Research Paper

Paola Subacchi and Matthew Oxenford
International Economics Department | January 2017

The 'Belt and Road' Initiative and the London Market – the Next Steps in Renminbi Internationalization

Part 2: The View from London

CHATHAM HOUSE
The Royal Institute of International Affairs

Contents

Summary

- Over the past 18 months, the internationalization of China's currency, the renminbi, has entered a new phase – thanks to an ambitious government-led programme of regional infrastructure development. The 'Belt and Road' initiative has the potential to create real assets denominated in renminbi outside China. The initiative aims to help close the gap between infrastructure needs and infrastructure funding in developing countries. This gap is estimated at US$1 trillion a year above 2008 levels through 2020, much of which is in Belt and Road host countries. As this gap is too large to be financed by Chinese sources alone, offshore 'dim sum' bond markets could expand to fill this gap – thus contributing to the further internationalization of the renminbi.
- Up to mid-2015, growth in cross-border trade settlement, the development of fledgling offshore bond markets and expectations of currency appreciation had supported increased use of the renminbi as an international medium of exchange and unit of account. These factors made the renminbi attractive to investors, even though it was still not widely used as a store of value by international corporates and sovereigns operating outside China.
- London offers particular promise as a location for renminbi-denominated financing of Belt and Road projects. It provides access to a diverse international cross-section of investors, offers conformity with international accounting and reporting standards, and has the expertise to support sophisticated project finance instruments.
- London still needs to develop several pieces of market infrastructure to become a viable offshore renminbi hub of substantial size. In particular, it must establish a secondary market and long-term yield curve for renminbi-denominated bonds, a means of providing political risk insurance for countries partnering China on Belt and Road projects, and uniform standards for 'green financing'.
- Despite its opportunities, the ongoing modernization of China's financial system also potentially threatens the very offshore financing mechanisms that have contributed to the internationalization process to date. Over time, if liberalization renders the Chinese onshore bond market more accessible to foreign investors and issuers, and if interest rates onshore remain lower than those offshore, the relevance and role of the offshore market could diminish. That would be unwelcome for international financial centres such as Hong Kong and (to a lesser degree) London – albeit potentially a sign of progress in China's broader effort to establish the renminbi as an international reserve currency.

1. Introduction

Since 2009 China has been working to develop the renminbi as an international currency, by increasing both its circulation and its liquidity in international markets. The Chinese authorities have adopted a two-track approach to this project: first, promoting the use of the renminbi in international trade; and second, creating an offshore market for renminbi-denominated assets in international financial centres. The key challenge for the development of the renminbi has been to overcome the constraints on capital movements in and out of China's domestic market, so that the renminbi can function like a convertible international currency.

Until recently, steady appreciation against the US dollar had supported the renminbi's internationalization for a number of years. From June 2010, when a renminbi cross-border trade settlement scheme, the first step in the internationalization process, was extended to the whole country and more flexible exchange rate arrangements were introduced, to its peak in January 2014, the renminbi appreciated by 12 per cent against the dollar.[1]

The key challenge for the development of the renminbi has been to overcome the constraints on capital movements in and out of China's domestic market, so that the renminbi can function like a convertible international currency.

However, in the past 12–18 months the renminbi's internationalization has entered a more uncertain phase. China suffered significant capital market turmoil in August 2015, following the introduction of new measures to manage the exchange rate. The Chinese authorities presented this 'readjustment' as a reform designed to make the renminbi exchange rate more market-oriented. However, this reform was coupled with a 1.9 per cent cut in the renminbi's daily reference rate, which was widely perceived in international markets as a competitive devaluation. Capital outflows in the last months of 2015 and in early 2016 further weakened the renminbi, which subsequently slid to an eight-year low of RMB 6.9 to the US dollar in November 2016.[2] As a result, there no longer exists an expectation of steady future appreciation in the currency to provide traction for China's 'renminbi strategy'.

Coinciding with these developments has been the emergence of the government's ambitious 'Belt and Road' initiative – also widely known as 'One Belt, One Road' – which was announced in late 2013. The initiative entails a commitment to invest in physical infrastructure, with the eventual aim of connecting China (a) to Europe via land links along the ancient Silk Road through Eurasia; and (b) to South and Southeast Asia via improved port and maritime facilities. These investments will expand China's footprint abroad. China's leadership has given various reasons for the Belt and Road initiative, including providing investment outlets for Chinese capital, promoting infrastructure that could boost exports, and enhancing national prestige. Chinese sources have also hinted that the initiative is somehow related to plans to internationalize the renminbi, and thus part of the government's efforts to develop a more significant presence in the international financial system.

[1] Thomson Reuters Datastream, exchange rates of RMB 6.83:US$1 on 1 June 2010 and RMB 6.05:US$1 on 2 February 2014.
[2] Thomson Reuters Datastream, exchange rate of RMB 6.92:US$1 on 24 November 2016.

The Belt and Road initiative's complex demands in terms of financing and market infrastructure mean that it will require a great amount of international capital and financial expertise to succeed. This creates potential opportunities for offshore financial centres such as London, which established the first renminbi offshore bond market outside Asia in 2012. Compared to more established currencies traded in London, the renminbi market is currently limited in terms of trading volumes and range of activity. However, the Belt and Road initiative could lead to London being used by corporates and other organizations as a location for the issue of renminbi-denominated bonds in support of infrastructure projects.

This research paper examines the dynamics of renminbi internationalization, and whether London could become a key centre for renminbi-denominated project finance. The paper is organized as follows. In Part 2, we examine how and why the offshore renminbi market first developed. In Part 3, we discuss how this market is likely to develop in the future, and the impact both of changes in investor sentiment and of potential further liberalization of China's onshore market. In Part 4, we discuss the potential of the Belt and Road initiative to drive internationalization of the renminbi in trade and finance. In Part 5, we assess the market infrastructure that would be needed for London to take advantage of Belt and Road opportunities by developing its renminbi capabilities.

2. China's Initial Strategy for Renminbi Internationalization and the Development of the Offshore Market

The process of internationalizing China's currency began in earnest in 2009 with a statement by Zhou Xiaochuan, governor of the People's Bank of China (PBoC), on the shortcomings of the international monetary system, and specifically its dependence on the US dollar (Zhou, 2009). Shortly thereafter, China announced that it would engage in wider initiatives to develop the renminbi as an international currency and reduce the use of the dollar for invoicing and settling trade (Subacchi, 2010).

Track one: trade and payments

The government's 'renminbi strategy' – as it was widely called – relied on a two-track approach to overcoming the constraints arising from the Chinese currency's limited convertibility (Subacchi, 2010). The first track involved trade and payments. In 2009 the PBoC inaugurated a cross-border trade settlement scheme that allowed trade and business transactions outside China to be conducted in renminbi. The scheme was initially limited to Chinese municipalities, and to counterparties in Hong Kong designated by the PBoC. However, the list of accepted counterparties quickly expanded: by 2012 the scheme was open to all Chinese importers and exporters, and any willing counterparty (City of London Corporation, 2013).

As a consequence of these efforts, the value of trade transactions settled in renminbi increased from a negligible level in 2009 to roughly RMB 1.7 trillion (US$262 billion)[3] in the fourth quarter of 2015 (Mizuho, 2016). Indeed, by 2015 approximately 22 per cent of China's trade was settled in renminbi (Clover, 2015).

The trade settlement scheme created significant offshore renminbi liquidity, which was channelled into a pool in Hong Kong. The PBoC underpinned its policy by providing liquidity facilities through bilateral swap agreements with other central banks – mainly those of China's key trade partners – to exchange local currency for renminbi up to a pre-specified amount. By June 2016, China had signed 35 such bilateral agreements for a total notional amount of more than RMB 3.3 trillion (PBoC, 2016), including a RMB 350 billion facility with the UK (FTSE Russell, 2016). Offshore financial centres can use these lines in the event that they require liquidity in renminbi. Indeed Hong Kong drew on its swap agreement with China in 2010 (Fox and Lui, 2010) and in 2012 (HKMA, 2012), both times after a sharp spike in demand from investors. These agreements provide liquidity support so that international investors and sovereigns can freely trade, hold and use renminbi offshore. In some countries, notably Argentina and Pakistan, the swap facilities have been used to obtain renminbi for exchange into US dollars in order to avert foreign-exchange liquidity crises (Li, 2015). The Chinese government also established renminbi clearing and settlement banks – branches of major Chinese commercial banks with special access to onshore foreign exchange markets – to provide renminbi liquidity in financial centres around the world.

[3] Exchange rate of RMB 6.49:US$1, Thomson Reuters Datastream, 31 December 2015.

Track two: the offshore market and the creation of 'dim sum' bonds

The second part of China's two-track approach to renminbi internationalization was to increase the currency's appeal as an asset for foreign investors through the development of the offshore renminbi market in international financial centres. Much of the desirability of holding renminbi has been premised on the growth of the Chinese domestic economy and, until late 2014, on market expectations that the currency would continue to appreciate. At the same time, the renminbi's utility outside China is significantly affected by the fact that – unlike most widely used international currencies – it is not fully convertible on the capital account.[4]

In order to support the country's export- and investment-oriented model of growth while maintaining a stable exchange rate, the Chinese authorities have maintained controls on capital inflows and outflows since the opening up of the economy in the early 1980s and the exchange rate reforms of the late 1980s and early 1990s. These controls have been relaxed somewhat in recent years with the introduction of specific schemes and quotas to manage capital flows. However, the financial system is still far from open.

Indeed, the goal for China has never been the elimination of capital controls *per se*. As Governor Zhou explained at the IMF spring meeting in 2015, China's current policy consists of maintaining a regime of 'managed convertibility' with an end goal of continuing 'to manage capital account transactions, but in a largely transformed manner, including by using macroprudential measures to limit risks from cross-border capital flows and to maintain the stable value of the currency and a safe financial environment' (Zhou, 2015). While this suggests that capital controls will not be removed entirely, liberalization is nonetheless slowly progressing – to the point that investors are increasingly able to access the Chinese market directly (Subacchi, 2017).

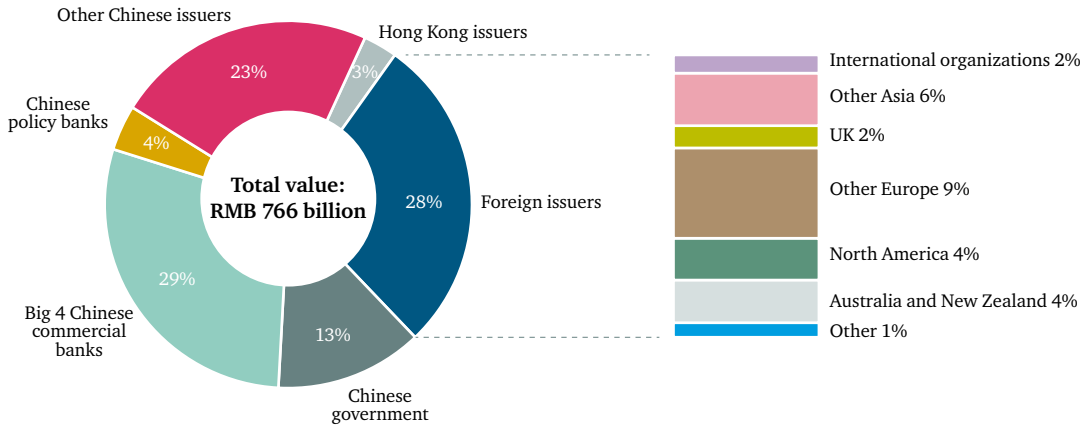
The pool of offshore liquidity generated by the increase in renminbi-denominated trade settlement has led to a moderate expansion in the renminbi's use as a medium of exchange. However, bank deposits alone provide too small a pool of assets to sustain increased renminbi activity in areas beyond trade settlement, or to make the renminbi attractive to overseas investors.[5] To address this issue, the Chinese monetary authorities have sought the development of an offshore renminbi bond market. The rationale for this is clear. A well-developed offshore market would create a large and stable pool of assets, denominated in renminbi and producing predictable returns, outside the tightly controlled Chinese domestic market. To this end, between 2010 and 2014 the Chinese government enacted a series of policies to create and develop markets for renminbi-denominated debt instruments issued offshore – or so-called 'dim sum' bonds. These bonds have a key function in promoting the offshore use and circulation of the renminbi.

The first dim sum bond was issued by China Development Bank in Hong Kong in 2007. The Hong Kong market was initially limited to Chinese and Hong Kong-based issuers, before opening to international issuers in 2010. Other financial centres soon followed suit, and by 2014 offshore markets had been created in multiple locations, including Singapore, Taipei and London. As these markets have developed, the profile of issuers has become significantly more international. Nonetheless, Chinese entities still predominate: issuers based outside mainland China and Hong Kong account for only 28 per cent of the worldwide value of outstanding dim sum bond issuances (see Figure 1).

[4] It has been fully convertible on the current account since 1996 (Bank for International Settlements, 2008).
[5] In economic theory, money has three functions: as a medium of exchange, as a unit of account, and as a store of value. For a currency to become truly international, it must fulfil all three functions on an international scale.

And while business in other offshore centres has increased, Hong Kong remains by far the largest issuing market, accounting for over one-third of the value of outstanding offshore renminbi issuances as of August 2016.

Figure 1: Worldwide 'dim sum' market: outstanding bonds by issuer origin (August 2016)



Sources: Thomson Reuters Eikon; Chatham House calculations.

Key offshore markets: London vs Hong Kong

Outside Hong Kong, London has become the largest market for renminbi-denominated debt. Although issuance is still relatively limited, London's prospects of becoming a more important offshore market are buoyed by a number of factors that differentiate it from Hong Kong. These include a more international pool of issuers and, consequently, less exposure to potential future competition if and when mainland Chinese markets liberalize. These differences could eventually enable London to challenge Hong Kong's leading position as an offshore renminbi hub.

Indeed, London already leads in offshore foreign exchange trading for renminbi: in 2014 the city transacted 67 per cent of all renminbi spot trades globally, as well as 56 per cent of forwards trades, 43 per cent of swaps trades and 20 per cent of options trades (Bourse Consult, 2015). London has also passed Singapore as the second-largest centre for payments, handling 6.3 per cent of all renminbi-denominated payments, compared with 4.6 per cent for Singapore (SWIFT, 2016). That said, it remains far behind Hong Kong in this area, with the territory accounting for a 73 per cent share of payments.

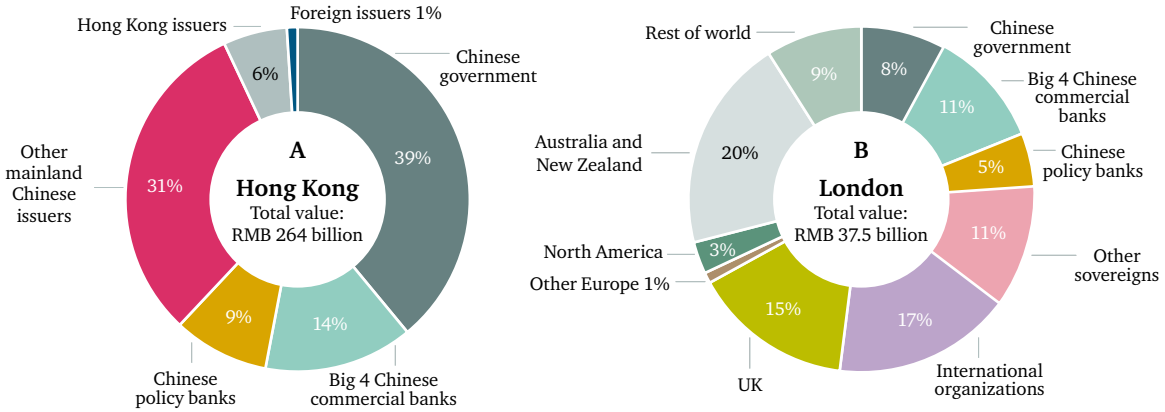
London still faces a number of obstacles to growing its offshore renminbi market. Liquidity is a particular challenge (Subacchi and Huang, 2012). As of January 2016, institutions in London held only RMB 50 billion in deposits, compared with over RMB 800 billion in institutions in Hong Kong, over RMB 300 billion in Taipei and over RMB 200 billion in Singapore (Herrero, Pang and Slu, 2016). Although mitigated somewhat by the PBoC's RMB 350 billion currency swap agreement with the UK (Shao, 2015), the lack of liquidity limits trading volumes. As of August 2016, only 95 renminbi-denominated bonds traded on the London Stock Exchange. These were worth roughly RMB 37.5 billion, or less than 5 per cent of the value of outstanding dim sum bonds globally. Furthermore, these bonds represented only 24 separate issuers.

The market continues to grow rapidly: as of August 2016, more than 55 new bonds had been issued in London. But the market still has a long way to go to catch up with Hong Kong, which had almost 300 bonds outstanding, comprising issues from over 80 institutions.

This size difference reflects Hong Kong's first-mover advantage and proximity to the rest of China. In effect, the city benefited from the initial surge of Chinese issuers seeking access to international markets when offshore facilities were first established in 2007. Yet as a consequence, Hong Kong is also heavily reliant on business originating in its own region, with only RMB 3.5 billion (1.3 per cent) out of a total of RMB 264 billion in currently outstanding bonds accounted for by issuers based outside China or Hong Kong. Indeed the Chinese government alone accounts for over one-third of all amounts outstanding in Hong Kong (see Figure 2A).

By contrast the London market, while much smaller than Hong Kong, is far more diverse. Some 76 per cent of outstanding bonds in London are from non-Chinese sources, representing over RMB 28 billion (see Figure 2B). Three sovereigns (the UK, China and Hungary) have already issued in London, as have international financial institutions such as the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC). In Hong Kong the only international financial institutions to have issued dim sum bonds so far are the Chinese-owned policy banks: China Development Bank (which has also issued in London) and the Export-Import Bank of China. Their issuances account for only about 9 per cent of outstanding bonds issued in Hong Kong (see Figure 2A). If one excludes issuers based in China and Hong Kong, the value of outstanding renminbi-denominated debt issued in London is actually greater than that issued in Hong Kong. Although UK banks and corporates are represented in London, no geographical region is dominant in terms of issuer origin to the same degree that Chinese firms are in Hong Kong. This suggests that London has a comparative advantage in providing access to a wider international pool of investors, including international institutions, whereas Hong Kong is the market of choice for those wishing to do business specifically with China. However, as discussed in more detail in the next section of this paper, Hong Kong's is a niche more likely to be disrupted by future Chinese policy changes.

Figure 2: Outstanding 'dim sum' bonds by market and issuer origin (August 2016)

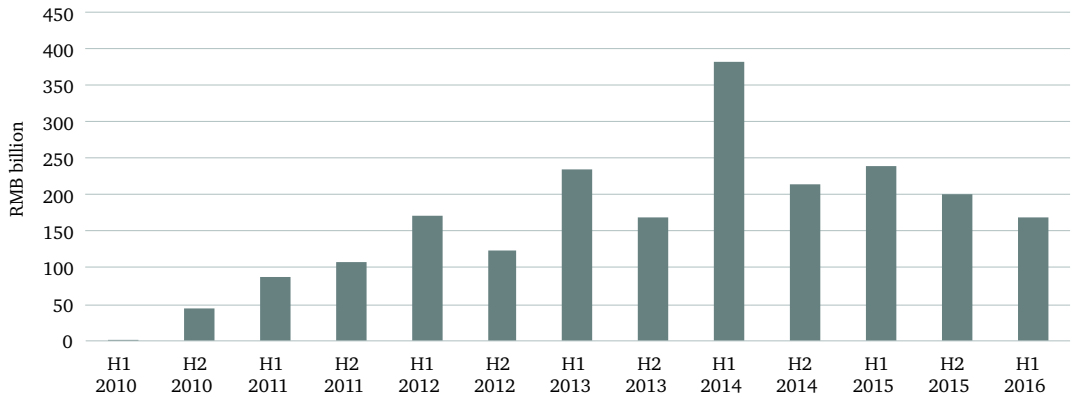


* The 'Big Four' Chinese commercial banks consist of the Bank of China, the Industrial and Commercial Bank of China, China Construction Bank and the Agricultural Bank of China. International organizations include the EBRD and IFC. Comparison of pie chart sizes not to scale.
Sources: Thomson Reuters Eikon; London Stock Exchange; Chatham House calculations.

3. The Slowing of the Offshore Market and the Rise of the Onshore Bond Market

'Dim sum' bond issuance worldwide peaked in 2014 and then declined in 2015 and the first half of 2016 (see Figure 3). Through a number of interviews with practitioners in the London market,[6] we have identified two possible causes of this slowdown. First, there is the effect of concerns that China's economic growth will become slower and less predictable in the next few years. As a result, investment in renminbi-denominated assets is starting to be perceived as riskier. The second likely reason for the decline in offshore issuance is the increasing liberalization of China's capital account and the resultant prospect of further opening of the onshore market.

Figure 3: Global 'dim sum' bond issuance



Sources: Thomson Reuters Eikon; Chatham House calculations.

The development of offshore centres has been dependent on their function in allowing international investors to hold renminbi when access to mainland China's domestic market has been limited by capital controls. The initial pool of offshore renminbi consisted of the deposits of non-Chinese firms that traded with China and settled transactions in renminbi, and that held assets in renminbi to either hedge against currency risk or secure renminbi liquidity for their business operations. Had the Chinese capital account been open at the time, it would have been easier for such firms simply to operate in the onshore market, which is significantly larger and more liquid than its offshore counterpart. Deposits in the offshore market totalled an estimated RMB 1.5 trillion (US$231 billion) in 2015 (Huntsman, 2015), whereas total bank deposits in mainland China amounted to RMB 199 trillion (US$30 trillion) in the same year.[7] Indeed, with roughly RMB 60 trillion (US$8.7 trillion) in outstanding issues,[8] China's onshore bond market is the third-largest

[6] For this project, we conducted a series of interviews with 15 practitioners active in the renminbi offshore market across 10 organizations in London, representing banks, government departments, international institutions and other stakeholders. The sample provides an overview of the London offshore market, and captures the main players in terms of both volume and variety of activities. These interviews were conducted in a semi-structured format, to allow for discussion around a range of topics while also covering common themes.
[7] IMF *International Financial Statistics*, via Thomson Reuters Datastream.
[8] Thomson Reuters Datastream, exchange rate of RMB 6.88:US$1, 8 December 2016.

bond market in the world (Deutsche Bank, 2016). In comparison, the value of the global dim sum bond market is only RMB 766 billion (US$114 billion).

The unique nature of China's capital controls created three incentives for firms to operate offshore. First, it made it logistically impossible for foreign corporates generating revenue onshore to repatriate those funds offshore. Second, the separate offshore exchange rate, combined with expectations of renminbi appreciation, created opportunities for arbitrage in the offshore market. Third, the lack of market infrastructure meant that interest rates were higher onshore in China than offshore, making the offshore market more attractive to borrowers. Yet the recent combination of slower economic growth and greater openness in the Chinese market has eroded all three of these incentives, as explained in further detail below.

Access

In recent years, China's domestic financial market has become more accessible, particularly for large institutional investors. In order to encourage investment, especially inward foreign investment, China has been liberalizing the market to bring the currency closer to convertibility. The main mechanism the authorities have used for this is the Qualified Foreign Institutional Investor (QFII) scheme, in place since 2003. In 2011, China also launched the Renminbi Qualified Foreign Institutional Investor (RQFII) scheme, which allowed foreign investors to conduct onshore operations directly in renminbi. These schemes, particularly QFII, have allowed registered institutional investors to engage in a series of activities, including bond issuances (see Table 1, below). This created a market for what are popularly termed 'panda bonds': renminbi-denominated bonds issued onshore in China by foreign issuers.

Table 1: QFII permitted activities as of 2016

• Bond collateral repo	• Open-ended funds
• A-shares	• Closed-ended funds
• Warrants	• Exchange-traded funds (ETFs)
• IPOs	• Tradeable listed fixed income
• Seasoned equity offerings (SEOs)	• Bond issuance
• Rights issues	

Source: Shanghai Stock Exchange.

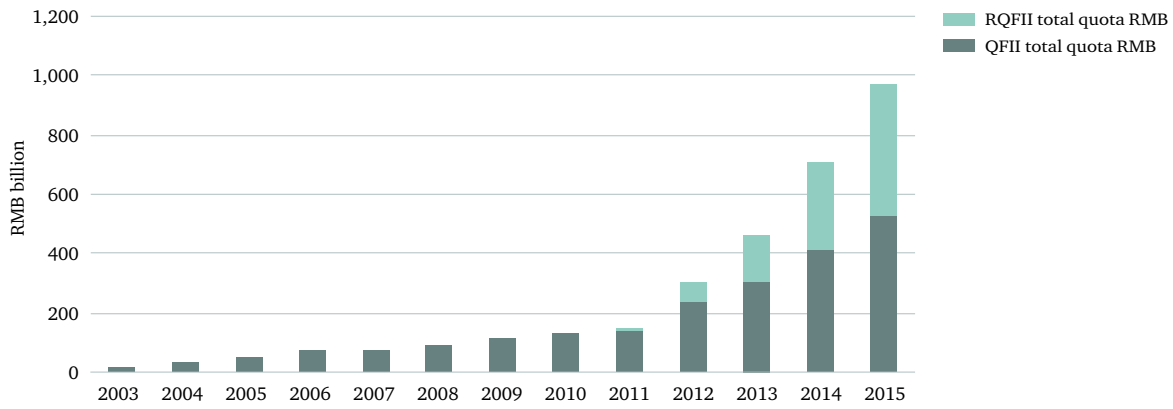
While small in comparison with the total size of the domestic market, both the QFII and RQFII schemes have grown rapidly since their launch (see Figure 4), aided by periodic quota increases by the State Administration of Foreign Exchange (SAFE) (Prasad, 2016). SAFE has also gradually streamlined the approval process for QFII and RQFII transactions. The most recent example occurred in February 2016, when it eliminated case-by-case approval requirements for transactions and raised the maximum base investment quota from US$1 million to US$5 million (Linklaters, 2016b). These restrictions were among the most cited barriers to foreign investment in the onshore market (Chen, 2016b). This reform also reduced the processing time for inward remittances and allowed QFIIs to access open-ended funds on a daily basis (HKTDC, 2016). On 27 May 2016, SAFE announced that it would open up the onshore interbank bond market directly to a wide range of foreign banks and institutional investors (Linklaters, 2016a), a move that has improved market access for offshore firms.

China has also established a system called Shanghai–Hong Kong Stock Connect, which allows Hong≈Kong investors to invest up to RMB 250 billion in Shanghai (Hong Kong Exchanges and Clearing, 2016). Another Stock Connect, in Shenzhen, launched in December (Wells and Weinland, 2016), and further variants on these initiatives – additional 'stock connect' and 'bond connect' schemes – are in development elsewhere, including London (Taplin, 2016).

More than half of our interviewees indicated that they believe the lack of access to the onshore market will not remain an insurmountable obstacle to large banks and multinational firms issuing debt onshore in the medium term, provided that yields onshore are sufficiently attractive. Indeed, despite the Chinese government's public position that it intends to continue the policy of 'managed convertibility' indefinitely (Kynge, 2015), more than a third of our interviewees suggested that within the next 10 years capital controls could be sufficiently liberalized for yields and exchange rates in offshore and onshore markets to converge. Interviewees also suggested that even if China retains capital controls, these may be loosened to the extent that they effectively cease to apply under non-crisis circumstances.

In the near term, there will remain significant obstacles to issuing debt in the onshore market. Chinese accounting and regulatory standards are markedly different from international standards, ensuring a steep learning curve and high associated costs for offshore issuers trying to expand onshore. These costs will discourage some foreign corporates from accessing the onshore market until China harmonizes its regulatory and accounting standards with international norms, a process that our interviewees generally believe is many years away. However, the widespread perception that accessing the onshore market is 'impossible' has begun to fade.

Figure 4: Growth of QFII and RQFII schemes



Source: Shanghai Stock Exchange, http://english.sse.com.cn/investors/qfii/listandquota/.

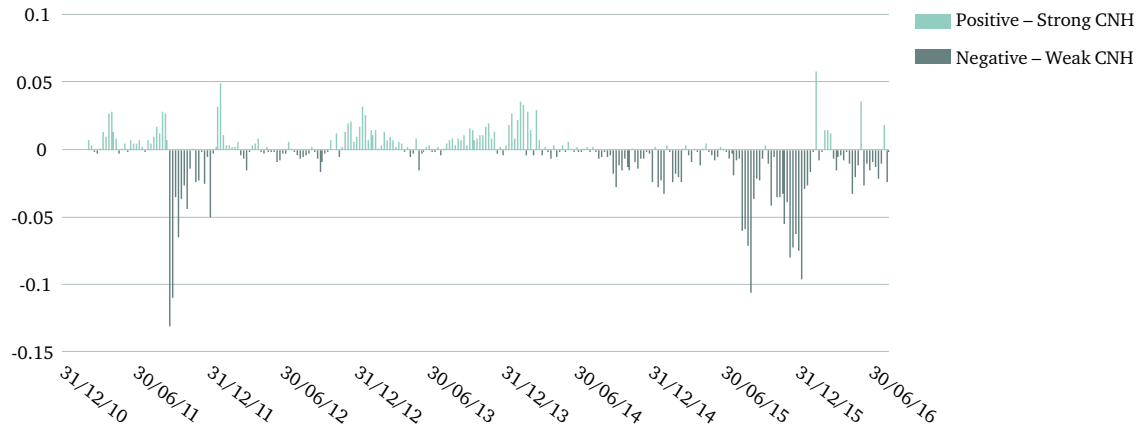
Appreciation expectations

Growth in the offshore market has historically been driven in part by the arbitrage and hedging opportunities it provided to investors operating in China or with balance sheets or significant cashflows denominated in renminbi (Huang, 2015). Much of the attraction of the offshore market came from the expectation that the renminbi would appreciate. With capital controls preventing the free exchange of

offshore and onshore renminbi in large quantities, the exchange rate in each market diverged to create separate onshore (CNY) and offshore (CNH) rates. The CNY exchange rate was (and still is) directly managed by the PBoC, although in recent years the central bank has increasingly taken market forces into account when setting it. In contrast, the CNH rate is not usually directly managed.

During most of 2011–14, the CNH traded at a premium to the CNY (see Figure 5). This reflected expectations of future growth in China: the CNH, being more sensitive to market sentiment than its less freely traded onshore counterpart, would typically be stronger than the CNY whenever investors were confident in China's economic prospects. Equally, as the CNH was also more markedly affected by negative sentiment, it would trade at a discount to the CNY whenever investors' concerns about Chinese growth and financial stability increased (Gagnon and Troutman, 2014).

Figure 5: Divergence between CNH and CNY rates against the US dollar



Source: Thomson Reuters Datastream.

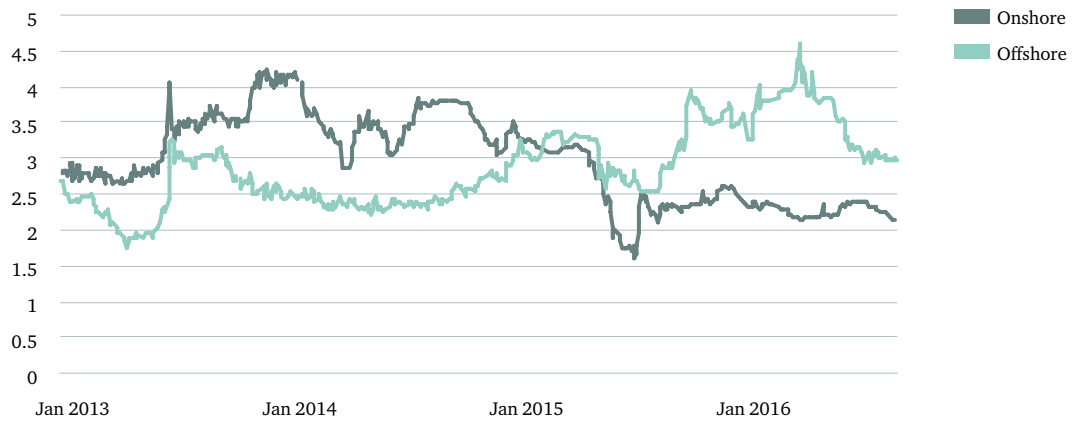
This discrepancy fostered arbitrage between the two markets, as firms that did business both onshore and offshore selectively made payments in whichever currency was weaker at the time, and received payments in whichever currency was stronger.[9] For example, when the CNH traded at a premium to the CNY, foreign counterparties to Chinese transactions had an incentive to settle trades in CNY, and to receive payments in CNH. As this was more likely to happen when investors expected the renminbi to appreciate, the CNH traded at a premium to the CNY for most of the period between 2011 to 2014, encouraging foreign counterparties to Chinese trades to hold renminbi offshore as an arbitrage opportunity (Gagnon and Troutman, 2014).

However, since 2015 – and especially since the August 2015 stock market correction in China – confidence in renminbi appreciation has faltered. Although the trend of appreciation is likely to resume in the long term, our interviewees expressed concern that in the medium term the change in currency outlook significantly complicates opportunities for arbitrage, and decreases the desirability of holding CNH for offshore firms.

[9] Because the nominal value of a payment in renminbi is the same whether it is paid in CNY or CNH, by paying in the weaker currency, foreign counterparties make the same nominal payment for a lesser cost in their native currency. Similarly, by receiving payments in the stronger currency, foreign counterparties can receive the same nominal amount of renminbi but can exchange it for a greater amount of their native currency.

Interest rates

Figure 6: China's offshore vs onshore one-year government bond yields, %



Source: Thomson Reuters Eikon.

A further factor affecting the outlook for the renminbi offshore market is the change in trajectory of bond yields. Before 2015, the yields on dim sum bonds were lower than those for renminbi bonds issued onshore (see Figure 6). However, since then, the situation has reversed. As a policy response to slowing economic growth, the Chinese authorities have embraced a more accommodative monetary policy. As a result, onshore interest rates are now below offshore rates. This has increased the attractiveness of issuing debt onshore at the very moment that it has also become logistically easier to do so.

Implications for offshore markets

The combined result of these three developments has been a decline in offshore bond issuance. Our interviews suggested that debt issuances in the offshore market, while often individually oversubscribed, are also becoming decreasingly common, beyond symbolic issuances. Issuers with access to both markets find issuing debt onshore more attractive. There is sufficient demand onshore at the existing yields, despite the fact that – all else being equal – the purchasers of such instruments would clearly prefer the higher yields available offshore.

This is a potentially pivotal moment for offshore renminbi trading. An investment environment in which it is relatively easy to access the onshore market poses a unique, possibly existential, threat to the prospects for a thriving offshore renminbi market. Indeed, in August 2016 the volume of panda bonds exceeded that of dim sum bonds for the first time (Chen, 2016a).

Several of our interviewees also noted that corporates operating in the offshore market face fundamental regulatory uncertainty, and that this presents a unique challenge. The Chinese government is committed to further reform and liberalization of the onshore market. Investors are also in favour of liberalization. This implies that reforms have a good chance of going ahead. If and when that happens, the relationship between the offshore and onshore markets will inevitably change.

The offshore market in its current form is less than seven years old, and has changed a great deal in this short time. Because of this degree of change and uncertainty in the market and in Chinese policy, more than two-thirds of our interviewees either believe that the Chinese government will allow the offshore market to be marginalized as the onshore market develops further, or at best are uncertain of the extent to which policy support for the offshore market will continue. A potential result, according to some interviewees, is that investors will demand an added risk premium for offshore renminbi issues, raising borrowing costs and further discouraging issuance in the offshore market.

> If China's onshore market eventually conforms more closely with international standards, the attractiveness of the offshore market to potential issuers will likely diminish further.

Until its onshore counterpart is more developed, the offshore market will continue to offer a number of advantages: these include greater access to expertise, more sophisticated financial products and enhanced convergence with international standards. In effect, issuers will have to weigh the lower costs and increased liquidity of a newly blossoming onshore renminbi market against the compliance with international standards and other benefits that the offshore market provides. However, if China's onshore market eventually conforms more closely with international standards, the attractiveness of the offshore market to potential issuers will likely diminish further.

In sum, the desirability of the *offshore* market in future could be negatively correlated, to an increasing degree, with the ability of the Chinese government to modernize the *onshore* market and harmonize the latter with international standards. If such efforts are successful, the offshore market could be left as a niche area, even if the two markets never fully converge.

Internationalization and the 'store of value' problem

For the renminbi to become an international currency, it is necessary for renminbi-denominated financial assets to be held globally by non-residents of China. There are two impediments to this occurring, however. The first is the aforementioned fact that higher interest rates and lower liquidity in the offshore market discourage issuance. The second is that the supply of real assets denominated in renminbi outside China is still so limited that there is little reason for investors to want to hold the currency as a reserve asset unless they have significant exposures to China.

For this second situation to change, more investors must hold renminbi, more governments must use the renminbi as a reserve asset, and more large corporates with renminbi-denominated balance sheets must operate outside China. Established reserve currencies such as the US dollar, the euro and the yen have long been used as units of account by the subsidiaries of international corporates operating outside their home markets (for example, the European division of a Japanese firm might maintain its balance sheet in yen). The volume of activity offshore in those currencies has been sufficiently great to create a self-reinforcing dynamic, in which increasingly sophisticated markets and instruments have developed to service these firms, which in turn makes operating offshore in those currencies progressively easier. The renminbi has not yet reached this stage, as Chinese corporates have only recently begun to operate abroad. When the IMF announced the inclusion of the renminbi in the basket of currencies that make up its Special Drawing Rights (SDRs) (see Box 1), the Chinese currency accounted for only 1 per cent of global reserves (Kindergan, 2015).

Box 1: The SDR basket and the renminbi as a reserve currency

In October 2016, the IMF added the renminbi to its basket of currencies that make up Special Drawing Rights (SDRs), a move widely understood as a show of confidence in the renminbi as an international currency. This may provide symbolic support for greater use of the renminbi, but its practical impact is likely to be small. The renminbi's addition to the SDR basket in 2016 means that many international institutions with balance sheets denominated in SDRs – including the IMF, the Bank for International Settlements (BIS), the Asian Development Bank (ADB), and other smaller development banks and funds – will need to diversify into renminbi-denominated assets. Countries with IMF loans denominated in SDRs, or other exposures to the IMF, will also have exposure to SDRs and consequently will need to hedge their renminbi positions.

Additionally, the change in the composition of the SDR basket could signal to some corporates and sovereigns that the renminbi is now sufficiently legitimate as an asset to be included in their reserves. There are some signs that international institutions are already promoting the use of the renminbi for this purpose. In July 2016, the World Bank issued a renminbi-denominated bond that will settle in renminbi.

However, the number of international organizations likely to be willing to issue or hold such instruments is limited, and would in any case account for a very small portion of the total market. The signalling power of renminbi diversification policies is therefore likely to be marginal for corporates and institutional investors driven by more straightforward profit considerations.

Indeed even now, while an increasing number of corporates may raise funds in renminbi, many then routinely convert the funds back into dollars, euros or sterling – as a result, the overall value of renminbi held abroad does not increase. Many of the largest dim sum bonds issued by non-Chinese corporates are actually 'synthetic' – that is, denominated in renminbi but settled in the issuer's local currency (Norton Rose Fulbright, 2012). While these activities facilitate the renminbi's use as a unit of account and medium of exchange, they do little to boost its use as a store of value globally. Until the renminbi becomes a desirable currency to hold as a store of value outside China, bonds issued in renminbi will likely continue to be quickly converted into traditional reserve currencies by international corporates. Moreover, if China continues to open its capital account, the incentive for non-Chinese corporates to hold renminbi offshore will further diminish because their business operations in China will increasingly be serviceable onshore, unless a substantial new incentive for holding renminbi offshore emerges. The 'Belt and Road' initiative – the subject of the next section – may provide just such an incentive.

4. 'Belt and Road': the Implications for Offshore Renminbi Markets

The Chinese government's 'Belt and Road' initiative – an ambitious programme to boost the country's trade links with Europe and the rest of Asia – could help to create a critical mass of firms using renminbi outside China. The government is encouraging Chinese firms to participate in Belt and Road projects. If they do, Chinese companies with renminbi-denominated balance sheets and operating in countries hosting Belt and Road infrastructure projects could increase the pool of renminbi liquidity in those countries. As many of the countries that are expected to host Belt and Road infrastructure projects lack liquidity in all currencies, using renminbi will not put firms at a competitive disadvantage – foreign corporates operating in these countries would also face the issue of limited liquidity if using dollars or euros.

Firms generating cashflows in renminbi outside China could find it attractive to issue debt in renminbi in order to reduce their currency risk. As Belt and Road investments increase and the number of Chinese corporates operating abroad rises, this in turn would make the renminbi more appealing as a store of value in project host countries.

Box 2: Overview of the 'Belt and Road' initiative

The 'Belt and Road' initiative – also widely known as 'One Belt, One Road' – was announced by President Xi Jinping in 2013. It will consist of infrastructure development projects in over 60 countries. These projects will be carried out within a framework designed around two larger initiatives: the 'Maritime Silk Road', a sea route from China to Europe through the Indian Ocean and Southeast Asia; and the 'Silk Road Economic Belt', a series of overland economic and logistics corridors through Eurasia that will notionally extend from western China to the Netherlands. The initiative is slated to include road, power, port, rail and other industrial projects.

The Chinese government's motivations in pursuing the Belt and Road initiative are diverse. They include easing industrial overcapacity, increasing the prestige and soft power of China in host countries, and – most relevant to this paper – creating viable pools of renminbi-denominated assets in countries outside China.

China has developed a variety of institutions to support infrastructure investment, and Belt and Road investment in particular. The main fundraising for the initiative is likely to be carried out by China Development Bank and the Export-Import Bank of China, which have been given government mandates to this end. Chinese commercial banks are also likely to be active in this space, especially Bank of China and the Industrial and Commercial Bank of China, as both already have substantial international footprints.

China has also established two international financial institutions that have a potentially significant role to play in the wider process of renminbi internationalization. One is the New Development Bank (NDB), commonly referred to as the 'BRICS Bank'. This multilateral development bank is sponsored by BRICS governments to support infrastructure and development projects in BRICS countries. The other is the Asian Infrastructure Investment Bank (AIIB), a multilateral development bank with 57 members and a mandate to promote infrastructure-led development in Asia. While these institutions have similar aims to the Belt and Road initiative, they will not be directly involved in its projects. The NDB is limited by its geographic mandate to the five BRICS countries (Brazil, Russia, India, China and South Africa), two of which are outside the Belt and Road area. Similarly, the AIIB has been designed by China to function as an international financial institution akin to the World Bank or ADB, rather than as a policy arm of the Chinese government *per se*.

As such, to build its international reputation, the AIIB is likely to be cautious about investing in projects sponsored by the Chinese government. While the NDB and the AIIB may provide peripheral support to Belt and Road projects that fall within their mandate, they are not expected to take the lead in financing the initiative.

Sources: China-Britain Business Council, 2015; Dollar, 2015.

The logic of using the Belt and Road programme as a catalyst for wider financial reform was explained succinctly in Renmin University of China's 2015 *Renminbi Internationalization Report*, which argues:

> Financial transactions help [renminbi internationalization] grow rapidly in a short period of time, but the growth is not continuous and has risks. In the long run, the internationalization of RMB relies on the continuous demand of the global market for the products "Made in China" and "Created in China". We should seize the opportunity of the "One Belt, One Road" initiative to raise the proportion of RMB in trade pricing and settlement and increase the use of RMB in FDI, trade financing (TF), and loan and bond issuance which are closely related to real economy. (International Monetary Institute, 2016)

Investment in infrastructure in developing countries will need to increase by about US$1 trillion per year between 2008 and 2020 levels of spending. Much of these needs will be in Belt and Road countries and funded under its auspices (Liu et al., 2017). China is unlikely to be able to finance this initiative on its own. In part this is due to the institutional investment landscape – while there exist notable Chinese institutional investors, it is unlikely that they will be able to meet all of the Belt and Road initiative's funding needs on their own.

For example, China has created several sovereign equity investment funds with mandates related to development in Belt and Road partner countries. The most prominent of these is the Silk Road Fund, which was created explicitly for the purpose of providing equity investment for Belt and Road projects. It was launched in December 2014 and is capitalized to the amount of US$40 billion – primarily with funding from SAFE, but also with capital from the China Investment Corporation, the Export-Import Bank of China and China Development Bank (Silk Road Fund, 2015).

China has also capitalized several smaller funds with mandates to promote industry and development in other regions of the world. According to our interviews, two of the most active in the Belt and Road area include the China Africa Development Fund, established in 2007, and the newly established China Middle East Investment Fund. However, these funds are small relative to the financing needs of the Belt and Road initiative, with capital of US$5 billion and US$10 billion respectively (Sovereign Wealth Fund Institute, 2016; Bouyamourn, 2015).

Nor are onshore Chinese institutional investors likely to fill the funding gap. The most prominent potential institutional investors in China, domestic pension funds, hold an estimated RMB 2 trillion (US$300 billion) in cash available for investment (Lee, 2016). However, these funds were allowed to invest in stocks, bond futures and infrastructure indexes only for the first time this year (Lee, 2016), having previously been restricted to deposit financing and investing in government bonds. Moreover, permission to diversify their investment portfolios was expressly predicated on their supporting the struggling Chinese stock markets. These factors limit the logistical and legal ability of pension funds to invest in more complex instruments. Additionally, only up to 30 per cent of the funds' investable assets – roughly RMB 600 billion (US$90 billion) – can be invested in new vehicles. That is equivalent to less than 10 per cent of the Belt and Road programme's annual infrastructure funding needs. In the long term, China will need to offer more investment products on its domestic market if it is to develop its onshore financial system. However, at the moment the government appears to believe that project finance instruments are too complex, and exposed to too much political risk, to make viable vehicles for domestic investment.

In this context, the Chinese government has indicated that it will pursue a mix of domestic and foreign financing for Belt and Road projects (Hornby, 2016). Yet if the government wants to use the Belt and Road initiative as a means to expand the international use of the renminbi in financial markets as well as in the real economy, it will need a vastly expanded dim sum bond market. As we discuss next, this presents an opportunity for London, which has many of the ingredients needed to become a successful centre for project financing in this area.

5. The Role of Market Infrastructure – What is Needed for London to Become a Renminbi Project Finance Centre?

Advantages of the London market

The changes in the offshore market identified in Part 3 are likely to affect each of the offshore centres differently, yet there are reasons to believe that London will be more resilient than Hong Kong to these changes – particularly in so far as they relate to Belt and Road financing. Over two-thirds of our interviewees believe that London's advantages as an offshore market – its large investor base, and its accounting and transparency standards – leave it well placed to take advantage of any new instruments and mechanisms developed with the Chinese authorities.

London has access to international firms and international financial institutions on a scale not shared by other offshore markets, including Hong Kong. As mentioned earlier, a diverse range of institutions in Europe, North America, the Middle East and Asia-Pacific have chosen London as the location for renminbi-denominated bond issuances, while issuers in Hong Kong have mainly consisted of Chinese entities. London's internationally prominent role in settlement and foreign exchange functions also increases its attractiveness to both issuers and investors, as does its history as a centre for international bond trading. Our interviewees have suggested that even after 'Brexit', London will remain a major centre for foreign currency business and a market in which institutional investors and multinational firms will be comfortable raising funds. Additionally, the possible Brexit-related loss of European 'passporting' rights – which allow financial institutions authorized in one European Economic Area (EEA) state to operate in the rest of the EEA without needing approval in each individual country – creates a new urgency for London to expand its role as an offshore hub in order to maximize these advantages, and so to offset any decline in European business.

London also offers several advantages in terms of market infrastructure. This is the key area in which, despite the structural shifts outlined earlier in this paper, the offshore market maintains a clear advantage over the onshore market. Our interviewees highlighted three particular areas in which London has an edge over both the onshore market and the Hong Kong offshore market: accounting standards, the quality of credit ratings and transparency. The majority of interviewees believe that these advantages are unlikely to be eroded in the foreseeable future.

Accounting and ratings standards, in particular, were cited by interviewees as reasons for preferring London. International businesses in London generally conform to the International Financial Reporting Standards (IFRS), whereas China's accounting principles are not always fully compatible with international standards. According to our interviewees, this is a particular problem for international organizations such as the EBRD and the World Bank institutions.

As for London's advantage over China in terms of ratings standards, our interviewees point to the lack of a rigorous system for rating the creditworthiness of most renminbi bonds (other than a small segment of bonds) issued onshore. Moreover, obtaining a separate rating onshore is costly and time-consuming. This limits the attractiveness of the Chinese onshore market for Western

corporates without both substantial business in China and the ability to research issuers in the country. Moreover, the dearth of reliable credit ratings in China means that the onshore market is more vulnerable to defaults. In the first five months of 2016, there were 10 defaults in the onshore renminbi bond market (Tu, 2016).

Transparency was less often cited by our interviewees, but is seen as especially important in areas such as 'green finance' (see Box 3), where there is a need for verifiable standards for the criteria under which a given investment can be classified as 'green'. These standards need to be consistent across jurisdictions to avoid costly duplication of verification and compliance costs. Many of the first attempts at establishing such universal verification programmes began in London, including the 'Green Investment Principles'. More recently, in January 2016, the City of London Corporation launched a 'Green Finance Initiative': a programme designed to boost coordination between entities working in the sector and, more broadly, to support London's bid to become the premier centre for this type of financing (City of London Corporation, 2016).

Box 3: The role of 'green finance' in the Belt and Road initiative

As the Belt and Road initiative develops, the role of 'green finance' will be crucial. Many of the infrastructure projects that have been proposed under the Belt and Road banner will have a lifetime of decades. Due to the strengthening of global standards on greenhouse gas emissions agreed in the COP21 Conference in Paris in late 2015, it is expected that infrastructure investment will have to meet strict environmental standards based on projections 30 years into the future. Investment in polluting infrastructure, such as coal power or oil pipelines, will become less attractive compared with infrastructure projects that emphasize sustainability.

The Belt and Road host countries do not generally have high transparency standards on these issues. Roughly two-thirds of the practitioners we interviewed agreed that the Chinese government considers 'green bonds' essential to the successful financing of its Belt and Road initiative. This is potentially to London's advantage. London has positioned itself as a centre for 'green bonds' – the London Stock Exchange has one of the most developed product offerings in this area, and the London-based Climate Bonds Initiative offered one of the first sets of standards for 'green bonds' in 2014 (Grene, 2015). The first RMB-denominated 'green bond' from an Asian institution was issued by the Agricultural Bank of China in 2015 in London (Agricultural Bank of China, 2015).

One concern our interviewees raised regarding 'green bonds' is that simply signalling a project is green will not on its own increase its desirability to investors, and may even add costs. If a project does not make financial sense, it will not be funded, whether or not it is designated as 'green'. Such bonds are also likely to be more expensive to issue, as issuers will have to provide independent verification of compliance with environmental standards – a difficult process in some Belt and Road host countries with low transparency. Our interviewees suggested that the desirability of 'green bonds' would therefore depend on the regulatory requirements and mandates governments put in place to encourage sustainable investment. The costs of issuing such bonds could be significantly reduced if standards were harmonized between the investor's home country, the market in which a bond was issued, and the country hosting the relevant project. To make 'green bonds' attractive, it would be desirable for the Chinese government to either secure assurances from host-country governments or insure against the political risk of host countries not honouring their climate obligations.

Despite the above-mentioned advantages, several pieces of market infrastructure remain to be developed if London is to secure and expand its role as an offshore renminbi market. In particular, it must develop a long-term yield curve for renminbi-denominated bonds, establish a deeper and more robust secondary market for them, and create a means of providing political risk insurance for countries partnering China on Belt and Road projects.

Developing the yield curve

While London's offshore market is growing, its small size is reflected in the lack of bonds with a maturity longer than five years. As of June 2016, only four renminbi-denominated bonds issued with a maturity of 10 years or greater had been issued in London. This poses a problem because infrastructure projects are long-term: they do not generate revenue immediately and usually require decades to recoup their financing costs. The lack of a market for bonds with maturities of even 10 years – let alone longer maturities – risks undermining attempts to raise Belt and Road financing outside China. Although the necessary market infrastructure has been created elsewhere in the past, doing so requires significant policy coordination.

In previous instances, multilateral development banks or other policy banks have led the way in establishing new markets for project finance. Generally, such organizations have several advantages when it comes to developing markets. First, they often have experience in solving the 'chicken and egg' problem of a non-existent bond market – which they typically overcome by issuing the first local-currency instruments in the country concerned; these bonds then serve as benchmarks for the wider market. Second, they are able to provide advisory services both to potential institutional investors such as pension funds and to public–private partnerships (World Bank, 2015). While the challenges of creating domestic and offshore bond markets differ – especially in terms of liquidity – roughly half of our interviewees suggested that the successful development of a market for renminbi bonds with maturities in excess of 10 years would likely involve an international financial institution such as the IFC taking the leading role.

Public organizations in China that our interviewees identified as potential candidates for such a role include the Ministry of Finance and policy banks. These institutions have already done something similar in the Hong Kong offshore market. In 2010, China Development Bank became the first organization to issue debt instruments dated longer than 10 years in the dim sum market, soon followed by the Ministry of Finance. Having a Chinese regulator take the lead in establishing markets in Belt and Road countries would also send a political signal to investors that China is committed to market development. However, even if the Chinese government committed to deeper development of the offshore market in London, doing so would be a long-term process. In Hong Kong, it took almost four years for the market to have sufficient benchmarks for a commercial bank – China Construction Bank – to issue its own longer-maturity bonds (see Table 2).

Table 2: RMB bonds issued in Hong Kong, 10-year maturities or longer

Issuer	No. of bonds	Date of first issue	Total amount issued (RMB billion)	Maturity
Chinese government (Ministry of Finance)	18	1 December 2010	16.2	10 years x 9 15 years x 4 20 years x 3 30 years x 2
China Development Bank	10	29 October 2010	7.1	10 years x 5 15 years x 4 20 years x 1
Export-Import Bank of China	2	18 June 2012	2.0	10 years x 1 15 years x 1
China Construction Bank	1	12 November 2014	2.0	10 years x 1

Source: Thomson Reuters Eikon.

The dearth of bonds dated longer than five years may reflect in part the uncertain future of the offshore market. Even if full liberalization of the onshore market is unlikely within the next 10 years, issuers of bonds with long time horizons must take developments that far into the future into account. It is therefore important for Beijing to provide clarity on how it sees the offshore market developing *vis*-à-*vis* the onshore market. Considering how much change has taken place in the CNH market's first five years of existence, it is plausible to expect that the offshore market will continue to experience significant transformation over the next 10 years.

The lack of a robust secondary market

For a robust offshore bond market to develop, it is also necessary that dim sum instruments can be traded on a secondary market. This is particularly important for bonds with long durations, as these are especially illiquid and thus represent a greater liquidity risk if investors cannot easily resell the bonds to improve their liquidity. This creates an additional 'chicken and egg' problem in developing the secondary market – a lack of liquidity, especially for longer-duration bonds, that limits the number of secondary-market trades and makes the few instruments available less attractive to purchasers. For the market to develop, there must simultaneously be an increase in the number of bonds issued and actively traded on the London market, and a liberalization of the rules around secondary-market trading. So far, the only significant policy to support any development of a secondary debt market was introduced in June 2015, when the PBoC allowed offshore renminbi clearing and settlement banks to access the onshore interbank market for short-term loans, but even this policy was quickly suspended in November of the same year, and would likely not have been able to expand to support the larger dim sum market.

Risk infrastructure needed for successful project financing

Debt financing for projects in Belt and Road countries will require more complex instruments than simple corporate bonds. These instruments will have to securitize and allocate project and country risk more effectively than 'plain vanilla' bonds. Traditional project finance instruments have been on the decline in Europe for several years, as domestic issuers retrenched during the financial crisis (Swiss Re, 2014). The volume of project finance worldwide peaked at US$247 billion in 2008, then declined to roughly US$200 billion in both 2012 and 2013, while UK project bond issuance peaked in 2006 (Della Croce and Gatti, 2014).

Roughly half of our interviewees highlighted the fact that the project finance market has grown smaller and more specialized, especially in London. They have also suggested that higher capital requirements since the financial crisis and the higher due diligence costs associated with investing in complex instruments of long duration have limited growth in project finance. The structural challenges in creating the necessary market infrastructure are significant.

In addition to their duration, project finance instruments differ from standard debt instruments in that the capital raised is for a specific project, rather than for the general treasury of the issuer. This structure allows multiple investors to take on different aspects of a project's risks. However, it also means that project finance instruments are complicated, requiring more detailed structuring and allocation of risk than is standard. Our interviews have indicated that, in Asia excluding China, the use of project finance bonds has been rare. The creation of an expanded project finance bond market would depend on Chinese policy banks taking a prominent role.

These banks already have a track record of issuing infrastructure bonds for domestic projects. However, the country risk for projects in China is well known and can be hedged. In contrast, a number of neighbouring Belt and Road countries – for example in Central Asia – have greater political risk that is more difficult to hedge. Our interviewees have suggested that these risks would not be manageable through simple market mechanisms, implying the need for more complex project financing arrangements. They highlighted 'completion risk' and 'cashflow risk' as the key likely risks attached to any project finance bond issued as part of the Belt and Road initiative.

In an infrastructure financing instrument, banks may allocate risks via their structuring of the bond. Our interviewees have suggested that without this sort of structuring, and political risk cover, most investors would be unwilling to finance projects with certain uninsured risks at any rate of return. International investors have very little experience in foreign direct investment (FDI) in many of the Belt and Road countries (see Table 3), which increases the political risk and uncertainty inherent in such projects.

Therefore, the development of a market for Belt and Road project bonds must fulfil three objectives in terms of mitigating the above risks. First, instruments need to be created that international investors are willing to buy in large amounts. Second, the market needs to provide local expertise to minimize completion risk. Third, project finance instruments need to provide cover for the risks that private investors are unwilling to assume.

Table 3: Inward FDI stock of Belt and Road recipient countries per capita (US$)

Singapore	166.79	Mongolia	5.71	Vietnam	1.00
Brunei	15.09	Oman	5.30	Cambodia	0.85
Bahrain	14.80	Lithuania	5.01	Iraq	0.68
Estonia	14.66	Turkmenistan	4.93	Kyrgyzstan	0.60
Qatar	13.87	Serbia	4.65	Philippines	0.57
Lebanon	12.60	Malaysia	4.37	Iran	0.55
UAE	12.42	Jordan	4.30	Laos	0.53
Israel	12.02	Kuwait	3.84	Sri Lanka	0.50
Czech Republic	11.56	Georgia	3.28	Myanmar	0.34
Hungary	9.96	Thailand	2.90	Uzbekistan	0.29
Slovakia	9.83	Russia	2.59	Tajikistan	0.23
Montenegro	8.01	Turkey	2.19	India	0.20
Kazakhstan	7.42	Azerbaijan	1.95	Pakistan	0.17
Maldives	7.28	Bosnia and Herzegovina	1.91	Armenia	0.15
Latvia	7.28	Belarus	1.87	Bhutan	0.15
Croatia	7.02	Albania	1.54	Bangladesh	0.06
Saudi Arabia	7.02	Ukraine	1.49	Afghanistan	0.05
Bulgaria	6.46	Moldova	1.02	Nepal	0.02
Poland	6.45	Egypt	1.01	Syria	N/A
Slovenia	6.18	Indonesia	1.00	Yemen	N/A

Source: UNCTAD.

Our interviews identified two policy mechanisms that might address these issues. The first is the development of co-partnerships. It is common in project finance to develop public–private partnerships allowing organizations with greater experience in project delivery to bear completion risks. This allows the implementing party to take on the project risks, while the investor can provide the capital at a reasonable interest rate. Western firms have had greater experience than Chinese firms in developing outward direct investment in high-risk countries, such as the ones in which Belt and Road projects will be concentrated, while Chinese or local firms can engage in project delivery. Western firms could also undertake M&A activities in Belt and Road host countries, in order to acquire firms that can provide the local expertise necessary for successful delivery of a given project. Many public–private partnerships take the form of equity partnerships; debt financing relationships are also possible. The exact merits of debt versus equity financing, both for successful delivery of the project and for the internationalization of the renminbi, will have to be determined on a case-by-case basis, but the subject is worthy of further investigation.

The second policy mechanism that might support development of renminbi-denominated offshore project finance would be the creation of an institution to backstop project risks. Private financiers investing in foreign countries are generally funded by export credit agencies (ECAs) in their home countries. China's ECA, the China Export & Credit Insurance Corporation, also known as Sinosure, provides insurance for country risk in Belt and Road projects. However, Sinosure requires that at least 60 per cent of any project capital raised goes to Chinese entities, and that at least 70 per cent of financing is provided by Chinese banks. This limits the ability of international investors to obtain political risk cover (Norton Rose Fulbright, 2016).

> For projects to go ahead, it may be necessary for China, or some other actor, to create or empower an ECA or MIGA-like entity that would be willing to insure Belt and Road financing for non-Chinese investors.

While other countries have ECAs, these agencies' mandates are not aligned with Belt and Road objectives, meaning that they are less likely to provide cover to private investors operating in recipient countries. The only truly international institution that operates in a similar fashion to an ECA is the World Bank's Multilateral Investment Guarantee Agency (MIGA), which limits itself to projects under the World Bank's umbrella. As mentioned, our interviewees suggested that if the political risk inherent in Belt and Road projects was not covered through some insuring entity, projects would not be financeable at any yield. For projects to go ahead, it may be necessary for China, or some other actor, to create or empower an ECA or MIGA-like entity that would be willing to insure Belt and Road financing for non-Chinese investors. The creation of this vehicle could provide sufficient incentive for investors to finance renminbi projects that would not otherwise be considered 'bankable'.

6. Conclusions and Recommendations

The Belt and Road initiative offers the chance to develop and expand the international use of the renminbi, but this will require active support from Chinese policymakers. Such a development could also, if managed properly, provide a substantial boost to offshore renminbi markets – especially London's.

However, it remains unclear whether bond issuance for Belt and Road projects can create sufficient momentum for the offshore renminbi ecosystem to become self-sustaining. Increased issuance of renminbi-denominated offshore debt, financed by international investors, may encourage Chinese firms to operate abroad, and international corporates to hold renminbi-denominated assets. This in turn may create a sufficiently large and liquid pool of attractive assets to make the internationalization process self-sustaining.

For this to work, both the Chinese and British governments must establish a robust policy and regulatory framework. In particular, the Chinese government must provide greater guidance on how it plans to develop the Belt and Road initiative and offshore market in future. If China does wish to develop the offshore market, it must provide mechanisms to further increase liquidity and encourage the development of a secondary offshore bond market. To facilitate effective bond financing of infrastructure, the Chinese government and policy banks need to take the lead in developing yield curves for longer-dated bonds in offshore markets, and in developing a mechanism for political risk cover around Belt and Road investments.

The British government and City of London are uniquely placed to take advantage of these opportunities. However, they must develop the necessary new market infrastructure: by establishing incentives for the issue of project finance bonds; by encouraging international co-financing and partnership arrangements with Chinese firms operating in 'Belt and Road' countries; and by developing uniform, internationally accepted 'green finance' principles.

These recommendations, if followed, will allow China to promote internationalization of the renminbi in financial markets and London to act as a key facilitator in this process.

References

Agricultural Bank of China (2015), 'ABC Issues the First Green Bond of Chinese Financial Institutions in London', press release, 20 November 2015, http://www.abchina.com/en/about-us/news/201511/t20151120_791054.htm.

Bank for International Settlements (2008), *China: the evolution of foreign exchange controls and the consequences of capital flows*, Basel: Bank for International Settlements, http://www.bis.org/publ/bppdf/bispap44h.pdf (accessed 30 Sep. 2016).

Bourse Consult (2015), *London RMB business volumes 2014,* City of London Corporation Report, https://www.cityoflondon.gov.uk/business/economic-research-and-information/research-publications/Pages/London-RMB-business-volumes-2014.aspx (accessed 1 Aug. 2016).

Bouyamourn, A. (2015), 'UAE, China to set up $10bn joint strategic investment fund', *The National,* 14 December 2015, http://www.thenational.ae/business/economy/uae-china-to-set-up-10bn-joint-strategic-investment-fund (accessed 25 Aug. 2015).

Chen, M. (2016a), 'China's panda bond issuance seen exceeding dim sum for first time', Reuters, 5 August 2016, http://www.reuters.com/article/china-bonds-pandas-idUSL4N1AF1P9 (accessed 24 Oct. 2016).

Chen, M. (2016b), 'Foreign issuers keep clear of panda bond market despite lower costs', Reuters, 17 March 2016, http://www.reuters.com/article/china-bonds-offshore-idUSL3N16N1CP (accessed 19 Aug. 2016).

China-Britain Business Council (2015), 'One Belt One Road, A role for UK companies in developing China's new initiative', China Britain Business Council factsheet, http://www.cbbc.org/sectors/one-belt,-one-road/ (accessed 21 Aug. 2016).

City of London Corporation (2013), 'FAQs: City of London Renminbi Series', City of London Corporation website, https://www.cityoflondon.gov.uk/business/support-promotion-and-advice/promoting-the-city-internationally/china/Documents/renminbi_faqs.pdf (accessed 30 Aug. 2016).

City of London Corporation (2016), 'Globalising Green Finance: The UK as an International Hub', City of London Corporation Research Report, http://greenfinanceinitiative.org/wp-content/uploads/2016/11/Globalising-green-finance_AA3.pdf (accessed 29 Nov. 2016).

Clover, C. (2015), 'Trade propels renminbi on route to global reserve currency', *Financial Times*, 29 July 2015, https://www.ft.com/content/29ee3136-1ffc-11e5-ab0f-6bb9974f25d0.

Della Croce, R. and Gatti, S. (2014), 'Financing infrastructure – International trends', *OECD Journal: Financial Market Trends*, Volume 2014, Issue 1, http://www.oecd-ilibrary.org/finance-and-investment/financing-infrastructure-international-trends_fmt-2014-5jxvpb4jfrf1.

Deutsche Bank (2016), 'Deutsche Bank survey reveals fixed income investors poised to significantly increase allocations to China's domestic bond market', Deustche Bank press release, 30 September 2016, https://www.db.com/newsroom_news/2016/medien/deutsche-bank-survey-reveals-fixed-income-investors-poised-to-significantly-increase-allocations-en-11704.htm (accessed 7 Oct. 2016).

Dollar, D. (2015), *China's Rise as a Regional and Global Power: The AIIB and One Belt One Road,* Brookings Institution, 25 July 2015, https://www.brookings.edu/wp-content/uploads/2016/06/China-rise-as-regional-and-global-power.pdf (retrieved 21 Aug. 2016).

Fox, H. and Lui, P. (2010), 'HKMA Taps Yuan Swap Agreement After Demand Quickens', Bloomberg, 29 October 2010, http://www.bloomberg.com/news/articles/2010-10-28/hong-kong-s-annual-yuan-quota-for-trade-settlement-is-depleted-hkma-says.

FTSE Russell (2016), *FTSE BOCHK Offshore RMB Bond Quarterly Research Report: An Examination of the Offshore RMB Bond Market,* FTSE Russell Report.

Gagnon, J. and Troutman, K. (2014), *Internationalization of the Renminbi: The Role of Trade Settlement,* Washington, DC: Peterson Institute for International Economics.

Grene, S. (2015), 'The Dark Side of Green Bonds', *Financial Times,* 14 June 2015, https://www.ft.com/content/16bd9a48-0f76-11e5-b968-00144feabdc0.

Herrero, A. G., Pang, I. and Slu, P. (2016), 'Introduction of reserves requirement on offshore RMB: Financial Stability: 1, RMB internationalisation and Hong Kong: 0', *China Hot Topics Economic Research*, Natixis, 18 January 2016.

Hong Kong Exchanges and Clearing (2016), 'Shanghai-Hong Kong Stock Connect: For investing in SSE securities', Hong Kong Stock Exchange factsheet, http://www.hkex.com.hk/eng/market/sec_tradinfra/chinaconnect/Documents/Northbound_Flyer_e.PDF (accessed 30 Aug. 2016).

Hong Kong Monetary Authority (HKMA) (2012), 'Renminbi Liquidity Facility to Renminbi Business Participating Authorized Institutions', HKMA press release, 29 June 2012, http://www.hkma.gov.hk/eng/key-information/press-releases/2012/20120614-4.shtml (accessed 12 Sep. 2016).

Hong Kong Trade Development Council (HKTDC) (2016), 'SAFE Relaxes QFII Investment Quota to Stem Capital Outflows', HKTDC press release, 15 February 2016, http://hkmb.hktdc.com/en/1X0A57OR/hktdc-research/SAFE-Relaxes-QFII-Investment-Quota-to-Stem-Capital-Outflows (accessed 30 Aug. 2016).

Hornby, L. (2016), 'China seeks foreign investors for One Belt, One Road push', *Financial Times,* 25 May 2016, https://www.ft.com/content/b04c0800-2246-11e6-aa98-db1e01fabc0c.

Huang, H. (2015), 'The Development of the RMB Offshore Market and the Liberalization of China's Capital Account', Project Summary, https://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20150119RMBChinaLiberalizationProjectSummary.pdf.

Huntsman, J. (2015), 'Renminbi Ascending: How China's Currency Impacts Global Markets, Foreign Policy and Transatlantic Financial Regulation', Atlantic Council Report, http://financial.thomsonreuters.com/content/dam/openweb/documents/pdf/financial/renminbi-ascending-report.pdf (accessed 30 Nov. 2016).

International Monetary Institute (2016), 'RMB Internationalization Report 2015 Monetary Strategy in "One Belt, One Road" Initiative', *Journal of Chinese Economics,* 2016 Vol. 4. No. 1, pp. 99–133 (online version) http://journals.sfu.ca/nwchp/index.php/journal.

Kindergan, A. (2015), 'Reserved: What's next for the RMB?', The Financialist blog by Credit Suisse, 3 December 2015, https://www.thefinancialist.com/reserved-what-next-for-the-renminbi/ (accessed 12 Sep. 2016).

Kynge, J. (2015), 'Pivotal moment for the renminbi and China', *Financial Times,* 30 November 2015, https://www.ft.com/content/12abb02e-7f02-11e5-98fb-5a6d4728f74e.

Lee, J. (2016), 'China Pension Readies $300 Billion Warchest for Market Foray', Bloomberg, 10 July 2016, http://www.bloomberg.com/news/articles/2016-07-10/china-pension-readies-300-billion-warchest-for-markets-foray.

Li, C. (2015), 'Banking on China through Currency Swap Agreements,' Pacific Exchange Blog, Federal Reserve Bank of San Francisco, 25 October 2015, http://www.frbsf.org/banking/asia-program/pacific-exchange-blog/banking-on-china-renminbi-currency-swap-agreements/ (accessed 1 Aug. 2016).

Linklaters (2016a), 'China opens up interbank bond market to foreign institutional investors', press release, 1 June 2016, www.linklaters.com/pdfs/mkt/hongkong/Bulletin_June%202016.pdf (accessed 26 Oct. 2016).

Linklaters (2016b), 'China's SAFE relaxes QFII quota and funds flow restrictions', China Update, http://www.linklaters.com/Insights/AsiaNews/LinkstoChina/Pages/Chinas-SAFE-relaxes-QFII-quota-funds-flow-restrictions.aspx (accessed 10 Aug. 2016).

Liu, D., Gao, H., Xu, Q., Li, Y. and Shuang, S. (2017), *The 'Belt and Road' Initiative and the London Market – the Next Steps in Renminbi Internationalization. Part 1: The View from Beijing,*Research Paper, London: Royal Institute of International Affairs.

Mizuho (2016), 'Cross-border RMB Settlements', http://www.mizuhobank.com/service/global/cndb/rmb/pdf/cross_border.pdf (accessed 30 Jun. 2016).

Norton Rose Fulbright (2012), 'The Market for Dim Sum Bonds. February 2012', Norton Rose Fulbright web page, February 2012, http://www.nortonrosefulbright.com/knowledge/publications/61977/the-market-for-dim-sum-bonds (accessed 30 Sep. 2016).

Norton Rose Fulbright (2016), '"The Belt & Road Initiative" – A modern day silk road', Norton Rose Fulbright web page, May 2016, http://www.nortonrosefulbright.com/knowledge/publications/139223/the-belt-road-initiative-a-modern-day-silk-road (accessed 23 Aug. 2016).

People's Bank of China (PBoC) (2016), 'PBOC and other central banks or monetary authorities bilateral currency swap list (as of June 2016)', http://www.pbc.gov.cn/huobizhengceersi/214481/214511/214541/index.html (accessed 26 Oct. 2016).

Prasad, E. (2016), *China's Efforts to Expand the International Use of the Renminbi*, Washington, DC: Brookings Institution, https://www.brookings.edu/wp-content/uploads/2016/07/RMBReportFinal.pdf.

Shao, X. (2015), 'China, UK enlarge, extend bilateral currency swap deal', Reuters, 21 October 2015, http://uk.reuters.com/article/uk-china-britain-renminbi-idUKKCN0SF0Q920151021 (accessed 31 Aug. 2016).

Silk Road Fund (2015), 'About Us: Overview', http://www.silkroadfund.com.cn/enweb/23775/23767/index.html (accessed 30 Aug. 2016).

Sovereign Wealth Fund Institute (2016), 'China-Africa Development Fund', http://www.swfinstitute.org/swfs/china-africa-development-fund/ (accessed 30 Aug. 2016).

Subacchi, P. (2010), *'One Currency, Two Systems': China's RMB Strategy,* Briefing Paper, London: Royal Institute of International Affairs, https://www.chathamhouse.org/publications/papers/view/109498 (accessed 1 Sep. 2016).

Subacchi, P. and Huang, H. (2012), *The Connecting Dots of China's Renminbi Strategy: London and Hong Kong,* Briefing Paper, London: Royal Institute of International Affairs, https://www.chathamhouse.org/publications/papers/view/185765 (accessed 1 Aug. 2016).

Subacchi, P. and Huang, H. (2013), *Taipei in the Renminbi Offshore Market: Another Piece in the Jigsaw,* Briefing Paper, London: Royal Institute of International Affairs, https://www.chathamhouse.org/publications/papers/view/192599 (accessed 1 Aug. 2016).

Subacchi, P. (2017), *The People's Money: How China is Building a Global Currency,* New York: Columbia University Press.

SWIFT (2016), 'UK jumps ahead of Singapore as the second largest offshore RMB clearing centre', press release, https://www.swift.com/file/25776/download?token=OoHlkSSb (accessed 30 Jun. 2016).

Swiss Re (2014), *Infrastructure Investing. It Matters,* Swiss Re Report, 25 February 2014, http://www.swissre.com/library/archive/246315951.html.

Taplin, N. (2016), 'China c.bank working on Shanghai-London stock connect – Securities Times', Reuters, 14 September 2016, http://uk.reuters.com/article/china-stocks-london-idUKL3N1BQ0BW (accessed 29 Nov. 2016).

Tu, L. (2016), 'Goldman Sees 0.2% China Bond Default Rate as Zombies Kept Alive', Bloomberg, 27 May 2016, http://www.bloomberg.com/news/articles/2016-05-27/goldman-sees-0-2-china-bond-default-rate-as-zombies-kept-alive.

Wells, P. and Weinland, D. (2016), 'Muted debut for Shenzhen-Hong Kong Stock Connect', *Financial Times*, 5 December 2016, https://www.ft.com/content/5da7bb36-bacf-11e6-8b45-b8b81dd5d080 (accessed 20 Dec. 2016).

World Bank (2015), 'Colombia Deep Dive: Building Local Currency Bond Markets to Finance Infrastructure', World Bank online resource, 22 September 2015, http://www.worldbank.org/en/results/2015/09/22/colombia-deep-dive-building-local-currency-bond-markets-to-finance-infrastructure (accessed 18 Aug. 2016).

Zhou, X. (2015), 'IMFC Statement by Zhou Xiaochan, Governor, People's Bank of China, International Monetary Fund', 18 April 2015, https://www.imf.org/External/spring/2015/imfc/statement/eng/chn.pdf (accessed 30 Aug. 2016).

Zhou, X. (2009), 'Reform the international monetary system', Bank for International Settlements review, 23 May 2016, http://www.bis.org/review/r090402c.pdf (accessed 29 Nov. 2016).

About the Authors

Paola Subacchi is director of the International Economics Department at Chatham House. She is an expert on the functioning and governance of the international financial and monetary systems, and advises governments, international organizations, non-profits and corporations.

She is the author of several books, reports and articles, a media commentator with the BBC, CCTV, Project Syndicate and the *Financial Times*, and the writer of regular columns for *Foreign Policy* and *Huffington Post Italy*. Her forthcoming book, *The People's Money: How China is Building a Global Currency*, will be published by Columbia University Press.

Paola is also a visiting professor at the University of Bologna, a non-executive director of the FTSE-listed company Scottish Mortgage Investment Trust Plc, a governor of St Marylebone School in London and an advisory member of Wilton Park.

An Italian national, she studied at Università Bocconi in Milan and at the University of Oxford.

Matthew Oxenford has been a research associate at Chatham House since 2015. Prior to joining Chatham House, he worked as an assistant manager at Deloitte LLP, advising on structural reform of the banking sector and implementation of new macroprudential regulations stemming from the 2008–09 financial crisis. He has also served in several political and public-sector positions in Washington, DC.

Matthew holds a master's degree in public administration from the London School of Economics and Political Science, and a bachelor's degree in economics and public policy studies from the University of Chicago.

Acknowledgments

This paper has been produced with support from the FCO China prosperity fund for the purposes of promoting research on how to improve and support international engagement between China and the UK on trade and investment issues.

We would like to thank the anonymous interviewees whose contributions were so invaluable for providing the insights that we developed in this paper. We would also like to thank David Lubin, Jinny Yan and Alan Wheatley for providing commentary on an earlier draft of this paper, Dominic Williams for providing invaluable research assistance, Michele Bazzano and Sarah Okoye for assisting in the production of this manuscript, and Jake Statham and the publications team at Chatham House for editing this paper and preparing it for publication.

Independent thinking since 1920

Chatham House, the Royal Institute of International Affairs, is a world-leading source of independent analysis, informed debate and influential ideas on how to build a prosperous and secure world for all.

Chatham House is an independent body that promotes the rigorous study of international questions and does not express opinions of its own. The opinions expressed in this publication are the responsibility of the author(s).

ISBN 978 1 78413 186 9

The Royal Institute of International Affairs
Chatham House
10 St James's Square, London SW1Y 4LE
T +44 (0)20 7957 5700 F +44 (0)20 7957 5710
contact@chathamhouse.org www.chathamhouse.org

Charity Registration Number: 208223