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Yuan internationalisation. A measured pace strategy

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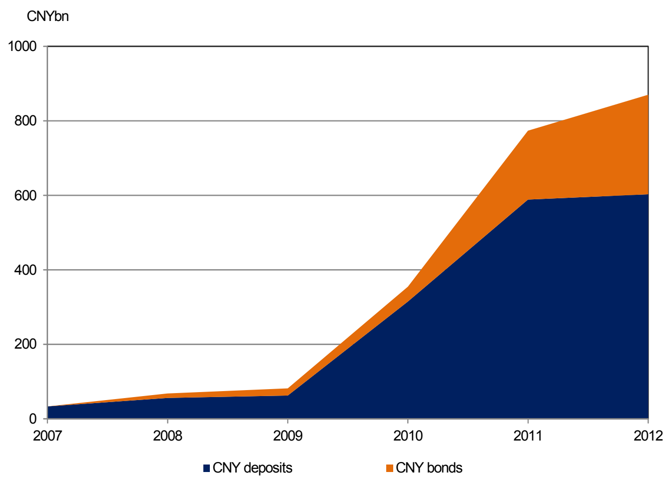
- The internationalisation of the yuan refers to the process by which both residents and non-residents can use the yuan outside of mainland China for trade and financial purposes. For residents' to acquire yuan-denominated securities outside of China, greater investment opportunities inside mainland China are needed. This in turn means (i) opening up China's capital account, which is still closed for the most part, and (ii) developing domestic capital markets, which still lack liquidity and depth.
- The gradual liberalization of interest rates and residents' opportunities to obtain higher returns on their savings should mitigate the risk of net capital outflows incurred by opening up the capital account. The development of China's capital markets should change business finance by offering alternatives to bank loans. Furthermore, the capital account should be opened up when the exchange rate is close to its equilibrium level. It should also be backed up by more foreign exchange flexibility in order to mitigate the risk of destabilising effects on the exchange rate.
- The process of yuan internationalisation meets both trade and strategic objectives. It should reduce exchange-rate risk for Chinese companies and should thus contribute to the growth of China's trade, particularly towards other emerging economies. The yuan is the only currency of the top six global economies that is not yet a reserve currency, which-adds to the process an important political stake. However, there is still uncertainty about the scope and pace of yuan internationalisation. The Chinese government has been silent about its plans, saying little about the extent of capital account liberalization and exchange rate flexibility at the end of the process.
- Internationalisation of the yuan carries a number of risks. Loosening capital controls could lead to more short-term volatility of exchange rates, and even interest rates. None of the economic players is really prepared to cope with such volatility today. Given the risks and the lessons learned from previous crises, the government is likely to move cautiously so as to acclimatise economic players gradually to the greater opportunities and greater risks created by freer capital flows.

Volume of offshore yuan (Hong Kong)



Source: CEIC Data Company Ltd (CEIC).

MINISTÈRE DE L'ÉCONOMIE ET DES FINANCES
MINISTÈRE DU COMMERCE EXTÉRIEUR

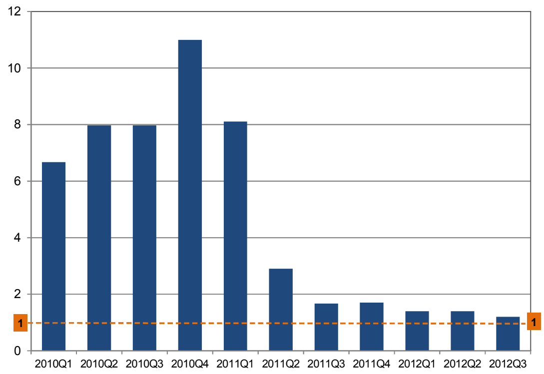
1. At this point, holdings of yuan outside of mainland China are limited

Internationalisation of the yuan refers to the process by which the yuan (CNY)[1] is used by both residents and non-residents outside of mainland China. International currency status would mean that the yuan could be used to settle trade and financial transactions with China or even between third countries, more central banks could hold reserves of yuan and the yuan would be included in the IMF's SDR basket. Internationalisation of the yuan started with the creation of an offshore (freely convertible) yuan market in Hong Kong in 2010. After an initial phase of strong growth, yuan holdings in Hong Kong went from CNY 90bn in mid-2010 to more than CNY 600bn at the end of 2011. These holdings remained flat or even declined slightly in 2012, before starting to grow again at the beginning of 2013 to stand at CNY 700bn at the end of May. In addition to quantitative changes, the maturing offshore market has led to a proliferation of yuan denominated financing and investment products, to more liquid and deeper underlying markets and more efficient pricing.

Up until now, the volume of offshore yuan (denoted CNH) has grown mainly as a result of trade transactions. The Chinese government launched a pilot programme in 2009 that allowed certain Chinese companies to invoice their exports in yuan and allowed all companies to settle their imports in yuan. The Chinese government stimulated the use of offshore yuan as a trade-settlement currency by extending, in March 2012, the programme to all companies holding an import-export licence. Consequently, the share of Chinese foreign trade invoiced in yuan grew from 2.5% in 2010 to 9% in 2011, then to 11% in 2012, when it stood at CNY 2,940bn (approximately $470bn). This is still much smaller than the ratios in the United States, the euro area or Japan[2]. **Because most of the transactions invoiced in yuan are Chinese imports, the programme has led to a net outflow of yuan from China.** Non-resident companies have held on to their offshore yuan because of limited opportunities for reinvesting it in the onshore market and strong expectations of yuan appreciation.

The second source of offshore yuan consists of financial transactions made through Bank of China - Hong Kong (BOCHK). It is the only clearing bank for the Hong Kong offshore yuan market. Since 2003, BOCHK has been exchanging yuan for foreign currencies held by Hong Kong banks[3]. Companies can exchange their yuan holdings with no limits, unlike retail customers, whose exchange transactions are subject to a daily limit of CNY 20,000. Nevertheless, the People's Bank of China (PBC) has imposed a quarterly cap of CNY 8bn on total transfers by BOCHK.

Chart 1: China's import/export ratio labeled in CNY



Source: People's Bank of China (PBC).

The swap agreements signed by the PBC should also provide yuan liquidity outside of mainland China. So far, the PBC has signed swap agreements with 24 foreign central banks, worth a total of CNY 2,588bn, including an agreement with the Bank of England and a very recent agreement with the European Central Bank. There is no swap agreement yet with the Fed. Under these agreements, a certain volume of yuan can be exchanged for other currencies at a rate previously agreed. However, these agreements have not yet been used, except in the case of Hong Kong and Korea. Consequently, their function seems primarily political or limited to creating potential sources of liquidity that can be called upon in a crisis. On the other hand, trade could be greatly facilitated by direct trading of yuan against partners' currencies (without passing through the dollar). China has already signed a series of specific agreements to allow direct yuan trading with the Japanese yen, the Russian rouble, the Australian dollar and the British sterling.

Finally, yuan internationalisation is still limited at this point, because the closed capital account is a barrier to transfers between the offshore and the domestic market. According to the Hong Kong Monetary Authority (HKMA), the total amount of yuan circulating outside of mainland China in May 2013 was approximately CNY 1,200bn. The vast majority (CNY 800bn) was in Hong Kong. Several savings products have been developed in order to make the offshore yuan more attractive. These include corporate yuan-denominated bonds, sovereign and sovereign-backed entities ("dim sum bonds") and certificates of deposit issued by banks. The value of these two categories of financial assets in May 2013 stood at CNY 260bn and CNY 130bn respectively, with Chinese banks issuing 4% of the total, the Chinese government issuing 15% and the foreign corporations and banks issuing the rest. Meanwhile, Chinese companies still have only limited access to these financing products.

(1) China's currency is also called renminbi (RMB).

(2) In the United States, 80-90% of trade is settled in dollars, 60% of trade in the euro area is settled in euros and 30% of Japan's trade is settled in yen.

(3) There are other clearing banks for the offshore market in Singapore, Taiwan and Macao, but the amounts handled are negligible compared to Hong Kong.

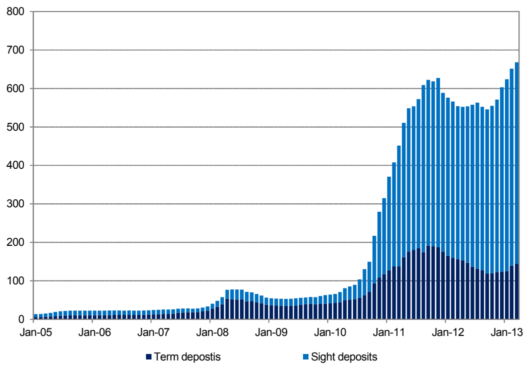
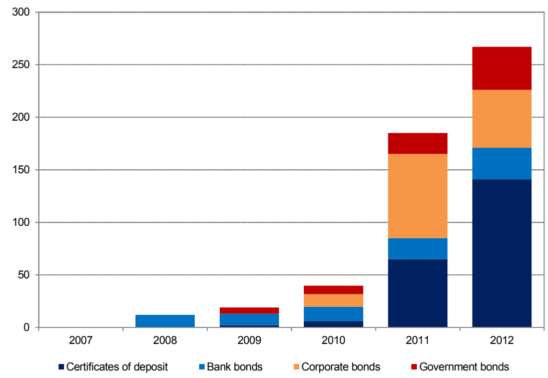


Chart 2: Yuan investment securities in Hong Kong



Source: CEIC, HKMA.

Box 1: **What is an international currency?**

An international currency is one that is held and used by both residents and non-residents outside of the monetary area where it is issued. An international currency must serve three functions: (i) unit of account, (ii) store of value and (iii) means of payment inside and outside of the monetary area where it is issued. More specifically, an international currency must be used for official purposes (for foreign exchange reserves, for intervention on foreign exchange markets, and as a peg for other currencies), as well as private purposes (trade invoicing, denomination of financial products, private-sector investment).

Several factors enhance the international status of a currency:

- the size of the issuing economy, its role in world trade and the size of its capital markets;
- the financial, economic and political stability of the monetary area where the currency is issued and the capacity of the monetary authority to achieve its price stability objectives;
- the liquidity and depth of capital markets, meaning that overall transaction volume is such that individual transactions have little impact on prices;
- convertibility for current account and financial account transactions, with a very open capital account.

Several comparisons have been made between the ongoing internationalisation of the yuan and internationalisation of other currencies in the twentieth century, such as the dollar, the yen and the Deutschemark. In all three cases, internationalisation of these currencies took place against a backdrop of a loss of confidence in the benchmark currency. Waning confidence in sterling during the First World War led to the rise of the dollar and a loss of confidence in the dollar in the nineteen-seventies and the nineteen-eighties led to the rise of the Deutschemark and the yen. These three currencies were issued by countries that ranked among the world's leading economic powers.

The internationalisation of the dollar seems to have happened relatively quickly: whereas the dollar was hardly in international use at all in 1914 one year after the Fed's creation, in 1917, the leading foreign central banks held dollar reserves and the dollar was increasingly used for international transactions. In 1924, the volume of international bonds denominated in dollars overtook that of international bonds denominated in sterling. In the case of the Deutschemark and the yen, the German and Japanese monetary authorities tried to slow the process down, fearing that their currencies would rise in value and undermine their countries' exports. These examples show that international demand for a currency may remain flat for a long time before some event triggers a rapid increase. The dollar hardly saw any use for international transactions before the First World War, even though the United States had become the world's leading industrial power by the end of the nineteenth century.

There are some similarities between the internationalisation of the yuan and the examples cited. The process is occurring in a time of slow economic growth for the main issuers of international currencies and strong growth of the money supply from the leading central banks, such as the Fed, the ECB and the Bank of Japan. Furthermore, the internationalisation process could be driven by international demand for the yuan, stimulated by a need to diversify portfolios. Finally, the outlook for China's growth, despite signs of a slowing trend, should continue to attract foreign investors.

Nonetheless, China's currency only meets some of the criteria set out above for becoming an international currency. China's 15% share of global GDP and its 10% share of international trade point to an international role for the yuan, and the PBC seems to be fairly effective in achieving its economic and financial stability targets. On the other hand, China's capital markets still lack liquidity and depth, and they have yet to offer consistent investment opportunities for yuan holders. In addition, the convertibility of the yuan is still limited, insofar as Chinese residents cannot purchase foreign currencies freely, and non-residents cannot obtain yuan completely freely.

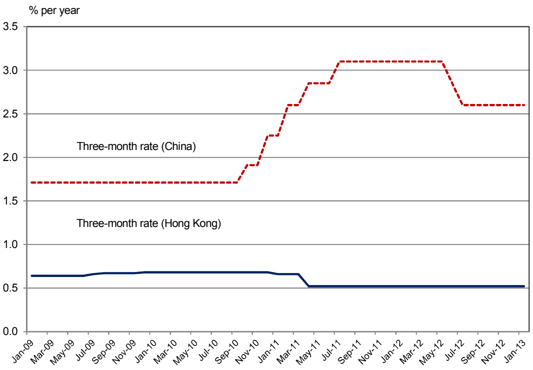
2. The differences between the offshore and onshore yuan parities stem from controls on China's capital account

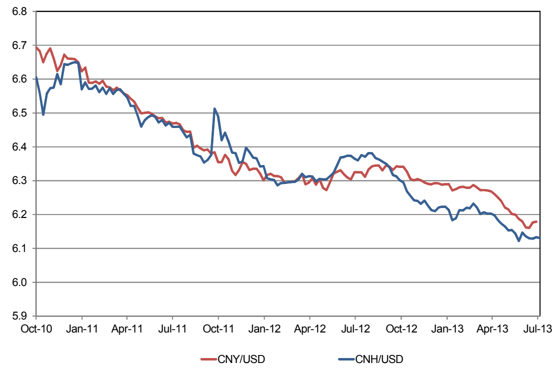
The persistence of capital controls explains the different dollar exchange rates of the onshore and the offshore yuan. The PBC administers the exchange rate of the onshore yuan, while the rate of the offshore yuan is set freely on the Hong Kong interbank market. Nevertheless, arbitrage possibilities and the limited supply of yuan lead to virtually the same parities between the two markets. Any differentials, seen particularly since September 2012, with the offshore yuan trading higher than the onshore yuan, stem from expectations of yuan appreciation. This spurs non-residents to acquire yuan and Chinese companies to invoice their imports through Hong Kong, where they get a better exchange rate than in China.

The demand for offshore yuan is strong, even though returns are still lower than in mainland China. The PBC-administered interest rates provided a poor annual return on capital of only 0.3% in real terms for deposits in 2012. Returns in 2010 and 2011 were even negative. Yet, yuan term deposits in Hong Kong offer even poorer returns, with a spread of 200 basis points compared to the onshore market, primarily because of the lack of opportunities for investing the yuan in financial instruments offering higher returns.

Meanwhile, Chinese banks took advantage of strong demand for yuan denominated assets from non-resident investors by issuing bonds on the Hong Kong market. The lower interest rates on the offshore market enabled Chinese banks to raise cheaper financing, partially circumventing the tighter monetary policy that the PBC imposed on the onshore market[4]. This explains the growth of the dim sum bond market since 2011. However, most Chinese companies are not able to issue dim sum bonds directly, so they use yuan-denominated letters of credit issued by Chinese banks as collateral for dollar loans in Hong Kong. These loans carry much lower interest rates than similar loans in mainland China. Another way of circumventing capital controls made a brief appearance in 2011, with the issuance of synthetic yuan bonds, which were denominated in US dollars or Hong Kong dollars, but pegged to the offshore yuan. This arrangement brought together investors' appetite for yuan assets and Chinese companies' financing requirements, while ensuring full compliance with the law banning Chinese companies from issuing dim sum bonds.

Chart 3: Onshore and offshore interest rates and exchange rates





Source: CEIC.

Box 2: **Differences between onshore and offshore yuan**

	Onshore yuan	Offshore yuan
Definition	The national currency of mainland China (also called CNY or RMB - renminbi)	The Chinese national currency outside of mainland China, which is also denoted CNH in Hong Kong.
Bank accounts	Chinese and foreign companies can open bank accounts denominated in yuan if they can prove that they have a legal entity in China. Foreign companies with no legal entities in China may open a special non-resident account.	Any company may open bank accounts denominated in yuan outside of mainland China, in Hong Kong or in other offshore financial centres. Companies are not required to have legal entities registered in China in order to open such accounts.
Trade settlement	Chinese and foreign companies with legal entities in China may use yuan to settle their trade transactions inside and outside China.	Companies that do not have legal entities in China may settle their transactions with China in yuan.
Exchange rate	The yuan in mainland China is pegged to a basket of currencies and its floating exchange rate is administered by the PBC to float within a trading band of +/–1%. Only residents have the right to exchange yuan for foreign currencies.	The offshore yuan trades at a freely floating exchange rate in Hong Kong. In practice, the offshore yuan exchange rate is fairly close to that of the onshore yuan. Anyone holding yuan in Hong Kong can exchange them freely against other currencies, however, individuals in Hong Kong are still subject to a daily cap of CNY 20,000.
Capital markets	Foreign investors are not usually allowed to invest in China, except for specific programmes subject to quotas and prior authorisation (Qualified Foreign Institutional Investors - QFII, etc.). Non-residents, other than international institutions, are not allowed to issue bonds in China, but they are allowed to take out bank loans denominated in yuan.	Chinese and foreign companies are allowed to raise funds by issuing yuan bonds in Hong Kong or other markets, such as Paris or Singapore. Chinese companies are also allowed to issue yuan-denominated shares on the Hong Kong stock market. So far, only one company has done so. However, SAFE and MOFCOM still need to approve any transfers of funds to China. Foreign companies are allowed to make direct investments in yuan in China and Chinese companies are allowed to make investments abroad in yuan. As a general rule, yuan transfers to China arising from bank loans in Hong Kong are not allowed, except for trade finance. Any foreign investor holding yuan can invest them in the Hong Kong bond and equities markets.

Source: PNC Financial Services Group, Inc.

(4) For example, Huaneng Power International issued dim sum bonds in Hong Kong in 2013. This issue had a value of CNY 1.5bn, maturing in 3 years and paying a coupon of 3.85%, compared to yields of 4.6% to 4.8% for similar issues in China.

3. Further progress on internationalisation of the yuan will involve futher capital account liberalization

Non-resident institutional investors will have an incentive to hold offshore yuan only if they have access to a significant pool of yuan denominated securities. This would require access to the Chinese domestic capital market, where the bulk of yuan-denominated securities are issued. This would also require further opening up China's capital account. Current account transactions and certain capital account transactions have already been liberalised, including inward direct investment. Other transactions, such as portfolio investment and outward direct investment, are still subject to quotas, while some capital account items are still completely closed. According to HSBC, 14 of the 40 items in the capital account are open, 22 are partially open and 4 are closed. The closed items in China's capital account concern institutional investors' activity on domestic financial markets, trust activities and investment funds, along with derivatives transactions.

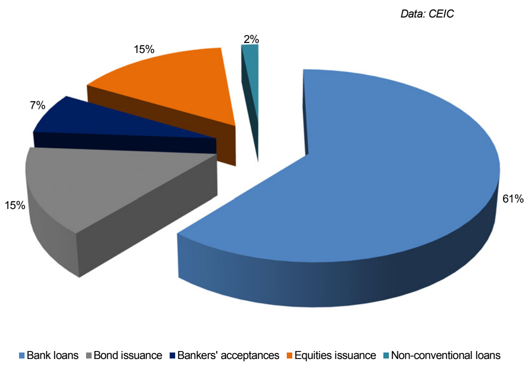
The Chinese government has phased in a number of measures regarding capital inflows that allow foreign investors to invest their yuan in mainland China. China liberalised inward foreign direct investment in dollars long ago, but such investments in yuan were banned until 2011. Consequently, 12% of inward foreign direct investment in China in 2012 was made in yuan. Portfolio investment has been opened up gradually, under programmes that set administrative quotas. The Qualified Foreign Institutional Investors (QFII) was the first programme, launched in 2002. It allowed foreign investors to invest dollars in the Shanghai and Shenzhen stock exchanges. Even though the initial quota of $30bn was raised to $80bn in April 2012, the foreign investors only still have access to 3.7% of China's market capitalisation. In January 2012, this programme was supplemented with the R-QFII (Renminbi-Qualified Foreign Institutional Investors) programme, which allows foreign investors to invest offshore yuan in onshore assets, up to a quota of CNY 20bn, which was increased to CNY 270bn[5] in November 2012.

The restrictions on yuan outflows are still tighter than restrictions on inflows. It has been possible to use yuan for China's outward direct investment since 2011. And yet, only 4% of such investment was denominated in yuan in 2012. With regard to portfolio investment, the Qualified Domestic Institutional Investors (QDII) programme launched in 2006 allows Chinese insurance companies to invest up to 15% of their assets in foreign assets. Originally, these investments were limited to Hong Kong equities and to the bond markets. Since 2012 they have been extended to 45 countries and a wider range of assets, such as real estate, fixed-income products and money-market products. Finally, a pilot programme was introduced in Shanghai in July 2012. The Qualified Domestic Limited Partner (QDLP) programme allows foreign investment funds to raise yuans from Chinese residents and invest them outside of China.

4. The development of domestic capital markets is a prerequisite for capital account liberalization

The development and liberalization of domestic capital markets seem to be absolute requirements for liberalising China's capital account. Without such development, opening up the capital account could lead to massive capital outflows seeking higher returns. Massive "financial repression" lies at the heart of the Chinese economy. Households' savings are channelled towards public-sector borrowers (primarily large corporations and local governments). The system, which is virtually completely State-owned, ensures comfortable profits for the banking system, while depriving households of higher returns on their savings. Domestic capital markets are still too shallow and illiquid to provide residents with credible investment alternatives compared to foreign markets. China's combined equities and bond markets account for only 17% of the total financing for the Chinese economy. Most of the financing (61%) still comes from the highly regulated banking sector.

Chart 4: Financing of the Chinese economy in 2012



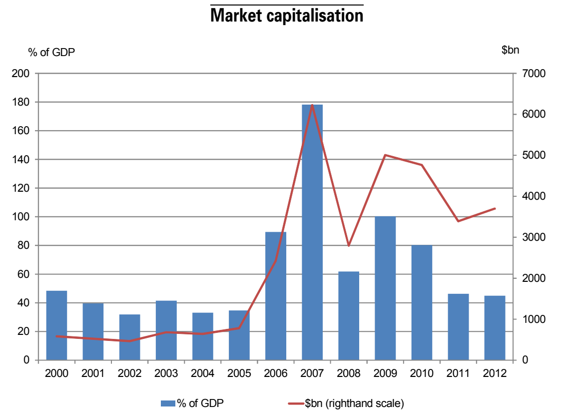
Source: HIS DataInsight.

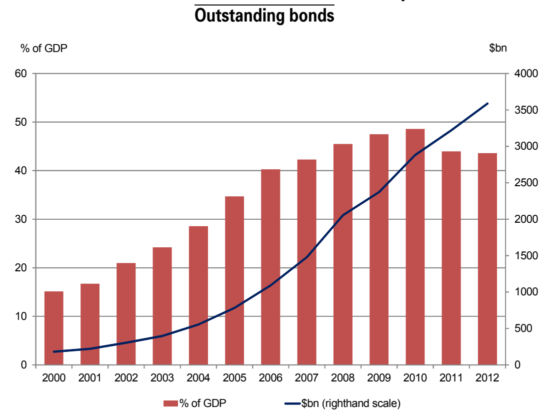
Despite recent growth, the Chinese bond market still lacks depth because of its fragmentation and heavy regulation. The market has two segments. There is the "interbank" market, where only banks are allowed to trade. This market, regulated by the PBC, accounts for 95% of the total Chinese bond market. The second market segment is the "open" bond market (Exchange Bond Market), which is not limited to banks only and is regulated by the Securities Regulatory Commission. The value of outstanding bonds increased steadily from $1,000bn in 2007 to $3,500bn in 2012, making it the fourth largest bond market in the world. This growth stems in part from infrastructure financing, through bond issuance of various local governments investment vehicles. Foreign investors' access to the bond market is limited under programmes such as (i) QFII in dollars and on the open market only, and (ii) RQFII, which provides access to the yuan "interbank" market for certain institutional investors only.

The Chinese equity market is still highly volatile and shows little potential for promoting internationalisation of the yuan. After blistering growth in 2006 and 2007, when China's market capitalisation soared from 48% of GDP to 178%, market capitalisation fell back to 45% of GDP in 2012 in the wake of the financial crisis. The pattern for total securities trading volume was similar, slipping from 223% of GDP in 2007 to only 71% in 2012. The liquidity of the equity market is also limited, with an annual turnover[6] of 1.64 in 2012. The volatility of the market and doubts about corporate governance indicate that the equity market can do little to promote internationalisation of the yuan. Furthermore, foreign investors accounted for only around 2% of investment in the Chinese stock market in 2012.

(5) British financial institutions obtained a supplementary dedicated quota of CNY 80bn under the Renminbi-Qualified Foreign Institutional Investors programme in October 2013.

Chart 5: Mainland China's bond and equities markets





Source: World Bank, DataInsight.

Gradual liberalization of China's financial sector suggets that market mechanisms play a larger role in determining interest rates. The PBC has permitted limited competition in the banking sector since July 2012 by giving banks more flexibility with regard to regulated interest rates. The leeway is greater for lending rates than for deposit rates: banks are allowed to pay deposit rates up to 10% higher than the regulated rate (up to 3.3% when the regulated rate is 3%). Meanwhile, the PBC eliminated the floor on lending rates in July 2013, which was previously at 30% below the regulated rate of 6%, making the former floor rate 4.2%. In practice, banks have yet to use this leeway to raise deposit rates[7].

Strengthening market infrastructure is a prerequisite for the development of capital markets. In 2009, a new stock market, ChiNext, was founded in Shenzhen, using Nasdaq as a model. The purpose was to facilitate financing for innovative companies, particularly small- and medium-sized enterprises. The new market featured a number of institutional innovations. In April 2012, the PBC announced that, in the next two years, a cross-border payment system for trade transactions would be set up (*China International Payment System* - CIPS), which could then compete with the current payment system controlled by Hong Kong. CIPS should thus handle direct exchanges of yuan for yen, roubles and Australian dollars.

5. Yuan internationalisation raises many major risks

5.1 There is uncertainty about the pace and scope of yuan internationalisation

The Chinese government set out its official strategy for capital account liberalization in the 12th Five-Year Plan (2011-2015). Further details were provided in a roadmap put forward by a working group of the PBC. If the 12th Five-Year Plan published at the end of 2011, does not provide any indication as to the timetable for the process of internationalisation, the Chinese government announced its goal of making Shanghai a global financial centre by 2020. On the other hand, a working group of the PBC published a more detailed roadmap in February 2012, which sets out a three stage process. In the short term (1-3 years), the objective will be to liberalise outward direct investment by Chinese companies. In the medium term (3-5 years), plans call for liberalising business loans and developing the offshore yuan market. In the longer term (5-10 years), the domestic capital market should grow more quickly, through greater capital inflows at first, and then through capital outflows. Liberalization of transactions should start for real estate assets and then continue for equities and bonds, with the phasing out of quotas. In conclusion, most of capital account liberalization should take place over the next 5 to 10 years, even though some transactions may not be liberalised for a long time.

There is a great deal of uncertainty about the degree of capital account openess desired by the government. The capital account needs to be opened up to some degree, so that foreign investors can buy enough onshore securities to invest their holdings of offshore yuan. However, the Chinese government will want to maintain control over certain capital account items. More specifically, it already selects foreign investment inflows in specific sectors[8] and announced that it would maintain controls on capital account items corresponding to highly speculative financial products. More precisely the government could exclude sectors considered strategic from the internationalisation process or maintain restrictive rules on dividend transfers and reinvested earnings.

Yuan internationalisation meets both trade and strategic objectives. First, yuan internationalisation should help reduce exchange rate risk for Chinese companies, against the backdrop of the gradual appreciation of the yuan since 2005. It should also reduce exchange rate risk for the Chinese government, which has built up vast foreign

(6) This is the ratio between annual trading volume and market capitalisation, indicating the average number of times a share is traded over one year.

(7) In January 2013, the Chinese government started an pilot programme to allow businesses located in the Qianhai Special Economic Zone to raise offshore yuan from banks located in Hong Kong. Interest rates and loan terms were determined on a case-by-case basis, with no reference to the onshore yuan rates set by the PBC.

(8) China already publishes a catalogue of sectors that the government considers to be strategic, where inward foreign direct investment is restricted or banned.

exchange assets, primarily in US dollars. Internationalisation should also cut transaction costs and boost China's trade, particularly with other emerging economies. The yuan should first emerge as one of Asia's regional currencies, due to China's share in regional trade. In the first decade of the new century, China became the leading trading partner for Japan, South Korea, Taiwan, Malaysia, Thailand and the Philippines, surpassing the United States. On the political front, yuan internationalisation reflects the Chinese government's strategy for challenging the supremacy of the dollar in world trade. The yuan is today the only currency of the top six global economies that is not yet a reserve currency, which gives to the process a significant political under-pinning.

5.2 The changes that yuan internationalisation will bring to foreign exchange rates are far from clear

Gradual liberalization of the capital account could lead to a significant increase in foreign exchange transactions. According to the IMF's 2013 Spillover Report published in July 2013, liberalization of China's capital account should lead to a sharp rise in both capital inflows and outflows. China's external net asset position could increase from 4% to 18% of GDP in the long term, since the IMF's scenario predicts stronger capital outflows compared to inflows (15-25% GDP compared to 2-10% GDP).

The internationalisation process could lead to asymetries between international supply and demand[9] for yuan, which will have an impact on the yuan exchange rate. Non-resident investors may adopt a wait-and-see attitude in the short term. Once the yuan has gained international status, demand could rise sharply as foreign investors are attracted by the growth prospects in China and the opportunity to diversify their portfolios. Medium- and long-term changes in yuan supply and demand could lend to exchange rate depreciation or appreciation, requiring major intervention to keep the exchange rate within the PBC's trading bands, unless further exchange rate flexibility. Such intervention would create a risk of massive swings in foreign exchange reserves and China's money supply.

The government could make exchange rates more flexible in order to limit fluctuations in China's foreign exchange reserves. The government indicated that it wishes to make the yuan exchange rate more flexible in 2014, but there is still uncertainty as to the desired degree of flexibility. In 2012, the trading band for the yuan around the daily parity set by the PBC was widened from +/−0.5% to +/−1%. Increased flexibility could take many forms: wider trading band, new fixing methodology for the central parity, transition to a system of occasional interventions to prevent excessive swings in exchange rates, etc. Nevertheless, if the capital account liberalization is not backed up by more flexible exchange rates, it will lead to a loss of independence of the monetary policy.

The government could smooth destabilising effects by waiting until the exchange rate reaches its equilibrium level before liberalising the capital account[10]. This is bound to limit swings in the short term, but it will not prevent future fluctuations. In the second quarter of 2013, the IMF estimated that the yuan was only moderately undervalued (between 5% and 10% for the real effective exchange rate), after a 21% appreciation against the dollar between 2005 and 2008. The rise of the yuan was paused by the 2008 financial crisis. Since September 2010, the yuan has resumed its appreciation and the government implemented measures to improve exchange rate flexibility by allowing it to post a further moderate nominal gain of 8% against the dollar between September 2010 and May 2013. In the long term, as the Chinese economy will rely more on domestic demand, the IMF predicts that the real effective exchange rate of the yuan will rise by another 10% up to 2018. **The Chinese government could also set up the encounter of international yuan supply and demand,** for example by organising currency exchange transactions at fixed intervals (fixings), rather than continuous trading[11]. This would facilitate large transactions (for long-term investors) by limiting the impact of individual transactions on the exchange rate, while enabling authorities to assess the strength of yuan supply and demand.

5.3 Internationalisation of the yuan creates a risk for Chinese exporters

The uncertainty surrounding the yuan exchange rate during the internationalisation process creates a risk for China's private sector. If the Chinese government increases the flexibility of the exchange rate, capital flows could lead to short-term and medium-term exchange rate volatility, creating risks exporters may have to hedge. Furthermore, when the yen and Deutschemark were internationalised, the Japanese and German central banks were concerned about exchange rate strengthening and took measures to restrict such appreciation. A rise in the yuan exchange rate could have major consequences for the Chinese economy, particularly in sectors facing strong price competition from developing Asian economies.

The Chinese government is likely to pursue a prudent and gradual approach. The first key objective of the government in the internationalisation process seems to be making the Chinese economy less dependent on an undervalued exchange rate and cheap credit. It thus prepares it for the transition to liberalised capital flows later on. Opening up the capital account will most certainly lead to higher onshore interest rates, in order to prevent Chinese residents from investing their capital abroad. This will require economic players to adapt to a market financing mechanism. The transition will hinder State-owned companies and local governments, which now enjoy artificially low interest rates. The transition will also reshape the structure of banks' profits.

The Chinese government is likely to maintain its prudent and gradual strategy for the internationalisation of its currency. So far, it has carried out gradual and simultaneous reforms by expanding the use of the yuan outside of mainland China, primarily for trade. This strategy allows a still limited liberalization of the capital account, giving economic players time to upgrade their performance and acquire new skills, such as hedging exchange rate risk and interest rate risk. The pace of the process should further depend on the speed of economic changes underlying the yuan internationalisation, so as to limit its potentially destabilising effects. The Chinese govern-

(9) This refers to the domestic supply of CNY to be used for acquiring foreign securities and the foreign demand for CNY to be used for purchasing onshore yuan securities.

(10) It could also maintain restrictions on capital inflows and/or outflows.

(11) Large-volume transactions may have an impact on prices and lead to short-term exchange rates volatility.

ment could communicate more details about its intentions in order to gain a clearer picture of the strength of international yuan demand. This process will be difficult to carry out, but it should make the Chinese economy less dependent on exports and more resilient to exchange rate fluctuations, by rebalancing its growth model towards domestic consumption.

Once it has been completed, the internationalisation of the yuan should promote a multipolar international monetary system and underpin the ongoing transformation of China's growth model. China's economic power should promote the emergence of the yuan as an Asian regional currency at first, and then as an international currency. However, yuan internationalisation is still a long-term process.

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