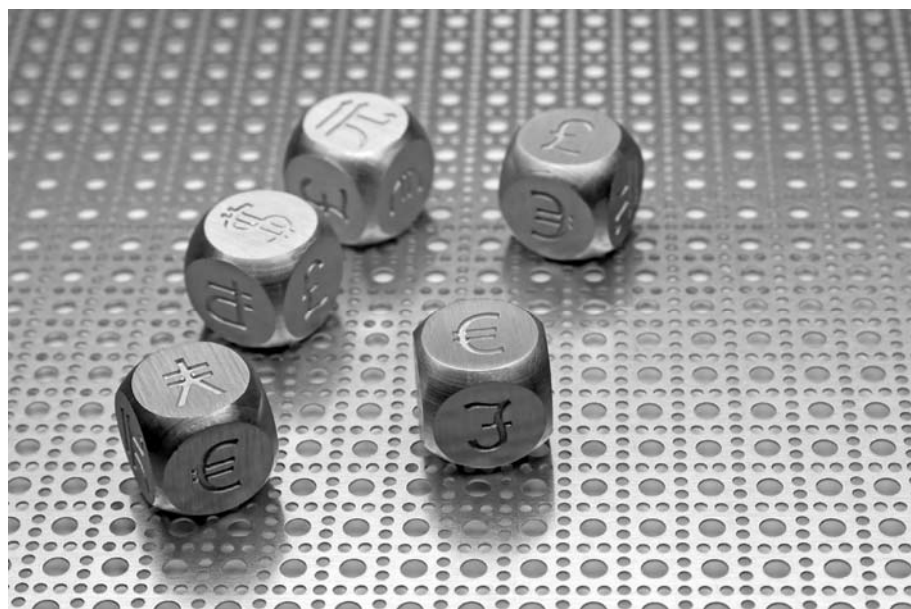


Special Report | 13:45 GMT 10 January 2011

CNH supports CNY reserve-ification



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Highlights

- China's economic importance should guarantee the Chinese yuan (CNY) a greater global role. The CNY will appreciate – but it has yet to prove its ability to hold its value over time. Capital-account and capital-market reforms are needed to cement the CNY's rise to reserve status. A multi-reserve currency world is the most likely scenario for 2010-30; the CNY will likely be the major new player.
- China's capital account liberalisation, currency internationalisation, and the development of an offshore CNY (CNH) market will develop alongside each other. This parallel approach means the CNH market is bound to suffer from growing pains from time to time. But scalability should not be mistaken for sustainability. Our 2015 projections reflect an upbeat outlook.
- The CNH market creates new opportunities for corporate hedging and cash management. Corporates should take opportunities to make trade-related transfers into the offshore CNY market (from onshore) and hedge in USD-CNH deliverable forwards. Investors should hold CNH-denominated assets given positive carry and prospective CNY appreciation versus the US dollar.
- Prospective exponential growth in CNY trade settlement will see new currencies traded directly versus the CNY (trade patterns suggest that the Korean won and Taiwan dollar could be next). CNY regionalisation will be an intermediate step toward full internationalisation.
- The CNH bond market is likely to grow exponentially, as evidenced by the pace of issuance in 2010, which doubled from 2009. Secondary-market liquidity also picked up in the final months of 2010. Growing bond issuance will in turn help to broaden the range of derivative products available.

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1. Reserve-ification: The CNY's journey to reserve-currency status

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A significant reserve currency, we believe, needs to be able to hold its value, be freely traded and be supported by deep and liquid capital markets. During our lifetimes, the US dollar (USD) has fulfilled these requirements so incredibly well that it has dominated central bank reserve holdings. It has accounted for the majority of global reserves since the end of the Second World War. It has been able to fulfill these roles because of the US' central role in, and commitment to, the open global economy since the 1930s. The advent of the euro resulted in some diversification, but the USD has largely retained its dominance in global reserve holdings. Old habits tend to change slowly. And new institutions need time to prove their mettle.

But the super-cycle is reshaping the global economy, and the US-European debt crisis has accelerated the shift of economic growth and financial influence to Asia and other parts of the developing world. Suddenly, there are widespread doubts about the US authorities' willingness and ability to maintain the value of the dollar. Certainly, the US Fed's quantitative easing creates legitimate concerns about future inflation in the US, even if the US faces deflationary pressure today. And the euro hardly seems like an attractive alternative. Without the ability to pool public risk across the euro area in a single bond market, there is clearly a danger that the weakest economies will be forced to restructure and deflate their way out of their heavy debt burdens. The fragmentation of the euro area is no longer an impossibility. Indeed, some 50% of our institutional clients at a conference in London in mid-2010 believed that the euro would not last another decade.

The economist Robert Triffin noted more than 50 years ago that a reserve currency holds within it the seeds of its own destruction. Creditors' willingness to hold US securities probably contributed to the ability and willingness of US households and government to run such large deficits and accumulate such massive debts over the last three decades. A reserve currency undermines discipline, Triffin said, and the US and maybe even Europe appear to have proven him right in recent years.

But investors are clearly thinking about the future, and looking for alternatives

So it is no wonder that the search for another reserve currency, and even a new international financial architecture, has begun.

China has evidently decided that its national interest will be served first by the regionalisation of the CNY, and then, at some point, by its 'reserve-ification'. Why Beijing wants the CNY to be a reserve currency is not completely clear. Some appear to equate a reserve currency with Great Power status, which is certainly something that many in Beijing desire. Some talk about the financial gains involved in being able to print the world's currency, but such benefits tend to be hard to measure and are often exaggerated. Creating a reserve currency entails costs, too. One has to issue debt for others to hold, but China's Ministry of Finance does not appear to be keen on that idea, keeping the official deficit low and debt held by foreigners to a minimum. Other reserve currency issuers have often run large trade deficits, necessitating the issuance of external debt. This brings considerable longer-term risk, as Triffin pointed out, of getting addicted to cheap foreign borrowing.



Becoming a reserve currency of any significance is quite difficult

Becoming a reserve currency is easier said than done. The CNY starts this journey with a number of strengths. China is a very large, open economy, with enormous trade flows. Its exports account for 16% of G3 imports, up from 10% in 2005. Foreign investment in China totalled some USD 1trn as of the end of 2009; China's stock of outward investment is smaller, at USD 230bn, but is also growing quickly. China accounts for 10% of global output today – and we expect that share to rise to around 23% by 2030. Other countries' holdings of a currency tend to rise as that country's share of global GDP and trade rise. Back in the late 19th century, Britain was the natural host of the world's reserve currency because it was also a centre of global commerce. Britain imported some 30% of the rest of the world's exports in 1860. From 1860-1914, some 60% of the world's trade was settled in pound sterling.

Given the very supportive economic background, the fact that the CNY is not already a reserve currency can be explained by deliberate choices by Beijing to restrict convertibility. Conversion of FX into CNY for trade purposes has been open since the mid-1990s, but many financial account transactions are either banned or restricted. Access to the onshore market is still very limited from offshore. As these controls are lifted, the CNY should 'normalise', and gain some of the status in trade settlement and reserve holdings because of China's economic weight.

The CNY's road to reserve-currency status has started with trade settlement – and is now moving to include investible assets

In practice, the government's plan for CNY internationalisation has started with trade. There have been mammoth official efforts to persuade importers and exporters to stop using USD to invoice and settle their voluminous trade, and to use CNY instead. The second step – creating a market of investible instruments – seems set to take two paths. The first runs through Hong Kong, where the China sovereign and various corporates can issue CNY paper and offshore investors can freely buy. The second path runs into the mainland, with a plan (not yet operational) to allow offshore investors access to the interbank CNY bond market. It is unclear which route will become dominant, though the first has clearly gotten off to a faster start. However, other central bank reserve managers clearly have a preference for holding sovereign paper from China's Ministry of Finance. And almost all of that is onshore, and will likely remain there for the near future.

Asian central banks are the obvious first buyers of CNY assets. China's outward investment is concentrated in Asia – and some 35% of China's exports now go to the region, a higher proportion than to Europe or the US. Central banks tend to want to hold reserves in the currencies of economies with which they trade. And they tend to hold reserves in currencies which dominate their local regions. Hong Kong provides the Asian region with a liquid hub for offshore CNY settlement.

But China is also clearly pushing for the CNY to move beyond the region, striking very public agreements with Russia, Brazil and a number of other countries to re-denominate trade in CNY. This will be harder given the lack of a Hong Kong-like CNY hub in these time zones.

There are considerable challenges ahead. Here, we discuss the three main characteristics of a reserve currency, and how the CNY stacks up – both today and in the foreseeable future.



A reserve currency needs to retain value, offer liquid investment instruments and be freely convertible

Holding value

One reason to be sceptical about the USD’s reserve status is its apparent inability to hold its value. As Chart 1 shows, the dollar has lost 97.5% of its value against gold since 1950. In 1950, USD 1,000 bought you 28.8oz of gold, now, it buys only 0.7oz. However, the CNY has hardly distinguished itself in this regard: it has lost 99.0% of its value over the same period. Back in 1950, CNY 1,000 bought 10.5oz; it now buys 0.1oz. This loss of value did not just happen during the Maoist years: since 2000, the CNY has lost 75% of its value against gold.

Economic vitality certainly supports a reserve currency, as the experiences of the UK and the US suggest. China certainly has lots of that. And the market clearly expects the CNY to appreciate over time. But expectations of appreciation alone do not a reserve currency make. Big institutional reforms are required to ensure that the CNY can retain its value over the long term.

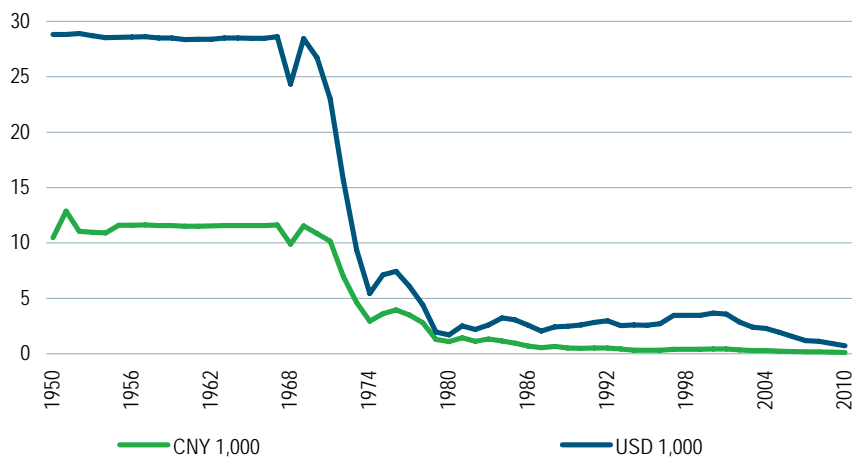
The current best thinking is that an independent central bank is key to achieving this. The USD gained acceptance rapidly after the 1914 creation of the Federal Reserve System, which provided credibility, liquidity and a lender of last resort function to the market. The Bank of England provided similar independence and stability to sterling before the First World War. The People’s Bank of China, in contrast, is an integrated part of the government. We wonder if the government would be willing to give up control over monetary policy and establish an independent guardian of the currency in the next 10 years.

Deep and liquid capital markets

Holders of reserves today need a place to invest them – deep and liquid markets. In the late 19th century, London was the obvious place for any country or major corporate to raise debt. Funds would then be deposited in a London bank. As the host of the world’s trade and investment flows, London had liquidity, and this provided a foundation for the development of financial markets. After the First World War, New York boasted even higher levels of liquidity, attracting borrowers and investors.

Chart 1: How much gold can you buy?

How many ounces of gold you can get for USD 1,000 and CNY 1,000



Sources: Bloomberg, Standard Chartered Research



China's bond market is big but illiquid, and is more or less off limits to offshore investors

China's bond market has grown rapidly in recent years, but it is still generally illiquid past the 1Y tenor. Foreign institutions have not yet been given access. Onshore institutions tend to buy and hold securities in investment accounts, and there is no credible strategy in place to significantly boost liquidity. Until interest rates are reformed, banks will be tempted to rely upon deposit/loan spreads and downplay the role of trading.

However, the development of the offshore CNH market offers some chance to side-step this problem. As we explain later in this Special Report, corporates are now free and keen to issue CNY debt in Hong Kong – and even the Ministry of Finance has been pleasantly surprised by the low cost of raising funds there. The offshore market will take time to develop, and given the lack of supply of debt instruments relative to demand, it could still be held back by liquidity issues. But it does offer a potential site for reserve investors to use.

An open capital account

When Britain's sterling dominated global reserve holdings at the beginning of the 20th century, the UK authorities placed no limit on one's ability to import or export gold bullion. As the dollar rose to pre-eminence in the 1920s, there were very limited restrictions on gold movement. After the Second World War, the US was one of the few countries which did not implement capital controls, bolstering the dollar's role as the paramount reserve currency. Even when the US introduced capital controls in the 1960s, the rapid creation of the Eurodollar market meant that the dollar's reserve status was protected.

China's capital account remains mostly closed. Most importantly, access to the onshore debt market is restricted. Corporates that want to take funds out of China face a number of regulatory hurdles. Perhaps even more importantly than the current restrictions, there is no guarantee that new restrictions will not be imposed in the future.

That said, the strategy of gradually opening China's capital account has paid off. It insulated the economy from the Asian financial crisis of 1997-98 and the more recent 2008 financial crisis. Over the next 10 years, we expect gradual opening to continue, alongside growing confidence in managing inflows and outflows. Unless a dedicated hole in the capital account can be created, which is entirely possible, this conservative approach to the capital account means it will remain difficult for offshore reserve managers to hold CNY reserves.

Again, though, the CNH market and Hong Kong's open capital account offer a way around the problem. Moreover, central bank reserve managers will likely be offered a QFII-like hole through the capital account controls to enable them to access the onshore bond market. Although CNY holdings will remain limited in scale until these issues are resolved, this will be a start.

What will the world's reserve currencies be from 2010-30?

Popular worries about the decline of the dollar do not guarantee its immediate demise as a reserve currency. However, concerns about US inflation and USD depreciation are legitimate, and depending on what happens in the US and the euro

There are few, if any, short-term alternatives to the USD



area over the next 10 years, it is possible – if not likely – that the USD will lose its status as the world's pre-eminent reserve. We currently see four possible future scenarios:

Gold

One possible scenario is the rejection of all paper currencies and the return to gold or another unprintable asset. Some critics decry the current fiat money system, where the value of a currency is tied to a man-made institution, subject to political pressure and with an asymmetric bias to favour inflation over deflation. However, while gold (and possibly other metals) will certainly regain some of its stature, we hesitate to support its use in a reserve system. Gold does not generate returns – and its liquidity is not guaranteed. More broadly, linking currencies to gold, and thus limiting money supply to the amount of yellow rock dug up from the ground, is not a particularly attractive future either. For good or bad, we believe we are stuck with a fiat system.

The SDR is a nice idea, but is impractical

A global currency: Special Drawing Rights

Given renewed scepticism towards national fiat currencies in general, the age-old search for an alternative has been revived. Special Drawing Rights (SDRs) are one possibility. They were created as part of the Bretton Woods system but have never become operational. Thus, in function, they remain an accounting unit for countries' contributions to the IMF.

For central banks to be able to hold SDRs as assets in their reserves, governments and companies would need to issue SDR debt. But that would require a global central bank willing to issue SDRs, and to function as a lender of last resort. At present, the only conceivable candidate for the role of a global central bank is the IMF. In theory, the IMF could be a truly independent issuer of currency.

However, this appears to be a very remote possibility. The politics of combining national central banks into a global one are too complicated to imagine. And at any rate, there is no clear advantage to the SDR. There would be nothing to stop any central bank or institutional investor from simply holding their reserves in a portfolio of assets which mirrored the SDR – the USD, euro (EUR), British pound (GBP) and Japanese yen (JPY). Adding the CNY to this mix would have hardly any real impact except for the symbolism of the act.

The CNY replaces the USD as the dominant reserve currency

When the US arrived on the global economic stage in the early 20th century, the dollar's ascent to reserve status was rapid. In 1914, it did not appear in any country's reserves; by 1924, it had become the world's leading reserve currency (even if sterling and the French franc still played a role). This transition was accelerated by the combination of a disastrous war that destroyed Europe's economy, the unparalleled rise of the US industrial economy, and New York replacing London overnight as the world's financial capital. During the second half of the 20th century, the US dollar had no rival.

The sudden rise of the dollar shows that when the stars align, rapid promotion to reserve status is possible. But the stars will probably not align so fortuitously for the CNY. As we have highlighted above, the challenges of establishing a liquid bond market, an institutionally protected central bank and opening up the capital account



are big. At the same time, the decline of the dollar and euro will, despite their present difficulties, probably not be as dramatic as that of sterling from 1910-30. For this reason, we do not think the CNY will become the dominant reserve currency, at least not for the next 20 years.

Over the 2010-30 period, we will most likely live in a multiple reserve currency world

Multiple reserve currencies

In the early 20th century, there were a number of different reserve currencies. The French franc and the German mark played a supporting role to British sterling before the First World War. In 1913, these currencies accounted for some 30%, 10-15% and 50% of known global reserves, respectively. In the 1920s and 1930s, even as the dollar rose to dominance, the pound and franc still played important roles.

We believe we will see a return to a world of multiple reserve currencies during the 2010-30 period. The USD, EUR, CNY, GBP and perhaps even the Indian rupee and Brazilian peso may all play a role.

For one thing, the new global economy is multi-polar. Although global corporates may prefer the ease of transacting in one currency, the development of financial markets means that FX conversion risk can generally be easily and cheaply managed. If they have a number of choices, reserve managers will have a greater ability to diversify.

Multiple reserve currencies will provide investors with the ability to hedge risk

The CNY may not replace the dollar as the dominant reserve currency anytime in the next 20 years. But this should not be viewed as a failure. The CNY is likely to enter Asian and other emerging economies' central bank holdings between 2010 and 2015 in a small way, and should then gradually grow in stature, assuming that capital-market and capital-account reforms take place. The CNY will then assume its place as part of a portfolio of reserve currencies. A little bit of competition, with the costs and benefits of reserve-currency status shared, might be the best outcome for everyone.



2. Scalability and sustainability of CNH

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Short-term scalability challenges, which are bound to surface from time to time as the CNH market continues to expand, should not be mistaken for threats to its long-term sustainability

Parallel liberalisation approach results in growing pains

The CNY's journey to achieving reserve-currency status will require three inter-related components to develop alongside each other: capital account liberalisation, currency internationalisation, and the expansion of the CNH market. This rather unique parallel approach adopted by China essentially makes it a 'controlled experiment'. (By contrast, the Eurodollar market in the 1960s enjoyed an already highly internationalised USD, and the US government never impeded settlement between onshore and offshore banks.) As a result, the development of the CNH market is bound to suffer growing pains from time to time. These could stem from a slower-than-preferred policy response to fast-growing offshore demand, or from potential system abuse – and could prompt the authorities to take a more cautious approach to liberalisation. Yet one should not mistake speed bumps for brick walls or, more precisely, scalability for sustainability. Scalability can be achieved over time through policy fine-tuning. The long-term sustainability of the CNH market is not disputed, in our view.

A series of major policy breakthroughs has translated into rapid CNH market growth over the past 18 months. This includes the recent surge in CNY trade settlement volume, which contributed to the earlier-than-expected depletion in late October 2010 of the trade settlement quota assigned to the designated clearing bank – Bank of China (Hong Kong). The authorities' failure at the time to announce an immediate quota increase raised fears (unfounded, in our view) that they wanted to slow or even stall the scheme's growth on concerns that money from additional quantitative easing in the US would find its way to the mainland via Hong Kong and the trade settlement scheme. Sceptics have been quick to highlight the underlying policy risk that Beijing could step on the brakes as quickly as it brought the market to life.

We believe such worries are overblown. The policy refinements introduced in late December 2010 should help to defuse such fears, and drive home the point that the mainland authorities remain committed to promoting CNY internationalisation and the CNH market.

The existing management of the CNH regime is already quite liberal, and the authorities have shown an openness to trying to iron out the kinks

In this section, we revisit the basics of the new CNH regime, and conclude that the existing rules are, for the most part, already quite liberal. In areas that are less liberalised (mainly involving cross-border money flows in and out of the mainland), the authorities have shown an openness to trying to iron out the kinks – one at a time, as they come to light. A stop-and-go approach may therefore be a recurring theme of the market's long-term liberalisation, given the need to balance potentially differing interests among policy makers, financial institutions, corporates and investors. But we see very little risk of the CNH market taking a step backwards. We project that by 2015, the CNY will account for close to 40% of Hong Kong's total deposits and will be used as the settlement currency for over 20% of China's imports.



CNY trade settlement: Concerns over quota constraints are overblown

CNY trade settlement holds the key to CNY internationalisation and the further build-up of CNH liquidity offshore

We have long argued that the CNY trade settlement scheme is the backbone of the CNH market. Beijing has always been much more comfortable opening up its current account than its capital account. It also makes a lot of sense for China to kick-start its CNY internationalisation plans with trade, given that the economy has already exerted its global influence on that front. Once demand for CNY trade settlement grows, the rest should automatically fall into place – i.e., the development of financial instruments and markets allowing offshore corporates and institutions to invest in, hedge and raise CNY. The trade settlement scheme will be key to the further build-up of CNH liquidity offshore, which will in turn pave the way for the creation of more channels to recycle money back into the mainland system.

With much-relaxed geographical and enterprise eligibility restrictions (see Box 1), the current rules effectively allow money to enter and leave China freely as long as it is backed by trade documents. Things get slightly more complicated when currency conversion is involved – there is no guarantee, at least at the initial stage of CNH market development, that overseas corporates wanting to settle trade in CNY (or the banks they do business with) can always easily get hold of CNY. Participating banks offshore are therefore allowed to purchase CNY for their customers from the onshore market (via the clearing agent bank or onshore agent banks) for trade settlement purposes, subject to a quota and other restrictions.

The latest policy refinements from the HKMA were designed to address the trade conversion quota issue exposed in October 2010

The trade settlement conversion quota for 2010 was CNY 8bn and was exhausted much earlier than expected, in October 2010. This was due partly to the surprising surge in trade settlement volume, and partly to corporates bringing forward trade-related CNY demand (converting in advance for settlements several months down the road). The growing tendency for offshore proceeds from exports to China to remain in CNY (or at least not be sold back to the clearing bank) may have also been a contributing factor.

To address this issue, the Hong Kong Monetary Authority (HKMA) announced fine-tuning measures on 23 December 2010. A fresh CNY 4bn quota was granted for Q1-2011, and the authorities committed to reassessing it on a quarterly basis, “taking into consideration the actual circumstances”. However, there are two caveats: (1) banks must first utilise the CNY trade-related proceeds they have purchased from their customers to meet their trade settlement needs, before they can square their positions with the clearing bank; and (2) banks can only purchase onshore CNY through the clearing bank for their customers for trade transactions due for payment to the mainland within three months. Ensuring that money leaving the mainland via the trade settlement route returns onshore within three months will greatly reduce scope for CNY hoarding and speculation offshore (by misusing the trade settlement scheme to take advantage of onshore/offshore market misalignment).

Table 2 shows the latest policy refinements, and Chart 2 illustrates how the quota system works under this new arrangement.



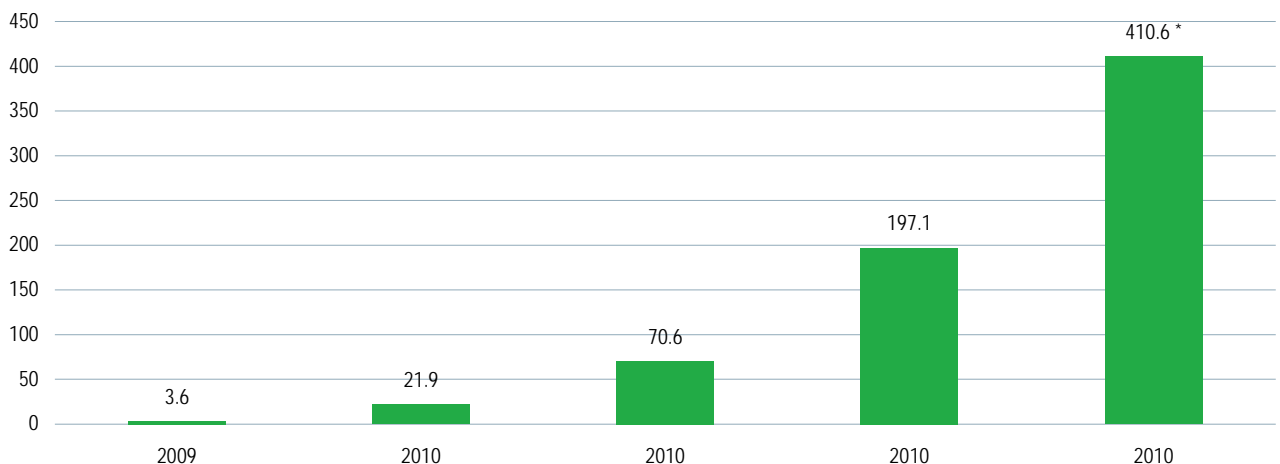
Box 1: The CNY trade settlement pilot scheme – where things stand now

Introduced in late June 2009, the pilot scheme initially covered only cross-border trade between Shanghai and four cities in Guangdong province on the one hand, and Hong Kong, Macau and ASEAN on the other. Its scope was subsequently expanded, and since June 2010 it has covered 20 mainland provinces (which together account for 95% of China’s import/export trade) and all overseas counterparties. Currently, all mainland importers in the pilot provinces are eligible to participate in the scheme. On the export side, for a Chinese exporter to invoice in CNY, it must be a Mainland Designated Enterprise (MDE). An approved MDE can settle exports and imports in CNY, whereas a non-MDE can settle imports in CNY (plus both inward and outward services trade), but not exports. On 6 December 2010, the number of MDEs was expanded to 67,359 companies from 365. This list will likely continue to expand over time.

Prior to the launch of the scheme, banks in Hong Kong had limited channels to expand either the liability or the asset sides of their CNY balance sheets. Business was generally confined to the build-up of CNY in low-yielding retail bank deposits and the provision of restricted personal CNY services. Banks in Hong Kong with CNY funds only had one way out: to place them with Bank of China (Hong Kong), the CNY clearing bank in Hong Kong. This effectively limited the circulation of CNY offshore, and there was little multiplier effect. The introduction of the trade settlement scheme and the liberalisation of CNH business in February 2010 changed all of this.

CNY settlement volumes have grown in leaps and bounds since the beginning of 2010, albeit from a very low base. As of end-November 2010, an estimated CNY 410bn had been accumulated since the scheme’s launch (see Chart 1). Based on Q3-2010 numbers alone, settlement volumes equated to roughly 3.7% of China’s total imports, 0.4% of its exports, and 2.1% of its total trade. Table 1 provides a further breakdown for the first three quarters of 2010.

Chart 1: China’s cumulative CNY trade settlement volume since launch (CNY bn)



* Estimated, based on PBoC comments on 6 December that, as of end-November 2010, a total of CNY 340bn in trade settlement had been conducted since the scheme expanded in late June 2010
Sources: PBoC, Standard Chartered Research

Table 1: CNY trade settlement (CNY bn)

| | Trade per quarter | Trade, cumulative | Exports, cumulative | Imports, cumulative | Services trade and & current account, cumulative | Interbank account outstanding, cumulative |
|---------|-------------------|-------------------|---------------------|---------------------|--|---|
| Q1-2010 | 18.4 | 21.9 | 1.9 | 18.1 | 2.0 | 3.2 |
| Q2-2010 | 48.7 | 70.6 | 6.5 | 56.4 | 7.7 | 7.7 |
| Q3-2010 | 126.5 | 197.1 | 17.7 | 157.1 | 22.3 | 19.1 |

Sources: CEIC, Standard Chartered Research

It is clear that China’s imports are increasingly being settled in CNY, while the amount of Chinese exports settled in CNY remains relatively small. Apart from the MDE restriction, this may also partly reflect China’s trading patterns – exports to the US and EU account for 38% of its total exports, whereas imports from the US and the EU account for only 19% of its total imports. US and (to some extent) European corporates that currently settle trade with China in their domestic currencies are likely to be less willing to shift to settling trade in the CNY than Asian corporates that currently settle trade with China in a third currency, the USD. However, the share of China’s exports settled in CNY should increase substantially in the coming years as the number of MDEs expands, as offshore CNY liquidity gradually improves, and as overseas banks start providing CNH services to offshore corporates.



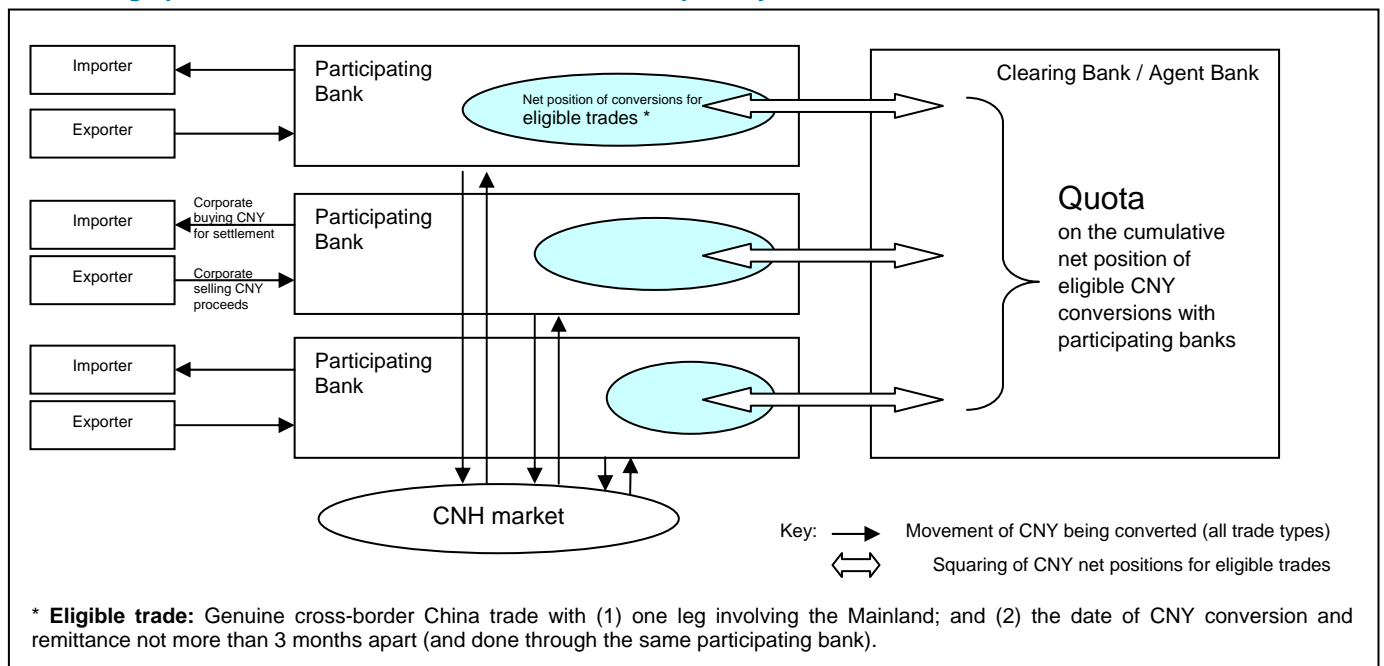
Table 2: Recent policy refinements related to CNY trade settlement and banks' risk exposures

From the HKMA press release, 'Latest Developments of Renminbi Business in Hong Kong', 23-Dec-2010

1. Participating Authorised Institutions (AIs) are eligible to square their positions with the Clearing Bank when there is a shortfall of CNY arising from conversions with customers for cross-border trade settlement transactions. In other words, Participating AIs should first utilise the CNY trade proceeds purchased from their customers to satisfy requests for CNY conversions for trade settlement transactions before purchasing CNY through the Clearing Bank in the China Foreign Exchange Trading System (CFETS) in Shanghai.
2. Participating AIs can only purchase CNY through the Clearing Bank in Shanghai for their customers in relation to trade transactions due for payments to the mainland within three months. It is estimated that demand for CNY conversion in Shanghai will be within CNY 4bn in the first quarter of 2011. The volume of conversion will be assessed after the first quarter, taking into consideration the actual circumstances.
3. In order to maintain a stable supply of CNY, the HKMA will, as a standing arrangement, provide CNY funds of CNY 20bn through its currency swap arrangement with the PBoC, for cross-border CNY trade settlement.
4. Given that the convertibility of CNY is restricted at present, we will require Participating AIs to limit their CNY net open positions (whether net long or net short) to 10% of their CNY assets or liabilities.
5. Separately, not related to CNY trade settlement, the HKMA and PBoC have discussed the issue of the credit exposure of the Participating AIs to the Clearing Bank. It is considered that this could in principle be resolved by the Participating AIs establishing custodian accounts with the Clearing Bank. Details of such an arrangement will be further discussed. It is hoped that the arrangement can be implemented as soon as early next year.

Sources: HKMA, Standard Chartered Research

Chart 2: A graphic illustration of the CNY trade settlement quota system



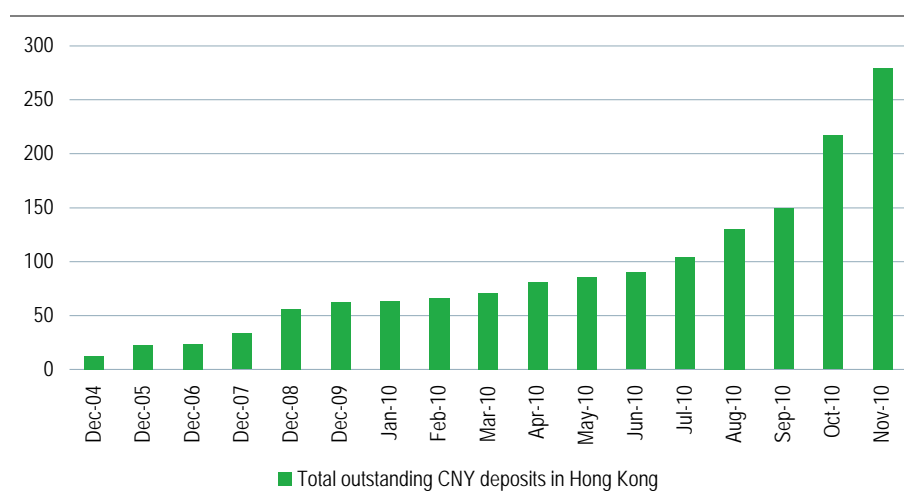
Source: Standard Chartered Research

New trade settlement measures have positive long-term implications

We believe these new measures will help to remove lingering doubts about the sustainability of the CNY trade settlement scheme, and about the mainland authorities' commitment to promoting CNY internationalisation. More importantly, the latest moves should pay great dividends over time in improving the scalability of CNY trading offshore, adding to what is already working well. More specifically:

- The new rules encourage the use of liquidity already sitting offshore (long trade-related positions held by participating banks) to be used to meet trade settlement needs before the onshore market is tapped. This not only eases pressure on quota usage, but also paves the way for the development of a self-sufficient model (from a liquidity standpoint) over time – i.e., CNY that migrates offshore through trade should be able to support offshore CNY demand to pay for imports from China. In fact, a premise of the latest changes, according to the HKMA, is that “the pool of [CNY] funds in Hong Kong is attaining a reasonable size and can meet the demand for [CNY] from corporates locally.”
- It is therefore safe to assume that the quota system will be gradually phased out, especially when the CNY interbank market in Hong Kong becomes deeper and more mature. As CNH deposits reach critical mass and the HKMA continues to act as the lender of last resort (using funds obtained from exercising its currency swap arrangement with the People's Bank of China, or PBoC), the only line of defence Beijing will ultimately need to maintain – at least on the current account front – will be to continue to check trade documents' authenticity to prevent use of the scheme for speculative purposes.
- One needs to separate remittance from exchange. CNY payments from mainland importers to their overseas counterparties do not involve currency conversion (until the offshore corporate decides to sell its CNY proceeds). Therefore, any quota constraint (exchange) should not impede onshore CNY from migrating offshore through trade settlement (remittance). Indeed, the recent depletion of the trade quota caused minimal disruption to CNY deposit accumulation in Hong Kong (see Chart 3).

Chart 3: CNY deposits in Hong Kong kept rising, despite brief trade settlement disruption (CNY bn)



Sources: HKMA, Standard Chartered Research



Not only banks but corporates, too, will need to adjust to these new trade settlement conversion rules. In particular, the newly introduced 'eligible trade' concept (touched on in Chart 2) could have pricing implications for corporates that want to buy or sell CNY related to trade settlement. The 'eligible trade' criteria effectively govern the types of trade-related CNY conversion for which banks can square their resulting positions with the clearing bank/agent banks – and the CNY price quoted to the underlying corporate this way could be different from those offered in the CNH market (where banks go to cover their CNY open positions for 'ineligible' trades).

Corporates buying or selling CNY related to trade settlement should be aware of the pricing implications under different circumstances

For example, the price a Hong Kong exporter receives for selling its CNY trade proceeds from its mainland counterparty could be different depending on (1) whether the conversion is to be made three months after receiving the proceeds (if yes, the trade is 'ineligible'); or (2) whether the CNY trade proceeds have been transferred to an account with another bank before being sold (if yes, the trade is 'ineligible'). Conversely, when a Hong Kong importer buys CNY via the clearing/agent banks to settle with its onshore counterparty, in order for it to qualify as an 'eligible trade', the CNY exchange transaction in this case – and the subsequent outward remittance to settle that trade – need to be conducted within three months and by the same participating bank.

In short, the increased complexity of the new system, while good for scalability overall, could lead to non-transparent pricing for corporates (at least to start with). Also, while participating banks are being tasked to check the 'eligibility' of trade-related conversion if they want the resulting position to be squared with the clearing bank, the onus of providing the supporting trade documents is on the corporates. The HKMA is taking a vigilant stance in this regard, stipulating that "appropriate third party documents (e.g. shipping documents) in support of the trade should normally be requested [by banks from customers], particularly for trades between related parties."

Nurturing CNH: liberal regime starts with Hong Kong

There is plenty of offshore freedom as long as CNY funds do not flow back into the mainland

As the trade settlement scheme encourages money to come out of the mainland, the next question is whether the regulatory environment is supportive enough to allow the CNY to internationalise and the CNH market to grow offshore to meet fast-rising demand. The general rule of thumb here is that CNH business can be developed freely (subject to the offshore jurisdiction's regulatory requirements and market conditions), as long as this business does not involve the flow of CNY back to the mainland. This has resulted in a sudden expansion of the scope of CNY holders offshore beyond those involved in CNY trade settlement. It has also given rise to various CNH markets and financial instruments since July 2010, when the key policy pieces finally fell into place (see Box 2). These include the CNH deliverable forward and cross-currency swap markets (with market transaction volumes rising at a staggering pace on a weekly basis), the increasingly popular CNH bond market in Hong Kong (known as the Dim Sum bond market), the emergence of CNH rates instruments, and the creation of various structured investments (e.g., CNH deposits linked to rates, FX, commodities, etc).¹

¹ CNH IPOs in Hong Kong could be the next big breakthrough. According to recent news reports, one of Hong Kong's largest property developers plans to launch a REIT (consisting of properties in China) denominated in CNY. While reportedly still pending approval from the authorities in China, the hope is that this will happen sometime early this year. As with other newly created CNH markets, the number and size of such CNH IPOs could be small to begin with (note that the first Dim Sum bond was launched in 2007, but only in 2010 did the market truly take off). Also, the remittance process for CNY funds raised could be cumbersome to begin with (again, much like the Dim Sum bond market), and it remains to be seen how many IPOs (and subsequent day-to-day trading) current liquidity can support. But there should certainly be no lack of demand, and many of these constraints should be easily addressed over time as the CNH market expands.



The HKMA is supporting the development of CNH-denominated financial instruments. There is no general prohibition on new products, although trading requires prior approval from the HKMA and authorised institutions need to submit product and risk management plans. This raises the prospect that the Hong Kong offshore market could become substantially more sophisticated than the mainland onshore financial markets.

Box 2: Two policy breakthroughs laid the foundations for CNH

- In February 2010, the HKMA stipulated that participating banks could “develop [CNY] business based on the regulatory requirements and market conditions in Hong Kong, as long as these businesses do not entail the flow of [CNY] funds back to the mainland.” The HKMA went so far as to state that participating banks “can conduct [CNY] businesses in accordance with the prevailing banking practices applicable to the businesses conducted in other foreign currencies.” This helped to set the stage for freer CNH circulation in Hong Kong.
- On 19 July 2010, the PBoC and the HKMA signed the Supplementary Memorandum of Co-operation. These rules helped to lay the foundation for the CNH market, as they substantially broadened the pool of potential CNY holders and the types of CNY-denominated financial products which could be offered. The memorandum lifted restrictions on the offshore CNY market and allowed non-bank financial institutions (such as securities brokerages and insurance companies), as well as corporates not directly involved in trade with the mainland, to open CNY accounts and enjoy unrestricted CNY services (i.e., non-trade-related CNY conversion), including loans and payments.

(For a full timeline of CNH policy liberalisation, see Appendix 1.)

Unlike for trade-related conversions, banks acting as counterparties to non-trade-related conversions are not allowed to automatically net out their positions with the clearing bank (but are permitted to do so with other participating banks). This effectively means that all CNH obtained for, say, investment purposes by corporates needs to come from the offshore liquidity pool itself. The different treatment of trade- and non-trade-related CNY conversion is one of way in which the on- and offshore markets have been kept distinct – and this has led to pricing divergences between the two.

Greater – and ultimately full –CNY convertibility will certainly help CNH development, but it is not a prerequisite

This arrangement (granting a high degree of ‘offshore freedom’) also allows Beijing to increase the number of institutions and individuals that can hold CNH without opening up its capital account. This is another reason not to be overly concerned that the gradual pace of capital account liberalisation will impede the progress of CNY internationalisation – as long as the trade settlement scheme continues to expand. Greater (and ultimately full) CNY convertibility will certainly help, but it is not a prerequisite for this initial stage of CNH development.

With China limiting the number of offshore access points to onshore markets (primarily via the clearing bank, the agent banks, or some form of quota system), the role of developing, promoting and extending CNH business to the rest of the world falls heavily on Hong Kong shoulders.² It is the natural choice for the following reasons:

² Alternatively, overseas banks and corporates can open CNY accounts directly with mainland banks, but having them in Hong Kong offers greater fund mobility and usage flexibility (e.g., non-trade-related activities). Since late 2009, the PBoC has also allowed offshore companies to open non-resident accounts (NRAs) on the mainland. The idea is to give overseas companies an alternative channel to conduct CNY trade settlement, especially those with limited access to CNY banking services in their home countries. The use of NRAs is much more restrictive (basically limited to trade-settlement purposes) than general-purpose CNH accounts offshore, but it does offer holders access to onshore deposit rates. Since October 2010, NRAs can in theory be opened in the 20 pilot provinces (the scheme was previously limited to seven cities).



- **Sovereign and proximity advantages.** Beijing is in effect conducting a 'controlled experiment' in its own backyard.
- **Corporates with a long history of doing business with China.** This creates natural demand for CNY trade settlement and other financial products.
- **Financial institutions with extensive international networks.** Hong Kong is a well-established international financial centre capable of tapping international funds and achieving financial innovation.
- **Financial infrastructure already in place.** There is a high level of trust in the HKMA, its regulatory expertise, and its multi-currency Real Time Gross Settlement (RTGS) system.
- **Strategic value within mainland China's plans.** Hong Kong has Beijing's blessing to continue to develop its financial sector in line with China's interests.

The CNH market can easily extend beyond Hong Kong via the correspondent banking network system

Overseas financial institutions that are interested in using CNH services or providing them to their customers are encouraged to open nostro accounts with participating banks in Hong Kong. It is through this correspondent banking network that the CNH gains geographical scalability. Leaving aside the technicalities involved in setting up these nostro accounts, there is theoretically nothing stopping banks around the world from facilitating CNY trade settlement or gaining access to other financial products already available in Hong Kong. Conversely, it is also through this network of nostro accounts that offshore liquidity is likely to be pooled in Hong Kong, supporting further CNH market development and innovation and reinforcing Hong Kong's status as an offshore CNY financial centre.

Restrictions on cross-border flows: inflexible but not incurable

While the CNH regime is generally liberal and flexible, it is not immune to bottlenecks. Here, we identify a few such bottlenecks – none of which are severe or long-lasting enough to derail the market's long-term growth, in our view.

Limits on where excess CNH funds can be deployed remain an industry-wide headache for participating banks offshore

One widely acknowledged challenge is the limited number of channels through which banks can currently deploy their excess CNH funds. This, in turn, affects how much banks can pay their depositors. This is important, because Hong Kong's ability to create an attractive interest rate environment for the CNH is key to replicating London's success with the Eurodollar market.

CNH time deposits in Hong Kong are currently paying only about or slightly above 1%, versus a one-year onshore CNY deposit rate of 2.75%. The gradual expansion of CNH financing business (and growth in CNH assets via other channels) will help over time, but for now, banks face the following common constraints:

- The lack of outlets means most of the excess CNY funds end up being placed with the clearing bank, from which banks only receive a meagre 0.865% in interest. In addition, at least 25% of their CNH deposits need to be placed there as a liquidity requirement, as stipulated by the HKMA.



- Because of this constraint, banks in Hong Kong now also face the risk of over-concentrated credit exposure to the clearing bank. This means banks may not even get the 0.865% return if they have reached their internal credit limits. This has prompted the HKMA to study the possibility of participating banks establishing custodian accounts with the clearing bank, effectively transferring the counterparty risk to the PBoC's Shenzhen branch.
- Quota approval for banks to access the onshore interbank bond market, while in itself a major policy breakthrough, has initially been slow and small in size with (see Box 3 for details). The approval process will hopefully pick up over time, offering a more permanent solution.

CNY funds that need to cross the border will likely continue to be constrained a quota system or by case-by-case regulatory approval

From a broader perspective, for the next few years at least, all forms of CNY going in and out of the mainland for non-trade purposes will likely continue to be constrained by a quota system or by case-by-case regulatory approval. This is how China will be able to manage its gradual capital account liberalisation. While greater or full CNY convertibility is not a prerequisite for the continued expansion of the CNH market, its absence could potentially hinder the development of specific markets.

The prime example is the Dim Sum bond market – especially in terms of attracting foreign issuers whose primary need for CNY is to support their mainland operations. In addition to liquidity and pricing considerations, the ease of remitting those funds back to the mainland could make or break a deal.

As we explain in Appendix 2, fund repatriation to the mainland can be done via two channels, both of which are subject to regulatory approval by the mainland authorities: (1) a shareholder loan to the mainland subsidiary, or (2) equity capital injections into the mainland subsidiary. Beyond that, the guiding principles of the market are quite liberal – for example, any entity, local or foreign, can issue CNY bonds in Hong Kong as long as it meets the HKMA's general bond-issuing criteria.

Allowing a more streamlined repatriation process will provide a further boost to the Dim Sum bond market...

The good news is that the streamlined clearance and settlement of CNH bond transactions has helped to fuel the rapid development of the CNH bond market in recent months. For example, CNH bonds can now be cleared via Euroclear, Clearstream or the Central Moneymarkets Unit service (CMU). There are plenty of successful examples, including the CNY 200mn bond issuance for McDonald's Corporation managed by Standard Chartered Bank. Even so, there is still plenty of room for improvement in the approval process, in our view.

In any case, we expect the Dim Sum bond market to continue to grow by leaps and bounds, driven by a sustained surge in offshore demand and CNH liquidity in Hong Kong. The latest numbers support this view, as shown in Chart 4. Even greater scalability would be even better.

...and to many other potential new CNH markets as well

The same could be said for other CNH markets that involve cross-border money remittances – for example, upcoming offshore CNY-denominated IPOs, the long-awaited mini-Qualified Foreign Institutional Investors (QFII) scheme that will allow CNH deposits to be invested back into mainland capital markets, or even project-based cross-border direct investment flows. Relaxing or adjusting the regulatory approval processes over time (subject to Beijing's comfort level) to meet potentially fast-growing offshore demand will be key to the long-term development of these markets. Judging from the Dim Sum bond experience, the authorities are open to trying to iron out such kinks, as they deem appropriate.



Box 3: Access to the onshore interbank bond market

The PBoC announced in August 2010 that CNY settlement participating banks, subject to a quota, would be allowed to invest their CNY liquidity in the onshore interbank bond market (IBM)³. Quotas are currently being applied for, and Standard Chartered Bank (Hong Kong) is one of the few banks to have been granted a quota so far. There has been no hint that quotas will be extended to institutions not involved in CNY trade settlement. Banks' ability to access the onshore bond market is significant because it involves another small opening of China's capital account. It will allow qualified institutions to acquire higher-yielding CNY-denominated assets – in turn allowing them to offer higher CNH deposit rates.

The other innovation in this area is the PBoC's move to give other central banks access to the onshore interbank bond market, also based on a quota. Diversifying some of their reserves into CNY would be a very attractive option for other Asian central banks given their trade links with China, China's economic influence on the region, and the likely appreciation of the CNY.

Overseas central banks will need to access CNH liquidity. One potential source is the CNY 800bn worth of bilateral currency swap lines they have already signed with the PBoC (see Table 3). As far as we know, none of these swap lines – with the exception of the one between the PBoC and the HKMA – have been exercised yet. Alternatively, special liquidity arrangements could be organised with the PBoC as an interim solution before CNH becomes more widely available. In any case, overseas central banks would still be able to buy CNH bonds in Hong Kong.

The HKMA's eligibility to invest in the mainland's interbank bond market has received PBoC approval, paving the way for Hong Kong's Exchange Fund to start investing in CNY assets. The HKMA has said that it is working closely with the PBoC on implementation arrangements. Beyond that, there has been no confirmed news of an IBM-specific quota being granted to any foreign central bank.

Overall, while allowing other central banks to invest in China's onshore bond market is an important policy breakthrough in its own right, we do not expect it to lead to an imminent sea-change in foreign sovereign behaviour.

Table 3: Bilateral currency swap agreements with the PBoC

| Counterparty | Date of agreement | Size of the swap lines |
|--|-------------------|--------------------------|
| Bank of Korea | 12 December 2008 | CNY 180bn and KRW 38trn |
| Hong Kong Monetary Authority | 20 January 2009 | CNY 200bn and HKD 227bn |
| Bank Negara Malaysia | 8 February 2009 | CNY 80bn and MYR 40bn |
| National Bank of the Republic of Belarus | 11 March 2009 | CNY 20bn and BYR 8trn |
| Bank Indonesia | 23 March 2009 | CNY 100bn and IDR 175trn |
| Central Bank of Argentina | 2 April 2009 | CNY 70bn and ARS 38bn |
| Central Bank of Iceland | 9 June 2010 | CNY 3.5bn and ISK 66bn |
| Monetary Authority of Singapore | 23 July 2010 | CNY 150bn and SGD 30bn |

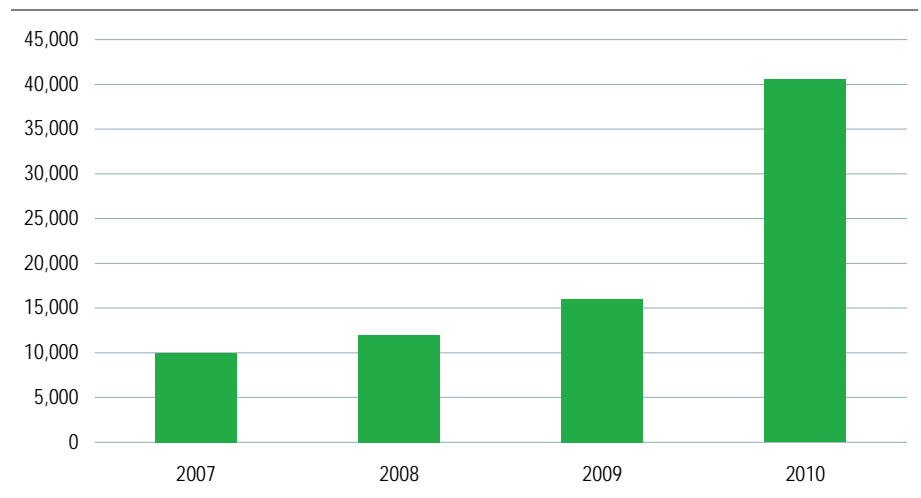
Note: All swaps listed have a 3Y maturity and are extendable upon agreement by both parties

Sources: PBOC, Central Bank of Iceland, HKIMR, Standard Chartered Research

³ The onshore CNY interbank bond market (IBM) is managed by the National Association of Financial Market Institutional Investors (NAFMII) under the direct supervision of the PBoC. The market accounts for 98% of all domestic debt issuance and trading (there is another bond market hosted by the stock-exchange system, but it is smaller and less liquid). Commercial banks, insurance companies and funds remain the main market participants. Bond spot trading volume increased significantly in 2010, to CNY 60.5trn as of November from CNY 48trn in 2009. Repo trading increased to CNY 85.6trn as of November 2010 from CNY 72trn in 2009. Both bond and repo trading on the interbank market are up from close to zero five years ago, while bond trading on the stock-exchange platform has not grown in recent years. Government bonds, central bank bonds and so-called policy bank bonds continue to represent the bulk of issuance on the IBM, with total outstanding amounts of CNY 6.04trn, CNY 3.85trn and CNY 5.17trn, respectively, as of end-November 2010. By contrast, commercial paper, medium-term notes and corporate bonds account for a combined 17% of the IBM, with only CNY 665bn outstanding in commercial paper, CNY 1.26trn in corporate bonds and CNY 1.35trn in medium-term notes.



Chart 4: New issue volumes for CNH bonds (CNY mn)



Source: Standard Chartered Research

The re-imposition of the NOP limit could be more restrictive than desired for offshore banks with small CNY balance sheets

Finally, there are also safeguards in place in Hong Kong to ensure that banks properly manage the foreign exchange risk associated with their CNY open positions. The HKMA requires banks' CNY net open positions (NOPs) to be limited to 10% of their CNY assets or liabilities. This is a clear example of the authorities' willingness to fine-tune policy to respond to (and strike a balance between) rapidly growing offshore demand for CNY and ever-changing macro and market circumstances (e.g., concerns about rising capital inflows stemming from additional quantitative easing in the US). Prior to July 2010, the limit on banks' CNY NOP was CNY 30mn; this proved to be too rigid and restrictive in view of the speed at which the market was developing. After this was abolished in July, the NOP limit is now being reintroduced, but with added flexibility. Linking the NOP limit to the scale of a bank's CNY business allows the two to expand in tandem over time. Near-term, however, banks with smaller CNY balance sheets could find this new NOP rule more restrictive than desired.

From scalability to sustainability: our projections to 2015

To summarise, the CNH market passed its first scalability test with flying colours in 2010. CNY trade settlement suffered little disruption following the quota depletion, and CNH deposits in Hong Kong kept growing. The regulatory adjustments made in December should create a solid foundation to handle future demand growth. Beyond that, the offshore CNH regime appears highly liberal, in our view. Radiating out from Hong Kong, the CNH market looks set to continue to grow, both in breadth and depth. Further liberalising cross-border capital flows should foster growth in specific markets; conversely, though, such liberalisation is not a prerequisite for CNH internationalisation – at least for now. Worries about the CNH market's scalability should not be overplayed, and should certainly not obscure the long-term sustainability of its development. Our updated projections underpin this view (most have been revised recently to take into account the market's recent robust performance).

By 2015, 22% of China's annual imports could be settled in CNY

First, CNY trade settlement volume for China. We expect annual settlement volume to surpass the CNY 1trn mark in 2011 (versus a cumulative total of around CNY 410bn since the scheme's launch in 2009). We expect this exponential growth trajectory to take annual volume to around CNY 5.6trn by 2015 (see Chart 5).



Imports account for 80% of CNY trade-settlement volume so far, and they also represent an increasingly important source of CNY deposit migration from onshore to offshore markets. We expect imports settled in CNY to expand from less than 4% of total imports in Q3-2010 to more than 8% in 2011 and 12% in 2012. By 2015, invoicing conversion could reach a share of 22%, translating into more than CNY 3trn of imports (out of China's CNY 14.6trn annual total). Hong Kong could easily be the counterparty to 60-70% of these CNY invoicing flows, in our view.

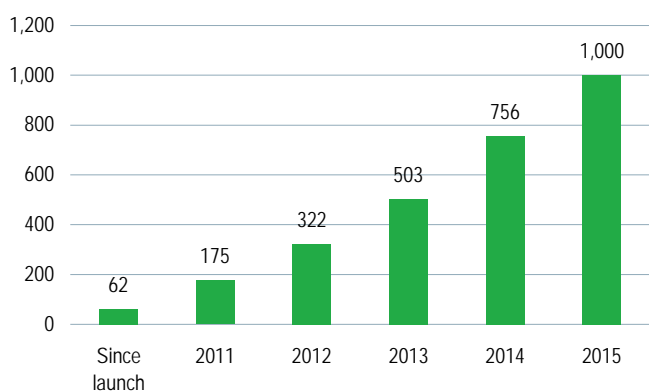
The above projections assume that the pace of invoicing conversion (from USD to CNY) is faster between China and emerging markets (Asia, Africa and Latin America) than between China and developed markets. Intra-regional trade flows within Asia, as well as China's trade with Africa and the Middle East, are growing fast. Emerging markets, which often use a third country's currency to settle trade, should be receptive to the idea of changing their invoicing behaviour.

Next, CNH deposits in Hong Kong. For our base-case scenario, we assume, conservatively, that current regulations will not change materially over the next five years. The projected increase is generated from two sources: (1) mainland importers paying CNY via settling trade transactions in CNY; and (2) mainland tourists and other visitors spending CNY in Hong Kong. The result is that CNH deposits are forecast to expand at a five-year CAGR of over 70%, reaching CNY 4.5trn by 2015 (from CNY 280bn currently). We show all this in Chart 7. Hong Kong's total bank deposit base should double over the next five years, with CNH accounting for close to 40% of the total (see Box 4 for long-term implications for the Hong Kong dollar, or HKD).

CNH deposits in Hong Kong could reach CNY 4.5trn by 2015

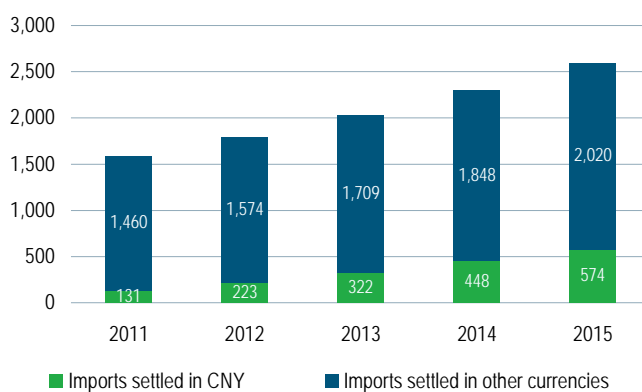
We worked through two alternative scenarios, also shown in Chart 7. These model the impact on CNH deposits if new channels for deposit migration outside of trade and tourism were opened up. The first involves a gradual migration of onshore deposits to Hong Kong via routes other than trade settlement. The size of these deposits will reach 1.0% of total onshore deposits by 2015, we estimate. The second scenario assumes a faster pace of non-trade-related migration, with these deposits reaching 2.5% of total onshore deposits five years from now. What immediately jumps out is how quickly CNH liquidity (and hence the development of CNH markets) in Hong Kong could change if the right incentives and regulations were put in place.

Chart 5: China's projected annual total CNY trade settlement volume (USD bn)



Sources: PBoC, Standard Chartered Research

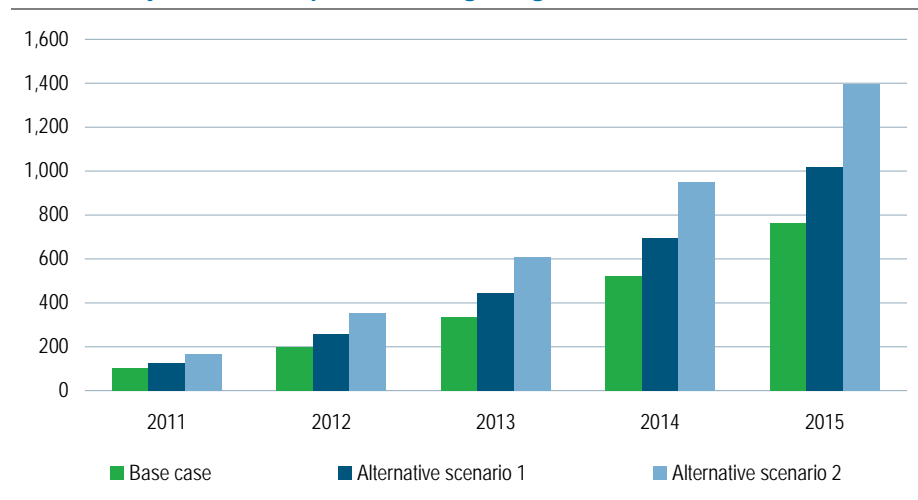
Chart 6: China's projected annual import value by settlement currency (USD bn)



Source: Standard Chartered Research



Chart 7: Projected CNH deposits in Hong Kong under three scenarios, USD bn



Source: Standard Chartered Research

Box 4: CNH – A threat to the HKD?

The recent rapid development of the CNH market in Hong Kong has rekindled concerns that the HKD will ultimately be marginalised. These concerns first arose in July 2009, when the cross-border CNY trade settlement pilot scheme was launched, and when Beijing announced its intention to turn Shanghai into an international financial centre by 2020. There appears to be a growing belief that the process of eventually replacing the HKD with the CNY has begun, with the CNH acting as the catalyst. Yet we maintain our view that, as with the possibility of a CNY-HKD peg, a long list of preconditions must be met before fully fledged currency substitution can occur – and this will take years. In the meantime, the HKD can co-exist with an appreciating CNY and a rapidly expanding CNH market.

Currency substitution can be defined as a situation in which a foreign currency is used significantly by local households and businesses as a transaction and investment vehicle, and in which a significant share of domestic residents' assets is denominated in that foreign currency. What we have seen with the CNY trade settlement scheme does not constitute currency substitution in the strictest 'displacement' sense – companies in Hong Kong commonly settle trades using the USD and the euro, and adding the CNY to the list of options does not change the fundamental picture. Similarly, the increased availability of CNH investment products has so far done little to distinguish the CNY from the many other foreign currencies that account for almost half of Hong Kong's total deposits. Regulatory limitations (personal CNH loans are still prohibited) also impede a behavioural change in consumer borrowing, and retailers that accept CNY payment still mostly cater for mainland tourists.

Some commentary also suggests that the growth of CNY deposits in Hong Kong creates a new policy option, or 'degree of freedom', for the HKMA in managing the currency regime. However, it is difficult to build a credible scenario which would substantially improve the policy options for Hong Kong. Allowing the HKD to mirror the performance of the CNY, for example, would simply give the HKD the status of a fully convertible currency that would potentially track CNY appreciation. This would exacerbate the potential problem of hot-money speculative flows being attracted to Hong Kong's asset markets (these have been relatively well contained so far given the stability of the HKMA's Aggregate Balance in recent quarters). It is noteworthy that the Basic Law extends beyond guaranteeing the HKD's role as legal tender in Hong Kong. It also states that no FX control policies shall be applied in Hong Kong, that the HKD will be "freely convertible", that the "Government of the Hong Kong SAR shall safeguard the free flow of capital within, into and out of the region", and that the issuance of Hong Kong currency must be backed by a 100% reserve fund. These elements are inter-related; any change in one element could threaten each of the others, and (ultimately) the authorities' ambitions to build Hong Kong's role as a trading centre for offshore CNH-denominated assets.

Longer-term, we believe that 'renminbisation' will indeed be the end-game for the HKD. However, that will happen only under the right conditions (a fully convertible and highly internationalised CNY; improved monetary transparency, credibility and stability on the mainland's part; and low transaction costs relative to the HKD) and for the right reasons (as a natural result of 'network externalities' due to closer economic and financial ties between Hong Kong and the mainland). In the meantime, the HKD's credibility will continue to be derived from the time-tested, rule-based Linked Exchange Rate System. There is also the currency's symbolic value – the USD-HKD peg is a symbol of Hong Kong's fiscal prudence and policy discipline, of its high degree of internationalisation and economic freedom, and of its uniqueness relative to most other Chinese cities. All are essential to the smooth functioning of an international financial centre, and of the key testing ground for Beijing's CNY internationalisation experiment.



3. Offshore CNY trading: Where next, and how much?

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Exponential growth in CNY trade settlement opens way for broader range of currencies to be traded directly versus CNY

Where will CNY trade settlement grow most rapidly?

We expect CNY trade settlement to expand exponentially, potentially accounting for 15-20% of China's total trade (and within that, more than 20% of China's imports) by 2015. A key aspect of CNY trade settlement is offshore quoting of the CNY. In H1-2010, two EM currencies were added to the China Foreign Exchange Trade System (CFETS) – the Malaysian ringgit (MYR) on 19 August and the Russian rouble (RUB) on 22 November. These were the sixth and seventh currencies to be traded on the system after the USD, HKD, EUR, JPY and GBP.

As we consider other currencies which could potentially be quoted in China (and vice versa), we note that the Chinese authorities have so far concentrated on the currencies of major trading partners, or on currencies which are major components of the international financial system. The USD, EUR and JPY easily fit both criteria; Hong Kong also has a large natural total trade exposure, with the sum of its total exports and imports since the beginning of 2008 following close behind the G3. The driving force behind China's ambitions to allow use of the CNY for trade settlement is to promote trade and mitigate the costs of foreign exchange volatility.

Trade patterns point to KRW and TWD as potential new candidates for inclusion in the CFETS system

Table 1 lists China's largest trading partners. Based solely on trading patterns, China could have an interest in having the Korean won (KRW) and the Taiwan dollar (TWD) traded on the CFETS and allowing offshore trading of the CNY in Korea and Taiwan. This could be followed by the Australian dollar (AUD), Singapore dollar (SGD) and Indian rupee (INR). Currently, trade between China and these economies is typically settled in USD. Hence, China and these economies could benefit from settling trade in CNY or their domestic currencies.

Table 1: China's largest trading partners, as % of its total trade*

| Europe | US | Japan | HK | Korea | Taiwan | Australia | Malaysia | Singapore | Russia | India |
|--------|------|-------|-----|-------|--------|-----------|----------|-----------|--------|-------|
| 19.6 | 13.3 | 10.4 | 8.1 | 7.2 | 5.1 | 2.5 | 2.3 | 2.1 | 2.0 | 2.0 |

*Data covers January 2007-October 2010,
Sources: CEIC, Standard Chartered Research*

Another consideration for offshore trading of the CNY, and for which currencies could be traded on the CFETS, is current offshore trading of the CNY and the interests of other countries in allowing offshore trading of their currencies. Table 2 lists the countries with the largest average daily USD-CNY turnover. Note that this is based on data from April 2010, before the CNH market was created in July. The data clearly illustrates Singapore's role as a major financial centre for CNY trading, alongside China and Hong Kong.

Table 2: OTC USD-CNY turnover by country* Daily averages, USD mn

| China | Hong Kong | Singapore | UK | US | Taiwan | Australia | Japan | Korea | Malaysia |
|-------|-----------|-----------|-------|-------|--------|-----------|-------|-------|----------|
| 9,742 | 10,690 | 7,447 | 6,772 | 3,025 | 201 | 173 | 111 | 12 | 2 |

** Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products;
Source: BIS Triennial Central Survey, December 2010*



A key consideration is whether a country allows its currency to be traded offshore. Given that the KRW and the TWD are not currently allowed to be traded offshore on a deliverable basis, the Korean and Taiwanese authorities may be more reluctant to allow their currencies to be traded in China. In addition, they may have limited interest in allowing the CNY to be traded in Korea and Taiwan. However, the success of the CNH market may present a challenge for the Korean and Taiwanese authorities in the coming years.

In the case of Taiwan, the need for a CNY-TWD clearing and settlement system is high on the agenda of cross-strait relations. However, little progress appears to have been made so far. There may also be concerns about risks to TWD stability, a long-held policy objective of Taiwan's central bank. Hong Kong may be a more convenient and neutral position to facilitate CNY-TWD clearing (see **On the Ground, 13 September 2010, 'Taiwan – CNH challenges and opportunities'**). In the case of Korea, it is possible that the CNY will be quoted in Korea before the KRW is quoted in China.

Deliverability of SGD and AUD may leave authorities tolerant of offshore trading versus CNY

Although Korea and Taiwan are substantially larger trading partners for China than Singapore and Australia, the SGD and AUD may be quoted on the CFETS before the KRW and TWD. Singapore's role as a centre for foreign exchange trading, and its relatively deep financial markets, increase the likelihood of the CNY deliverable being quoted in Singapore and the SGD being traded on the CFETS. In addition, the SGD and AUD are deliverable currencies, which implies that the authorities are likely to be more tolerant of offshore trading of their currencies than the authorities in Korea and Taiwan.

The regionalisation of CNY trading will be an intermediate step towards full internationalisation

The bottom line is that CNY trade settlement is likely to rise most rapidly with countries (1) that have close trade links with China; (2) where bilateral trade is currently settled in a third currency; and 3) where the authorities are tolerant of offshore trading of their local currencies and local trading of the CNY. This includes North East Asia, Malaysia, Singapore, Russia and Australia. Hence, for trade settlement purposes, the CNY is likely to go through a period of regionalisation first, which is a key step towards CNY internationalisation.

Future turnover of the CNY

Taking our analysis one step further, we provide an estimate of the average daily turnover of the CNY in 2020 relative to G10 currencies. To estimate the growth in the CNY over the coming 10 years, we use growth in trading volumes of G10 currencies during the 2000s and consider the size of China's GDP and trade in 2020. Table 3 shows growth in G10 currencies in the 2000s. During this period, the fastest-growing G10 currencies were the AUD and the New Zealand dollar (NZD). This likely reflects (1) the sharp rise in both countries' trade during the 2000s, (2) the low base of the currencies' average daily turnover in 2001, and (3) the fact that the AUD became a minor reserve currency during the 2000s.

Table 3: Foreign exchange turnover by currency, G10 currencies

Growth rate from 2001-10 in specified currency against all other currencies

| | USD | EUR | JPY | GBP | AUD | CHF | CAD | SEK | NZD | NOK |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| % 2001-10 | 219 | 252 | 184 | 230 | 508 | 257 | 302 | 189 | 842 | 197 |

Sources: BIS 2010 Triennial Central Bank Survey, Standard Chartered Research



According to the Bank for International Settlements' (BIS') 2010 Triennial Central Bank Survey, average daily turnover of the CNY versus all other currencies is USD 34.261bn. Table 4 shows the rise in CNY turnover over the last 10 years.

Table 4: Foreign exchange turnover of the CNY

CNY against all other currencies, daily average, USD mn

| | 2001 | 2004 | 2007 | 2010 |
|-----|------|-------|--------|--------|
| CNY | 95 | 1,742 | 14,631 | 34,261 |

Sources: BIS 2010 Triennial Central Bank Survey, Standard Chartered Research

CNY will be the world's fastest-growing currency in terms of average daily turnover.

To estimate the average daily turnover of the CNY compared to G10 currencies through 2020, we make the following assumptions:

- The CNY will be the world's fastest-growing currency in terms of average daily turnover, mirroring the early and middle phases of G10 currency development. This is based on the following factors: (1) China is the world's largest trading nation, and we estimate that its economy will surpass the US economy in the early 2020s; and (2) China will take rapid steps to internationalise the CNY for trade settlement, and the CNY is likely to become a minor reserve currency by 2020. Specifically, we assume that during the period from 2010-20, the CNY's average growth rate will be similar to the 2007-10 period.
- During the 2010-20 period, the growth rates of the individual G10 currencies will be similar to their average growth rates from 2007-10 and to the growth rate of global FX market turnover from 2007-10.

We show our estimates in the table below:

Table 5: Estimates of FX turnover in 2020 by currency (G10 currencies and the CNY)

Specified currency against all other currencies, daily average, USD mn

| | USD | EUR | JPY | GBP | AUD | CHF | CAD | SEK | NZD | NOK | CNY |
|------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| 2020 | 6,227 | 3,208 | 1,783 | 773 | 703 | 435 | 577 | 116 | 91 | 50 | 440 |

Sources: BIS 2010 Triennial Central Bank Survey, Standard Chartered Research

CNY turnover will potentially surpass GBP, AUD and CAD turnover by 2020

We make the following observations: By 2020, average daily turnover of the CNY is likely to be substantially larger than that of 'small' G10 currencies such as the NZD, Swedish krona (SEK) and Norwegian krone (NOK), and could be around the same size as that of the Swiss franc (CHF). By 2020, CNY turnover may even surpass 'medium-sized' G10 currencies such as the British pound (GBP), AUD and Canadian dollar (CAD). However, average daily CNY turnover is likely to remain substantially smaller than that of the G3 currencies.



4. Corporate and investor opportunities in CNH spot, forward markets

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Corporates have a new range of hedging and cash management options given CNH market liberalisation

A new liberal CNY regime for corporates and investors

Multinational corporations have long had access to CNY for trade-related purposes, while mainland corporations have direct access to the CNY. However, the creation of the CNH market is an important development for both, opening up new opportunities for hedging and cash management. Any corporate can now hold CNY accounts either directly with a Hong Kong trade settlement bank – such as Standard Bank (Hong Kong) Limited – or with a bank which has a nostro account with a Hong Kong trade settlement bank. A corporation without any immediate trade-related reason for holding CNY but with potential future CNY exposure (say, related to an investment in China) can build exposure to CNY now by acquiring CNH-denominated assets. On the liability side, corporations can consider issuing CNH-denominated debt as a liability match to mainland assets. At a more prosaic level, multinational corporations may now be willing to accept CNH in payment – secure in the knowledge that they will be able to use it for trade-related payments (perhaps on the mainland) at some point in the future and hold it in an appropriate CNH-denominated asset in the short term.

For international institutional investors, the pool of CNY-linked assets has been broadened considerably. Not only can investors hold CNH bank deposits and CNH-denominated debt free of direct mainland regulatory constraints, but active USD-CNH forward markets have also developed. Investors can now potentially sidestep the negative carry implied by USD-settled CNY non-deliverable forwards.

CNH market liquidity and the CNH-CNY ‘premium’

It is important for corporates and investors alike to note that there is no single CNH FX market. China’s capital account remains largely closed; as a result, the degree of fungibility between the CNY onshore and the CNH offshore markets is limited. Banks will typically quote USD-CNH in two contexts:

- USD-CNH quoted in a trade-related transaction is quoted with direct reference to the onshore market – giving similar pricing and similar liquidity.
- USD-CNH for non-trade-related purposes (such as purchasing a CNH-denominated structured product) has its own pricing and liquidity, reflecting specific demand and supply conditions for CNH deliverable in Hong Kong.

Banks, and particularly the trade settlement banks, will need to maintain separate accounts to manage their trade-related and non-trade-related exposure. For the multinational corporate, the picture is simpler. A single CNH account can be used for ‘general purpose’ or trade-settlement transactions, given the appropriate documentation.

Early 2011 has brought a rebound in CNH spot and forward market liquidity

Spot-market liquidity for ‘general purpose’ CNH has improved markedly since August 2010, and although there was a seasonal lull in activity ahead of year-end, early 2011 is seeing a new upswing in market volumes. Spot FX trading volumes are around USD 600mn per day (including customer transactions netted out within individual Hong Kong trade settlement banks), while swap-market volumes are running at roughly two-thirds of that. Transaction sizes of between USD 50mn and 100mn are now common out to the 1M forward point; beyond that, sizes are USD 10-



20mn (with the 1Y point the longest tradable tenor). Typical bid-offer spreads are now down to just 30-40 pips in the spot market. (SCBHK08 on Reuters shows Standard Chartered Bank (Hong Kong) Limited's own indicated USD-CNH prices.)

The limited degree of fungibility between the onshore CNY and offshore CNH markets means that there are not only two spot rates, USD-CNY and USD-CNH (for general purpose), but there are also three forward curves. The onshore deliverable forward for USD-CNY, the offshore non-deliverable forward for USD-CNY (USD-settled and indexed to USD-CNY), and the entirely new offshore deliverable forward market in USD-CNH. Table 1 summarises each market's key characteristics.

Table 1: Comparing CNH, CNY NDF and CNY onshore markets

| | CNH | CNY NDF | CNY onshore |
|----------------------|---|---|--|
| Liquidity | Deep spot to three months; modest liquidity at 1Y | Deep out to 2Y, light out to 3Y point | Deep |
| Match to CNY payable | Exact | Exact (USD settled) | Exact |
| Carry | Negative on forward, positive as a CNH asset | Negative (market discounts future CNY appreciation) | Negative on forward, positive as onshore asset |
| Access | Open | Open | Restricted |

Source: Standard Chartered Research

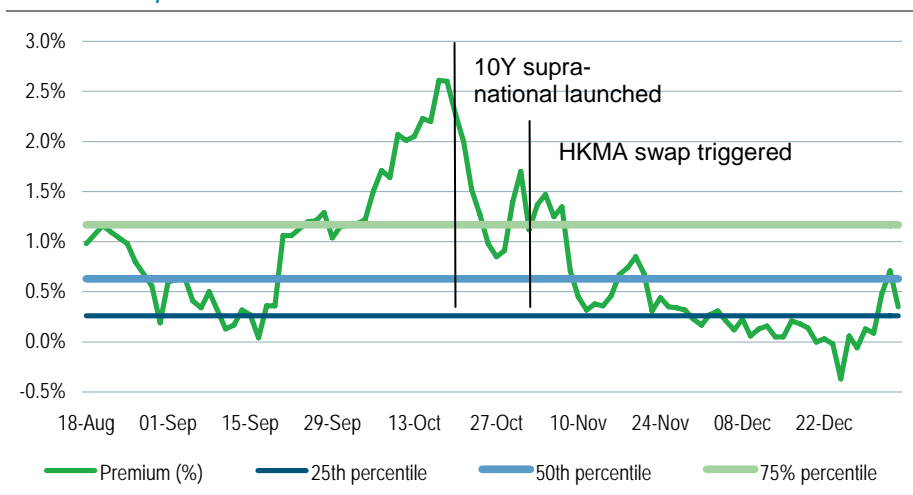
Analysing the CNH premium

CNH should trade at a premium to CNY given the option of using it for non-trade-related purposes

We now have just over four months of experience trading in 'general purpose' USD-CNH, and we can draw some early conclusions about the pricing of CNH offshore relative to the CNY onshore. We argue that under normal market conditions, CNH should trade persistently rich to the onshore CNY, given that it can be used for trade-related settlement purposes (and remitted back to mainland China) or invested in CNH-denominated assets with positive carry. This additional optionality has value. However, the 'equilibrium' level for the CNH premium is not readily identifiable. Investors have an economic incentive to buy CNH when the premium is at a low level given the positive carry in CNH and prospective CNY gains. Mainland corporations, in contrast, have an economic incentive to make cross-border transfers into Hong Kong before buying USD at the USD-CNH rate (rather than USD-CNY onshore) when the CNH premium is relatively elevated. Repricing of the CNH premium typically reflects shifts in the balance of power between the investor and corporate flows.

Chart 1: The 'CNH premium' since mid-August 2010

Peak in CNH premium linked to issuance flow



Sources: Bloomberg, Standard Chartered Research



CNH-denominated bond issuance volume plays an important role in driving the CNH premium

While there is some data on the CNH premium since July, daily readings of contemporaneous CNH and CNY trading are only available from mid-August onwards. Over the whole period, the median CNH premium has stood at 0.63%. The spread peaked in mid-October at around 2.6% amid the launch of a 10Y CNH supranational bond, which was USD-settled (in a bid to increase investor access to the issue). The implicit USD-CNH exposure (for the lead manager) was likely hedged ahead of the issuance, driving the CNH premium to its peak. The episode underlined the fact that investors must carefully evaluate prospects for the CNH premium in timing asset allocation decisions. In the month following the deal, the CNY rose marginally (by 0.2%), but the CNH premium slumped by 1.9%. As CNH-denominated bond issuance faded in late December 2010 and market conditions thinned, CNH has traded as much as 0.3% cheap to CNY.

The outlook for the CNH premium is a matter of political economy rather than just economics. The pace at which importers are allowed to transfer funds from the onshore to the offshore market, and the pace at which CNY is created in Hong Kong ahead of remittance to the mainland, are both closely controlled by the mainland authorities. So far, the official approach to cross-border flows appears to be rather liberal. The recent sharp expansion of the trade settlement scheme suggests that the CNY internationalisation project still has plenty of momentum, and the steady expansion of the CNH pool in Hong Kong is an integral element of that. Against this backdrop, the mainland authorities' liberal approach to cross-border transfers may well persist.

Early 2011 rebound in CNH premium may be extended on new CNH bond issuance, faster CNY appreciation

Nevertheless, there are grounds to expect the CNH premium to rebound early in 2011, and the 0.63% median may be a natural centre of gravity for the premium in the coming quarters. The new year will likely see an upturn in CNH-denominated bond issuance, alongside new CNY appreciation against the US dollar. Both of these developments will likely be associated with new investor inflows into CNH assets. As the CNH premium rebounds, this will create more attractive opportunities for corporations to make (trade-related) switches from the onshore into the offshore market ahead of any FX transaction.

Opportunities in CNH forward markets

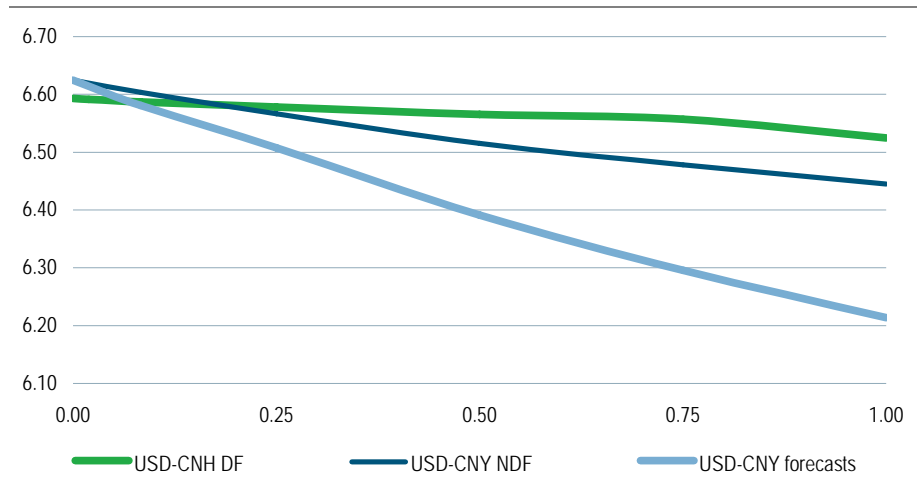
Analysis of the USD-CNH forward curves requires care, as liquidity is deepest out to the 3M forward point. Beyond that, maturity bid-offer spreads widen out and are typically indicated 100 pips wide. In this analysis, we focus on the bid side of USD-CNH, the NDF mids, and Standard Chartered Bank forecasts based on interpolations between the published forecasts.

- The erosion of the CNH premium in recent months has lifted the whole of the USD-CNH forward curve relative to the non-deliverable USD-CNY forward curve, and the positive differential now stretches out to 1.1% at the 1Y forward point. Corporates wishing to hedge future CNY payables should look for opportunities to do so in USD-CNH forwards rather than the non-deliverable forwards. Relative value investors should look to *buy* USD-CNY in the NDFs and *sell* USD-CNH in the offshore deliverable forwards given that CNH should not trade cheap relative to CNY under normal market conditions.



Chart 2: The USD-CNY NDF, USD-CNH and Standard Chartered Bank USD-CNY forecasts

USD-CNY forecast profile is well below



Sources: Bloomberg, Standard Chartered Research

- The biggest discrepancy in the forward space, however, is between these two forward curves and our forecast profile for USD-CNY. The gap between the USD-CNY NDF and our forecast widens from 1.2% at the 3M forward point to 4.0% one year out. Where CNH forward liquidity is a constraint, corporates should still look to the USD-CNY non-deliverable curve to hedge future CNY payables, while we recommend that investors hold short USD positions in the 3M and 1Y USD-CNY NDFs.
- While the USD-CNH DF and NDF curves are both now downward-sloping, the inversion remains steepest in the NDF curve (the 1Y forward is 1.1% below the 6M in the NDF, versus just 0.6% below in the CNH curve). Investors can earn relatively favourable roll-down by buying USD in the 1Y NDF curve and selling USD in the 1Y CNH deliverable forward curve. Note that this strategy also brings potential mark-to-market volatility, given that NDF forward curve pricing tends to be more sensitive to swings in market expectations of future CNY appreciation.

Finally, note that the shape of the USD-CNY deliverable forward curve has begun to stabilise after a bout of volatility in the early months of the new market. The curve is now uniformly downward-sloping out to one year (particularly on the left-hand side, where the market bids USD). In general, investors and corporates should consider 'buy and hold' strategies in positive-yielding CNH-denominated assets as a substitute for trading in the USD-CNH forwards.

Table 2: USD-CNY forward analytics and our USD-CNY forecasts (end-quarter profile)

| | USD-CNY NDF | USD-CNH DF | USD-CNY forecast | USD-CNY NDF vs. forecast | USD-CNH vs. forecast | USD-CNY NDF vs. USD-CNH DF |
|---------------|-------------|------------|------------------|--------------------------|----------------------|----------------------------|
| Spot | 6.6245 | 6.593 | NA | NA | NA | 0.48% |
| 3M | 6.5665 | 6.578 | 6.49 | 1.18% | 1.36% | -0.17% |
| 6M | 6.5152 | 6.565 | 6.37 | 2.28% | 3.06% | -0.76% |
| 9M | 6.4781 | 6.557 | 6.28 | 3.15% | 4.41% | -1.20% |
| 1Y | 6.445 | 6.525 | 6.2 | 3.95% | 5.24% | -1.23% |
| 2Y | 6.3 | n/a | 5.95 | 5.88% | NA | NA |
| 6M vs. 1Y (%) | 1.08% | 0.61% | 2.74% | NA | NA | NA |

Sources: Bloomberg, Reuters, Standard Chartered Research



5. An update on CNH bond and rates markets

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China's MoF continues to show strong support for the development of the CNH market

In November 2010, China's Ministry of Finance (MoF) auctioned a series of new CNH bonds to extend a benchmark yield curve offshore. While no mention was made of a regular issuance programme, we see this move as another sign of the authorities' strong commitment to developing the CNH offshore market.

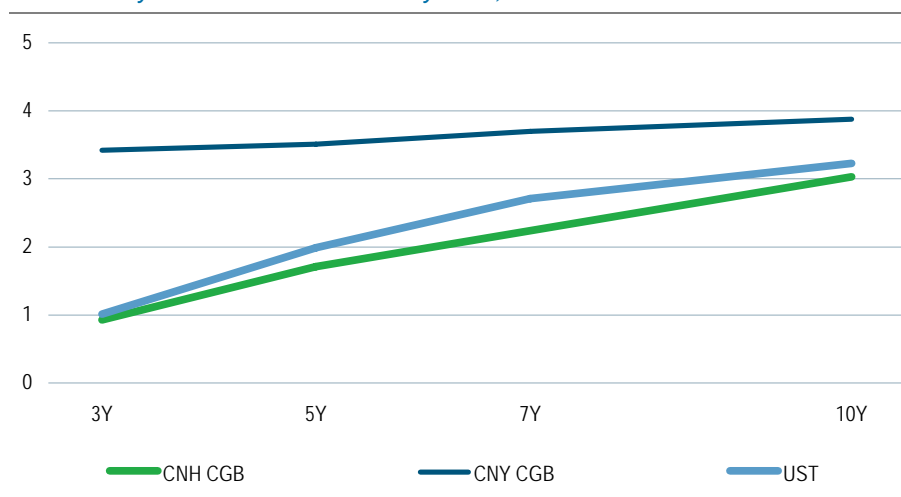
The CNY 5bn auction of 3Y, 5Y and 10Y bonds was up to 10 times oversubscribed, reflecting rising demand for CNH assets. The MoF also opted for the first time for a Dutch-type auction, which tends to offer greater price transparency but also tends to be biased towards lower yields. The Dutch auction process, in which participants bid competitively, is also known as a 'descending price auction'. Only bids at or below the cut-off yield set by the central bank are accepted and allocated at the cut-off yield. Cut-off yields (1% for the 3Y bond, 1.8% for the 5Y and 2.48% for the 10Y) came out well below onshore bond yields of the same tenors; China's onshore government bond market remains mostly closed to offshore investors, who can only access it through the Qualified Financial Institutional Investor (QFII) programme. By contrast, the onshore government bond yield curve has bearish flattened dramatically in the past few months, with the 7-day repo rate reaching a 30-month high after a series of monetary policy tightening measures by the PBoC to counter inflationary pressures.

Recent issues have been extremely well-received, benefiting from a still unbalanced demand/supply equation

While recent risk aversion has led to some market consolidation across emerging markets, offshore Chinese government bonds (CNH CGBs) appear to be emerging as a new safe-haven investment, with medium-term tenors yielding marginally above US Treasuries at issuance and benefiting from an appreciating currency. We note, however, that aggressive bids for CNH CGBs have pushed yields below USTs, which are currently on a bearish trend.

The impressive rise in CNH deposits to CNY 279.6bn at end-November 2010 (up 29% m/m from October) also creates an incentive for a broader base of issuers to tap that pool, where demand far outstrips the number of bonds on offer.

Chart 1: CNH CGBs trade below US Treasuries and onshore CGBs
Benchmark yield curves as of 5 January 2011, %



Sources: Bloomberg, Standard Chartered Research



Rapidly growing demand will set the stage for faster growth in supply

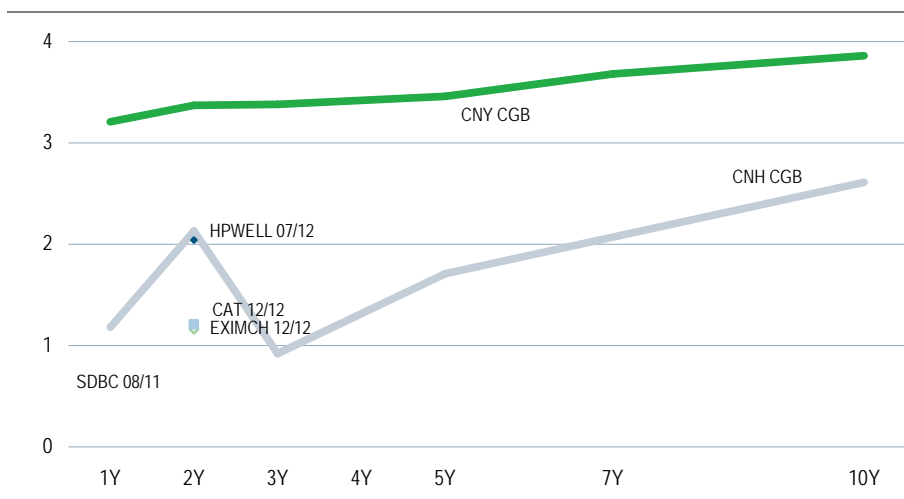
Indeed, CNH gross bond issuance more than doubled in 2010, rising to CNY 41bn in December from CNY 16bn in 2009. With around CNY 60bn of bonds outstanding, demand continues to far exceed supply, disincentivising secondary trading and exaggerating the downward trend in yields.

However, liquidity improved towards the end of December, increasing from CNH 10mn-20mn to CNH 50mn daily on the interbank market. The extremely low yields of recent issues finally gave ground to a bout of profit-taking, with more investors switching from one issue to another rather than holding them to maturity.

Hence, while CNH assets have recently attracted indiscriminate demand, sometimes overlooking the credit quality of the underlying names, we expect this trend to correct in the longer run, once the balance between supply and demand is restored. As liquidity improves, CNH bonds might also become eligible for inclusion in global bond indices.

Chart 2: Recent CNH issues trade rich on aggressive bids

Corporate and government bond yields as of 05 January 2011, %



Sources: Bloomberg, Standard Chartered Research

CNH derivatives are still in their infancy but should gain in terms of liquidity and diversity as CNH bond issuance picks up

As more bond issues comes on-stream, we expect the offshore interbank market to become more transparent, helping to create a reference rate for CNH derivatives.

The CNH options market currently has a daily turnover of USD 20-40mn. Cross-currency swaps (CNY fixed, USD floating) exist for tenors up to 5Y, although the most liquid tenors remain the 1Y and 2Y, where the bid/ask spread is around 30-40bps for a standard-sized deal of CNY 50mn. Demand has so far been relatively limited due to the low implied yield, but is expected to pick up as more assets come on-stream.

Due to the lack of an offshore interbank rate for now, interest rate swaps are currently referenced against onshore 3M SHIBOR, and only CNY 200mn have been traded so far. The bid/offer spread is around 5-10bps for an average ticket size of CNY 50-100mn.

While CNH rates products are still in their infancy, we expect the rise in CNH deposits to continue to foster the rapid development of the entire CNH market. The asset side is expected to rapidly gain strength in 2011, allowing for greater use of hedging products down the road. As a reference, the onshore CNY IRS market opened in 2006 and has a daily trading volume of USD 1bn.



Table 1: Snapshot of CNH-denominated product availability

| CNH product | Availability | Remarks |
|----------------------|---------------------|--|
| Spot | Yes | Daily liquidity USD 500-600mn interbank |
| Forward | Yes | There are now CNY DF, CNY NDF and CNH DF curves |
| FRA/CCS | Yes for CCS | Small volumes (CNY 400mn since October 2010), tenors up to 5Y |
| Money market | Yes | Interbank trading relatively thin amid CNH 'pooling' in a small number of institutions |
| CDs/structured notes | Yes for CDs | CDs launched; structured notes may be seen soon |
| IRS | Yes | Against 3M SHIBOR, up to 10Y, only CNY 200mn traded to date |
| Structured products | Not all | Fully funded structures so far |
| Bonds | Yes | Growing number of issues, daily market liquidity is CNH 20-50mn |

Source: Standard Chartered Research



Appendix 1. The CNH timeline

2003-2007

December 2003: The HKMA announced the beginning of CNY business on a trial basis in Hong Kong. Initial development of the offshore market was extremely limited, basically confined to the build-up of CNY in low-yielding retail bank deposits and the provision of restricted personal CNY services.

June 2007: The PBoC and National Development and Reform Commission (NDRC) announced that financial entities incorporated in China were allowed to issue CNY bonds in Hong Kong, subject to approval. This was the first step towards creating more uses for CNY funds in Hong Kong.

2008-2009

December 2008: China signed its first bilateral currency swap arrangement with South Korea. Shortly thereafter, the PBoC and the HKMA signed a currency swap agreement to provide CNY liquidity of up to CNY 200bn with a renewable term of three years. The list has since increased to eight counterparties.

June 2009: The PBoC launched the pilot scheme for CNY settlement of cross-border trade between Shanghai and four cities in Guangdong province on the one hand, and Hong Kong and Macau on the other. This scheme allowed CNY conversion within selected cities between the onshore and offshore markets for trade-related transactions.

September 2009: China's Ministry of Finance launched two tranches of CNY bonds (CNY 6bn in total) to retail and institutional investors in Hong Kong. This was the first CNY-denominated sovereign offering outside of the Mainland.

February 2010: The HKMA issued a clarification that participating banks could develop CNY business based on regulatory requirements and market conditions in Hong Kong, as long as these businesses do not entail the flow of CNY funds back to the mainland.

June 2010: Six regulatory bodies in China released a joint circular, expanding the scope of the CNY trade settlement pilot scheme to 20 mainland provinces on the one hand, and all overseas countries and regions on the other.

July 2010: The PBoC and the HKMA signed a Supplementary Memorandum of Co-operation which broadened the scope of CNY holders to all corporates, and differentiated between treatment of their trade- and non-trade-related CNY conversions. The development of CNY financial products has also picked up since.

August 2010: The PBoC announced that foreign central banks, CNY clearing banks, and cross-border CNY trade settlement participating banks could start participating in the interbank bond market in mainland China. This is subject to a quota system, with specific limits to be approved by the PBoC.

2010

August 2010: Standard Chartered Bank managed a CNY 200mn bond issuance for McDonald's Corporation. This was the first issuance of a CNY-denominated bond by an overseas non-financial corporation outside the mainland. This signified the emergence of a new funding channel for international companies to raise working capital for their China operations.

October and December 2010: The depletion in late October of the trade-related conversion quota granted to the clearing bank led to a revamp of the arrangement in December. Refinements included an expanded quota (for Q1-2011), plus other measures to discourage offshore CNY hoarding and speculation.

Appendix 2. ‘Dim Sum’ bond guide

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Development of the CNH bond market

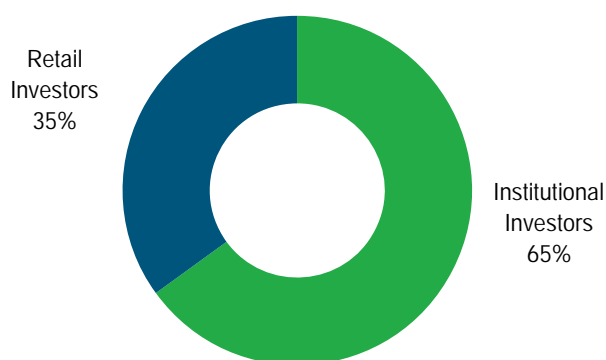
In 2007, based on the interim measures jointly formulated by the PBoC and the National Development and Reform Commission (NDRC), financial entities incorporated in mainland China were permitted to issue CNY-denominated bonds in Hong Kong. The market got a slow start in 2007 and was boosted by the first offshore CNY-issue launched by the Chinese Ministry of Finance in September 2009. In February 2010, the HKMA further clarifies the supervisory principles and expand the operational arrangements of cross-border CNY fund flows and the development of CNY business in Hong Kong (including issuance of CNY bonds in Hong Kong). The guiding principles are as follows:

- Any entity, local or foreign, can issue CNY bonds in Hong Kong, as long as it qualifies under the HKMA's general bond-issuing criteria.
- Cross-border CNY fund flows (including CNY bond proceeds) to and from mainland China should comply with the regulations stipulated by the mainland authorities. Participating Authorised Institutions (AI) in Hong Kong will process CNY in accordance with their usual banking practices in Hong Kong.
- AIs are permitted to develop CNY businesses based on regulatory requirements in Hong Kong as long as these businesses do not entail the flow of CNY funds to the mainland China (otherwise, the approval of the mainland authorities is required).

The streamlining of clearance and settlement of CNH bond transactions has further aided the development of the CNH bond market. CNH bonds can now be cleared via Euroclear, Clearstream or the Central Moneymarkets Unit Service (CMU). CMU is operated by the HKMA and provides computerised clearing and settlement facilities for both HKD and foreign-currency debt settlement, linked to Euroclear and Clearstream. The CMU Lodging Agent and Fiscal and Paying Agent are required to be members of CMU; Standard Chartered (Hong Kong) Limited is a member of the CMU. Since CNH bonds are settled and cleared through these internationally recognised clearing mechanisms, the issuer takes no payment risk at settlement.

Chart 1: Investor types

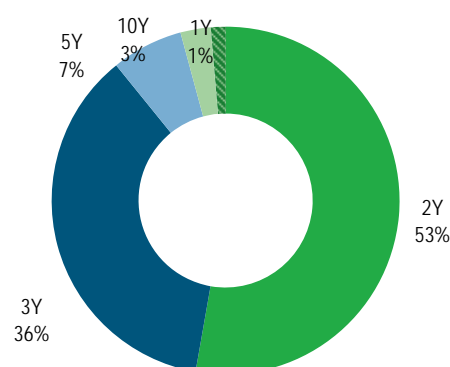
As of December 2010



Source: Standard Chartered Research

Chart 2: Tenors

As of December 2010



Source: Standard Chartered Research

Fund repatriation to the mainland requires regulatory approval

Fund repatriation to the mainland can be carried out in one of two ways, subject to regulatory approval by the mainland authorities: (1) a shareholder loan to the mainland subsidiary, or (2) equity capital injections into the mainland subsidiary. The advantages of a shareholder loan are as follows:



- It is easier to make debt principal and interest payments than dividend and capital reductions.
- Loan terms can be tailored to match the debt service on the CNY bond.
- Ongoing interest and ultimate repayment of principal on the loan can be staggered against the payment schedule for the CNY bond.

Further points worth noting are that the interest rate on the loan should take into account withholding tax and timing mismatch, and that interest payments are tax deductible at 25%.

Disadvantages of shareholder loans and equity injections

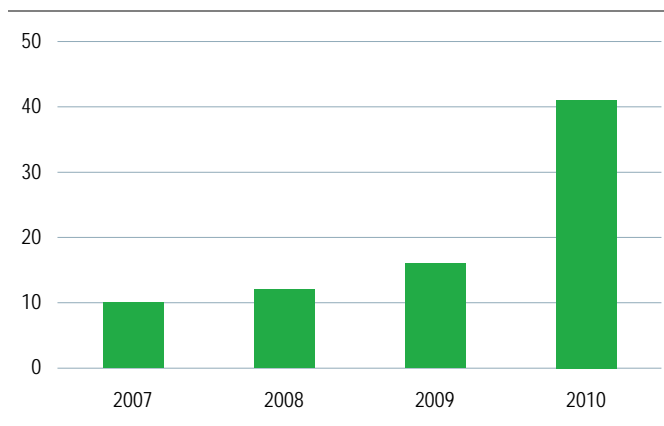
Shareholder's loans have some disadvantages. They have to be approved and registered with China's State Administration of Foreign Exchange (SAFE). Furthermore, there is a regulatory 'thin capitalisation' limitation which stipulates that the amount of a shareholder's loan has to be capped at a specified portion of total investment (this cap is set at the 'foreign debt quota' of the receiving entity). Finally, there is a withholding tax on coupon, set at 7% for interest and 5% for dividend payments to Hong Kong recipients, and at 10% for remittances to other countries.

The disadvantages of equity capital injections are manifold:

- Cash flow from mainland operations can only be extracted in the form of dividends; the issuer would have to repatriate capital to Hong Kong to repay the principal of the CNY bond at maturity.
- A 10% dividend withholding tax was introduced in 2008.
- Dividends are paid out of after-tax profits; hence, there are no tax benefits.
- Dividend payments are subject to the availability of distributable funds.
- Capital repayment/redemption requires regulatory approval (i.e., equity is trapped until the subsidiary is dissolved).

Chart 3: Issuance volume

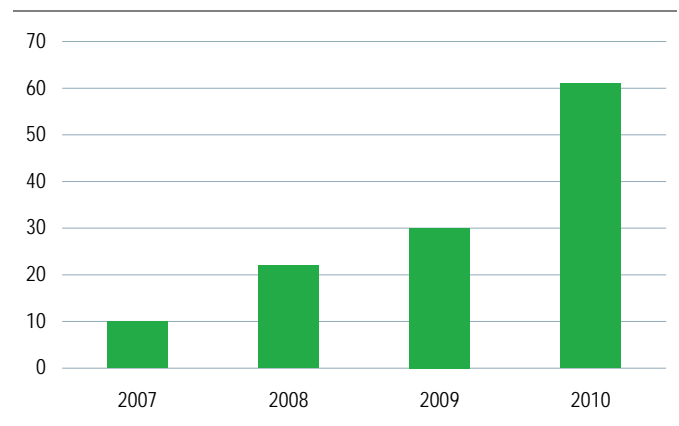
CNY bn



Source: Standard Chartered Research

Chart 4: Market size

CNY bn



Source: Standard Chartered Research

On balance, it is our view that an issuer of CNH would be better advised to on-lend the proceeds of the offering to its onshore subsidiary via a shareholder loan, rather than in the form of an equity injection. The process for obtaining the required approvals to remit CNH funds onshore in the form of a shareholder loan is outlined below.

Approval process for remitting CNH funds onshore via a shareholder's loan

Regulatory approvals for bringing bond proceeds into China are the most time-consuming aspect of CNH issuance, so the application process should be started as early as possible. In parallel to the approval process, there is sufficient time for the issuer to prepare the necessary supplemental documentation to its existing EMTN program to facilitate efficient access to the CNH market.



a) The approval process (subject to change)

- Case-by-case basis
- Initial application to the local PBoC cross-border office.
- The local PBoC cross-border office co-ordinates with respective local SAFE office for consideration.
- The local PBoC cross-border office notifies of the application process and procedures.
- After initial approval is received, the issuer will register the final shareholder's loan agreement indicating the size, interest rate, payment dates and maturity date, among other terms; the issuer can then announce the CNY bond transaction.

b) Application requirements

At present, SAFE requires the following:

- Cover letter
- Application letter
- Shareholder's loan agreement (in draft form)
- Domestic company's business license and approval certificate
- Domestic company's IC card
- Annual review supporting evidence as per the foreign direct investment (FDI) system

The required contents of the application are subject to change.

c) Timing

- While there are no formal guidelines regarding the timing of shareholder's loan approvals, it is safe to assume the process will take one to three months from the date the application is submitted.
- Once the shareholder's loan application is submitted, it takes approximately 15 business days for SAFE to formally register the shareholder's loan.

In summary, while the process to remit funds onshore is somewhat onerous, this option is available to companies/issuers that have a requirement to use these funds onshore.

A widening spectrum of issuers

Finally, beyond the bank issuers that have dominated CNH issuance so far, Hong Kong-based Hopewell Holdings and, more significantly, US fast-food giant McDonald's Corporation became the first of the non-traditional issuers to tap the CNH markets in mid-2010. This opened the floodgates for a whole range of issuers to access the CNH markets later in the year. Noteworthy developments going into year-end 2010 included the issuance of high-yield CNH bonds by Galaxy Entertainment and Shui On Land, in addition to a landmark transaction from another well-known US issuer, Caterpillar. The Asian Development Bank (ADB) priced a CNH transaction as well, validating the CNH marketplace in Hong Kong as an emerging capital market in its own right. Just as the pioneers of offshore USD issuance in Europe heralded the development of the Eurodollar bond market in the 1960s, we expect these issuers of offshore CNH bonds to be the forerunners of a fully fledged CNH-denominated offshore 'Dim Sum' bond market in Hong Kong in the not-too-distant future.



Appendix 3. FAQ on the CNH market

1. What is the difference between RMB, CNY and CNH?

The renminbi, literally translated as “people’s currency”, or the Chinese yuan is the official currency in the mainland of the People’s Republic of China (PRC). It is issued by the People’s Bank of China, the monetary authority of the PRC. The official ISO 4217 abbreviation is RMB, although it is also commonly abbreviated as CNY (Chinese yuan). Recent changes have allowed for a deliverable CNY market to be developed in Hong Kong; and the abbreviation CNH refers to this offshore deliverable CNY market.

2. Can Standard Chartered quote USD-CNH to offshore companies or institutions for trade-related business?

Yes, we are ready to quote both trade-related and non-trade-related USD-CNH. The only constraint to non-trade-related transactions is liquidity.

3. Can offshore companies and institutions wire CNH funds to beneficiaries in China?

Yes, subject to documentation checks by the beneficiaries’ banks, trade-related CNH can be remitted to onshore beneficiaries who are approved Mainland Designated Enterprises (MDEs).

4. What types of accounts can offshore companies and institutions open, and where?

Offshore companies and institutions outside China can open both a CNH (offshore deliverable) account at Standard Chartered Bank (Hong Kong) Limited or through the Standard Chartered offshore branch network. Companies and institutions can also open a deliverable CNY Non-Resident Account (NRA) with Standard Chartered Bank (China). The type of account clients choose to open depends on their needs. If the account is a CNH account at Standard Chartered Bank (Hong Kong) or offshore network, the funds’ mobility and usage are more flexible, but liquidity is limited to that of the offshore interbank market for non-trade-related activities. A Non-Resident Account is more tightly regulated, but the liquidity pool is huge.

Please speak with your relationship manager to agree on the nostro account arrangement.

5. Whom can you contact for CNH nostro account opening and related queries?

Your first point of contact should be your Standard Chartered relationship manager.

6. Why do trade-related CNH transactions enjoy onshore CNY rates?

Standard Chartered Bank (Hong Kong) is an Authorised Participating Institution, which means it is allowed to square trade-related CNH transactions with Agent Banks and the Clearing Bank, subject to the latest HKMA regulations announced on 23 December 2010. Standard Chartered Bank (China) is an Agent Bank and can therefore access the onshore spot liquidity pool. For non-trade-related transactions, Standard Chartered Bank (Hong Kong) can only square the position in the Hong Kong interbank CNH market.

7. How can companies, institutions or Standard Chartered Bank offshore branches obtain USD-CNH pricing during non-Asia time?

Liquidity is insufficient during the Asian day, and is even lower at night. As such, clients can leave orders (far from market) during the Asia night-time; they can be filled during Asian trading hours. When momentum picks up, we will leave tradable levels or quote out of other Standard Chartered Bank branches.

8. What are Standard Chartered Bank (Hong Kong)’s current capabilities?

At the time of going to print, we can do CNH deposit and loan, spot and forward, cross-currency swap, interest rate swap, CNH-denominated structured investment, certificate of deposit, FX option and CNH-denominated bond issuance.



9. Can Standard Chartered sell any corporate bond or commercial paper to offshore clients?

There have been a number of CNH-denominated bonds issued by financial institutions and corporates, such as the McDonald's Corporation, so far. Standard Chartered has lead-managed some of these transactions and distributed them to offshore companies and institutions.

We expect the volume of bond issuance to pick up further in 2011.

10. How is CNH settled?

For transactions within Hong Kong, settlement will be done through the Real-Time Gross Settlement (RTGS) system and cleared at the Bank of China (Hong Kong).

For cross-border transactions (with China), payment instructions go through SWIFT to any of our settlement banks in China, such as Standard Chartered Bank (China).

11. Could an offshore company or institution which exports to China invoice in CNH?

Yes. The company or institution needs to open an account with Standard Chartered Bank (Hong Kong) – or another Standard Chartered offshore branch, provided this branch has a nostro with Standard Chartered Bank (Hong Kong) or Standard Chartered Bank (China) – in order to receive CNH. The company or institution can hedge the CNH on a forward basis, if necessary.

12. What is required for an onshore exporter to invoice in CNY?

The onshore exporter must be a Mainland Designated Enterprise (MDE). In addition, the offshore payer must have a CNH account at Standard Chartered (Hong Kong) or at a Standard Chartered Bank offshore branch that has a nostro account with Standard Chartered Bank (Hong Kong) or Standard Chartered Bank (China).

13. What is the difference between approved Mainland Designated Enterprises (MDEs) and non-MDEs?

An approved MDE can settle export and import (physical goods) as well as services trade in deliverable CNY with offshore trade parties. Non-MDEs can settle import transactions and service trade in deliverable CNY with offshore trade parties.

14. Are funds in Non-Resident Accounts (NRAs) considered onshore or offshore deliverable CNY?

The funds are physically considered onshore CNY, but since they could be wired offshore to a same-name account without restrictions, they could become CNH at any time.



Appendix 4: Standard Chartered Research publications on CNH

FX Alert – Offshore CNY trading – where next? (3 January 2011)

Callum Henderson | Ned Rumpelstin | Thomas Harr

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=74554>

- Singapore and Australia could be the next places for offshore CNY trading
- CNY-KRW and CNY-TWD trading may take longer to occur due to offshore trading issues
- As offshore supply of CNY increases, Chinese exports may increasingly be settled in the CNY

On the Ground – Hong Kong – Fine-tuning CNY trade settlement (24 December 2010)

Eddie Cheung | Kelvin Lau

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=74518>

- Latest measures reinforce the authorities' commitment to expanding CNY trade settlement
- The moves should improve the scheme's scalability with little short-term disruption
- CNY deposit growth in Hong Kong continues to amaze, at 29% m/m in November
- CNH premium has declined but should rebound in early 2011

FX Alert – CNY – Opportunities in CNH premium, forwards (9 December 2010)

Eddie Cheung | Robert Minikin

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=74360>

- CNH premium has come under pressure amid sustained cross-border flows into Hong Kong
- Modest rebound in premium in early 2011 may enhance returns on CNH-denominated assets
- USD-CNH DFs are generally above USD-CNY NDFs, offering attractive hedging opportunities
- Corporates should look to hedge CNY payables through USD-CNH DFs and USD-CNY NDFs

FX Alert – CNY – CNY raised to Overweight from Neutral (23 November 2010)

Eddie Cheung | Robert Minikin | Stephen Green

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=74041>

- We raise our short-term and medium-term FX ratings on the CNY to *Overweight* from *Neutral*
- Sharp rises in headline inflation reinforce the case for faster CNY appreciation
- Prospective CNY advance in trade-weighted terms simply reverses the post de-peg slide
- Investors should hold CNH-denominated assets, look to sell USD via non-deliverable forwards
- Corporates should hedge future CNY payables

FX Alert – HKD – CNH is no threat to the peg (17 November 2010)

Callum Henderson | Kelvin Lau | Robert Minikin

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=73941>

- Commentary suggesting that the new CNH market undermines the HKD peg is misconceived
- HK CNY deposits are very modest and primarily held as a store of wealth, not for transactions
- New offshore market is not a step to early, full capital-account liberalisation on the mainland
- Investors should buy USD-HKD 2Y forward, sell 1Y ATM USD-HKD puts to capture high vol
- Corporates should hedge forward HKD receivables

Media – The CNH Market – video footage (8 November 2010)

Robert Minikin

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=73779>

- Watch our latest video footage of Robert Minikin reviewing the CNH market
- To view this interview, go to our Standard Chartered TV page, or copy and paste the URL below into your browser
- <http://www.standardchartered.tv/>



FX Alert – CNY – CNH premium rebound to dissipate (29 October 2010)

Eddie Cheung | Kelvin Lau | Robert Minikin

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=73530>

- Activation of the HKMA swap line with PBoC triggers an abrupt bounce in CNH premium
- HKMA development creates potential for scalability in CNY market outside the mainland
- Investor appetite for CNH remains healthy; mainland USD demand may slow next month
- Initial market reaction overdone but investors should look to sell into any bounce in USD-CNH

FX Alert – CNY – Opportunities in the CNH premium (20 October 2010)

Eddie Cheung | Robert Minikin

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=73281>

- The 'CNH premium' has rebounded powerfully as investor appetite for CNH picks up
- The premium upswing will likely be slowed by a rebound in cross-border flows
- Current pricing represents an opportunity for corporates able to make cross-border transfers
- Extended CNH yield curve provides opportunities for positive carry

FX Alert – HKD – Strong by association (6 October 2010)

Kelvin Lau | Robert Minikin

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72855>

- CNH and CNY developments look set to be persistently constructive factors for HKD
- We forecast that USD-HKD will remain close to the Convertibility Undertaking lower limit
- HKD-based corporates should boost hedge ratios for CNY payables and JPY receivables
- Investors should look to buy 1 x 2 call spreads with the lower strike at the Convertibility limit

Special Report – The CNH FX, rates and Dim Sum bond markets (5 October 2010)

Delphine Arrighi | Kelvin Lau | Robert Minikin | Stephen Green | Vijaykumar Chander

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72828>

- The offshore CNY market in Hong Kong (CNH) is going from strength to strength
- A burgeoning Dim Sum bond market and a nascent rates market are adding to CNH liquidity
- But there are still marked pricing divergences between onshore and CNH spot and forward markets
- Such pricing divergences offer corporates opportunities to hedge their CNY exposures
- This second CNH special report provides an update on CNH market developments, as well as guides to account opening and other practical issues

FX Alert – CNY – More scope for late 2010 gains (29 September 2010)

Eddie Cheung | Robert Minikin

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72723>

- The CNY NEER has slumped to new post de-peg lows
- US dollar weakness on the major crosses looks set to persist into year-end
- We revise down our near-term profile for USD-CNY against this backdrop
- Forwards still discount too little CNY appreciation on a one-year horizon
- Investors should look for opportunities to build exposure to CNH-denominated assets

The Credit Edge – Adding dim sum to the menu (22 September 2010)

Bharat Shettigar | Bret Rosen | HeeJeong Lee | Justinus Rahardjo | Kaushik Rudra | Li Shan Neo | Sandeep Tharian | Shankar Narayanaswamy | Shilpa Singhal | Simrin Sandhu | Victor Lohle | Vijaykumar Chander | Zhi Wei Feng

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72623>



- US economic data continues to come in decidedly weaker than market expectations, while EM data point to an improved economic outlook. In China, the slowdown engineered by the authorities has reversed. A host of data released during the last fortnight point to a re-acceleration in China, even if the growth rate is more subdued.
- EM bond funds have continued to enjoy strong inflows over the past fortnight. HY bond funds seem to be the 'flavour of the month', attracting more money than EM bonds.
- With investors remaining in risk-seeking mode, credit markets have continued to tighten and we believe the market's bounce off its recent lows is set to continue.
- Separately, we discuss the Chinese yuan offshore in the Hong Kong (CNH) bond market. We expect a fully-fledged, CNH-denominated offshore 'Dim Sum' bond market in Hong Kong to gather momentum over the next few years.
- This fortnight, we analysed the implications of the new Basel III minimum capital requirements for Asian banks. We also address the issue of potential regulatory call for bank capital securities in Asia.
- Separately, we published a piece comparing Korean and Indian banks. In our view, the fair spread differential between banks in the two countries should be 30-50bps.
- We compare valuations of Asian high-grade corporate and sovereign credits with global peers by breaking down the space by industry sector, rating buckets and maturity.

On the Ground – Taiwan – CNH challenges and opportunities (13 September 2010)

Nicholas Kwan | Tony Phoo

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72430>

- Development of the CNH market presents both opportunities and challenges for Taiwan
- It may facilitate cross-strait economic exchanges via a better CNY-TWD clearing system
- However, failure to participate could also undermine Taiwan's long-term financial position

FX Alert – CNY – Corporate hedging opportunities in CNH (10 September 2010)

Eddie Cheung | Robert Minikin | Thomas Harr

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72392>

- CNH market creates a potential new route for corporate hedging of CNY exposure
- USD-CNH liquidity is currently pooled in spot to 3M maturities
- USD-based corporates with forward CNY payables should hold shorts in USD-CNH spot
- Mainland corporates with short-term USD payables should buy USD-CNH spot

FX Alert – CNH – Investors should sell USD-CNH spot (2 September 2010)

Eddie Cheung | Robert Minikin | Thomas Harr

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72238>

- USD-CNH spot has abruptly compressed vs. USD-CNY amid heavy USD offshore demand
- Global appetite for CNH is likely to be strong; but potentially delayed
- We recommend investors to sell USD-CNH spot
- Carry characteristics in USD-CNH may be improved by upcoming quota allocations

Media – China's new offshore market in Hong Kong (31 August 2010)

David Semmens

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72159>

- David Semmens, Economist, discusses the impact of China's new offshore market in Hong Kong
- To view this footage, go to our Standard Chartered TV page, or copy and paste the URL below into your browser
- <http://www.standardchartered.tv/>

Special Report – The new CNH market (27 August 2010)

Delphine Arrighi | Kelvin Lau | Nicholas Kwan | Robert Minikin | Stephen Green | Thomas Harr | Will Oswald

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72119>



- The offshore CNY market in Hong Kong (CNH) has sprung to life
- Comparisons with the Eurodollar market are inevitable, but there are important differences
- We expect significant CNH liquidity growth as a result of CNY trade settlement, tourist receipts and other CNY flows
- New spot FX and deposit markets have developed as new rules limit CNY fungibility
- CNH bond issuance could grow quickly, if the transfer of funds to mainland China is relaxed further
- Rapid product innovation could mean the sophistication of the CNH market quickly runs ahead of the onshore market
- Standard Chartered, as one of the leading CNY trade settlement banks, is in the midst of these CNY/CNH flows and is active in building these markets
- We include an FAQ section on technical issues in the CNH market

FX Alert – CNH market – Lessons from Thailand, Australia (26 August 2010)

Thomas Harr | Usara Wilaipich

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=72100>

- The experiences of Thailand and Australia hold lessons for the CNH market
- USD-CNH may trade below USD-CNY as long as restrictions on CNY persist
- The USD-CNY NDF market should gradually fade as restrictions on CNY are lifted

FX Alert – CNY – Implications of new bond-market access (18 August 2010)

Delphine Arrighi | Kelvin Lau | Robert Minikin

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=71941>

- New rules give some offshore banks and central banks access to China's local bond market
- This is a major intermediate step towards the internationalisation of the CNY
- It is unlikely to interrupt the build-up of liquidity in the 'CNH' market
- CNH-CNY spot differential to persist, as PBoC still has close control over USD-CNY trajectory

FX Alert – CNY – The 'Hong Kong' effect (28 July 2010)

Robert Minikin

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=71425>

- The regulatory environment for CNY is evolving rapidly in Hong Kong
- Pool of potential CNY holders has been broadened substantially
- New CNH 'deliverable' forward will likely emerge, but fungibility is key to DF vs. NDF pricing

On the Ground – China – Another step offshore for the CNY (20 July 2010)

Kelvin Lau

<http://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=71247>

- CNY trade settlement volumes accelerate, mainly driven by expansion of the scheme
- The latest amendment to the Hong Kong-China CNY settlement agreement will promote more offshore CNY products, good for CNY invoicing and offshore CNY circulation
- More liberalisation experiments to come, but overall gradualism will prevail

On the Ground – China – Where we are with CNY invoicing (12 April 2010)

Kelvin Lau

<https://research.standardchartered.com/ResearchDocuments/Pages/ResearchArticle.aspx?R=69107>

- CNY trade settlement volumes are increasing, and the pilot programme has been expanded
- Regulatory complexity is an issue as different localities issue different guidance
- Hong Kong has moved to allow more local CNY products and will likely become the key offshore CNY centre



Disclosures Appendix

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