipay, originally a payment channel for the Alibaba e-commerce platform, and WeChat pay, growing out of a popular Chinese social messaging service, have emerged as giant providers of e-wallets in China. Their offering today has outgrown their initial scope and includes a wide variety of financial services – including money market investing, insurance services, personal credit lines and online banking.

Moreover, coupled with the rise of purchasing power of Chinese outbound tourists, such e-wallet providers are increasingly internationalising their offerings and aiming to increase their acceptance as a payment method abroad. Luxembourg is emerging as a European hub for such internationalisation, with Chinese e-payment companies setting up a licensed entity in the Grand Duchy

to passport their services across the European Union. As an example, in December 2018, Alipay obtained an e-money license in Luxembourg.

Innovation in payments is also helping to change the ways cross border payments flows work between merchants and e-commerce platforms. Specialist service providers in this field operating out of Luxembourg connect merchants from around the world with the customers of e-commerce platforms, while allowing them to receive their payments in their home currency in a seamless fashion.

Here, along with the provision of a payment channel, new technology allows for the provision of additional value added services – such as consumer trend analytics, performance data and cross-border regulatory compliance.

"Our mission is to empower our customers to sell anywhere in the world with a simple and streamlined experience to grow their businesses. The bigger vision is that we believe the world is hyperconnected but also hyper-local.

Payments could be one of those rare business scenarios which can be both - because we can facilitate and serve local people who have their own payments habits in their local currency and also benefit from cross border opportunity with our product."

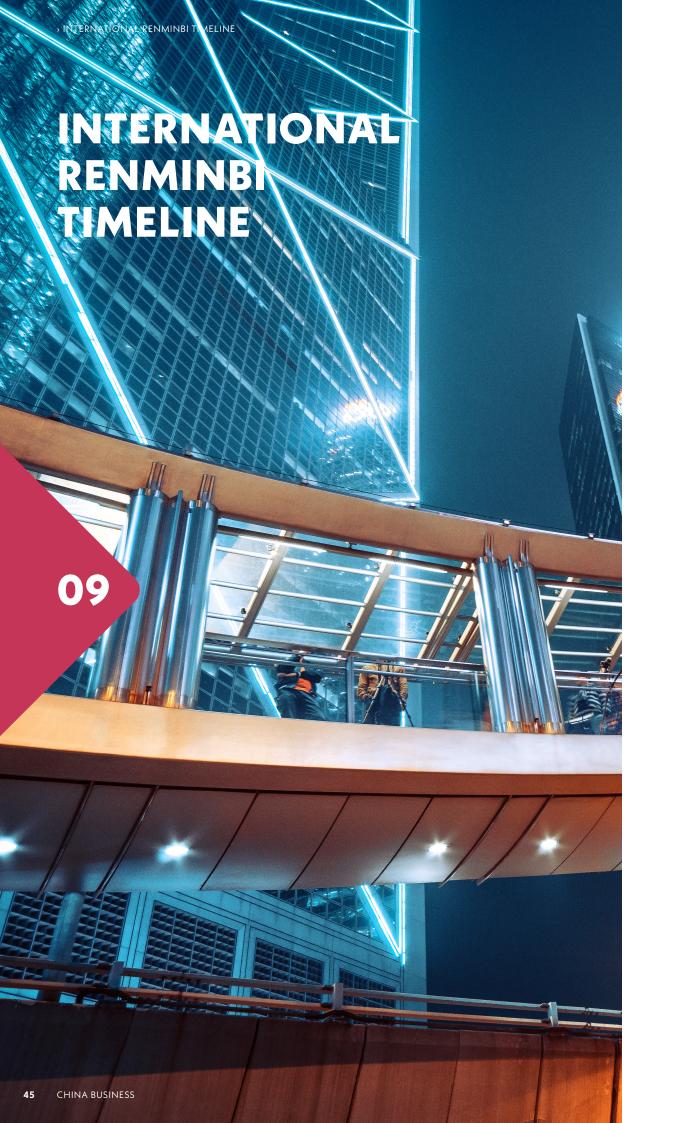
Ning Wang,

Chief Business Officer, PingPong

Over half of the world's population being mobile internet users as of January 2019^7 and there will be approximately 20.8 billion connected devices online by 2020^8 – the payments landscape will therefore continue to change dramatically in the coming years, growing ever more interconnected and global.

⁷ Statista, We are social, DataReportal, Hootsuite

⁸ Visa



INTERNATIONAL RENMINBI TIMELINE

2002	The QFII program allows licensed foreign investors to access Mainland stock markets (A-shares).
2003	PBoC designates BoCHK as RMB clearing and settlement bank.
2006	The QDII program allows licensed Chinese banks to invest their funds or those of their clients in specific financial products overseas
2007	Mainland financial institutions are allowed to issue RMB-denominated funds in Hong Kong.
2009	Launch of a pilot scheme for the RMB trade settlement of goods between five Chinese cities on the one hand, and HK, Macau and ASEAN countries on the other.
2010	June: The pilot RMB trade settlement scheme is extended to 20 Mainland provinces and cities on the one hand and to all parts of the world on the other. August: Offshore commercial banks and monetary authorities are allowed to access China interbank bond markets.
_	January: Enterprises in China are allowed to conduct and settle Overseas Direct Investments (ODI) in RMB. August: The pilot RMB trade settlement scheme is extended to all regions of China.
2011	October : Arrangement for foreign enterprises to conduct and settle Foreign Direct Investments (FDI) into China in RMB is formalised.
	December : RQFII program is launched, allowing offshore RMB in Hong Kong to invest in mainland securities.
2012	November : RQFII Investment quota is raised to ¥270 bn; investments no longer restricted to the 20% equities/80% bonds rule in asset allocation.

January: PBoC designates Bank of China Taipei as RMB clearing bank.

2013

January: Initiated pilot program in Zhejiang, Yiwu for individual RMB cross-border settlement. February: ICBC Singapore appointed as a RMB clearing bank.

July: The RQFII program is extended to Taiwan, London, and Singapore.

October: Currency swap line agreed between the ECB and PBoC.

February: Expansion of cross-border RMB business within the Shanghai Free Trade Zone.

March – November: RQFII scheme now granted to a total 9 markets and 93 institutions for almost ¥300 bn. Paris, South Korea, Frankfurt, Doha, Canada, and Australia added in 2014.

2014

September: Direct currency trading against the euro.

November: Launch of the Shanghai-Hong Kong Stock Connect. By 2015 expansion of the scheme between Shenzhen and Hong Kong.

November: Approval of the RQDII program.

March: New free trade zones launched in Tianjin, Fujian and Guangdong. March: Founding of the Asian Infrastructure Investment Bank (AIIB).

April: ¥50 bn RQFII quota granted to Luxembourg.

April: SAFE Expands FDI Currency Conversion from foreign currency to RMB from 16 pilot regions to all of China starting on 1 June.

May: FTSE starts transition to include China A Shares in global benchmarks.

2015

August: PBoC significantly devalues the RMB and introduces a new daily reference rate method, based, inter alia, on FX demand and supply.

September: PBoC opens onshore currency market to foreign central banks and sovereign wealth funds.

October: Launch of CIPS.

October: PBoC issues its first offshore sovereign bond in London.

November: The RMB is added to the IMF's SDR basket.

November: SSE, Deutsche Börse, Clearstream, and China Financial Futures Exchange launch the joint venture CEINEX in Frankfurt.

February: China opens its interbank bond market to a wider range of foreign institutional investors.

April: UK replaces Singapore as the largest RMB clearing centre outside the Greater China.

May: Chinese Ministry of Finance issues its first international RMB bond outside Greater China.

June: China gives ¥250 bn RQFII quota to the U.S.

2016

October: RMB officially joins IMF's SDR, in addition to the previously included four currencies – the U.S. dollar, the euro, the Japanese yen and the British pound.

December: Shenzhen-Hong Kong Stock Connect Program is officially launched. December: Panda bonds issue amount reaches ¥127.4 bn.

December: China gives ¥50 bn RQFII quota to Ireland. Now, RQFII quota are granted to a total of 18 markets for more than ¥1.5 tn.

December: IMF Official Foreign Exchange Reserve (COFER) in RMB reaches US\$85.51 bn by end 2016.

2017

March: MSCI revises proposal for China Mainland A-share inclusion in the Emerging Market Index.

July: Launch of north-bound trading bond connect scheme.

2018

June – **September**: Inclusion of Chinese A-shares into the MSCI emerging market benchmark.

2019

May: Launch of Japan ETF Connect.

June: Launch of Shanghai London Stock Connect.



USEFUL CONTACTS

Luxembourg Financial Centre

www.luxembourgforfinance.com

Luxembourg Government

www.gouvernement.lu

Financial Sector Regulator

www.cssf.lu

Insurance Regulator

www.caa.lu

Association of the Luxembourg Fund Industry

www.alfi.lu

Luxembourg Bankers' Association

www.abbl.lu

Luxembourg Chamber of Commerce

www.cc.lu

Insurance Association

www.aca.lu

Luxembourg Institute for Training in Banking

www.houseoftraining.lu

Luxembourg Stock Exchange

www.bourse.lu

Luxembourg Central Bank

www.bcl.lu

Luxembourg Statistics Portal (STATEC)

www.statec.lu

Grand Duchy of Luxembourg

www.luxembourg.lu

National Tourist Office

www.visitluxembourg.com

Luxembourg Private Equity and Venture Capital

Association (LPEA)

www.lpea.lu

Luxembourg House of Financial Technology

(LHoFT)

www.lhoft.lu

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