CME Group

Emerging Offshore Chinese Renminbi Market

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The People's Republic of China (PRC) has aggressively been pursuing the internationalization of the Chinese yuan or renminbi (CNY or RMB) since the financial crisis of 2008. The ultimate goal is to achieve full currency convertibility, thereby promoting use of the renminbi as an international trade currency of choice.

Thus, the People's Bank of China (PBOC) and the Hong Kong Monetary Authority (HKMA) jointly announced on July 19, 2010 that RMB may be deliverable in Hong Kong. This created a new offshore market in RMB, dubbed the "CNH" market. Since its introduction, this market has grown at a rapid pace, attracting widespread interest and activity.

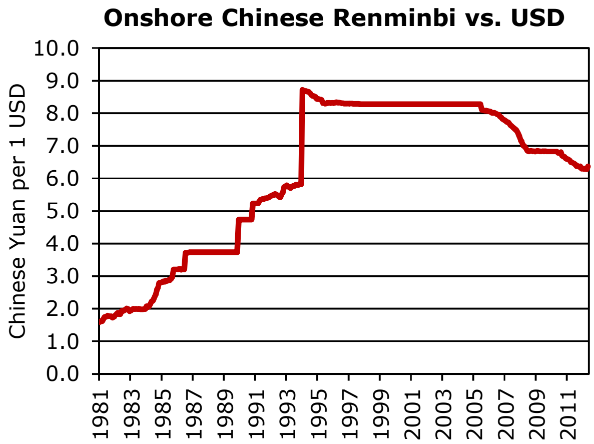
This development is changing the character of the RMB markets and of the FX markets in general. Note, of course, that CME Group currently offers RMB futures and options. Thus, we seek to examine this development in greater detail. [1]

About CNY **–** The renminbi or "people's currency" (designated as RMB or ¥ or RM¥) is the official legal tender in mainland China albeit not in Hong Kong. This is the formal reference most frequently used by Chinese officialdom to refer to the currency. Although there is no precise translation into English, it is generally analogous to a reference to the terms "money" or "legal tender."

The Chinese yuan refers to the standard unit of renminbi and is analogous to the term "dollar" in English. *I.e.,* the yuan represents the onshore or mainland Chinese spot currency market. [2] CNY is the ISO 4217 code for RMB and is used to designated Chinese yuan or renminbi in FX transactions.

For most of its early history after its introduction in 1948, the RMB had been pegged at 2.46 CNY per USD. The currency strengthened during the 1980s to a high of 1.50 CNY per USD by 1980s. Subsequently, as the PRC gradually transitioned from a centrally planned to a market driven economy, the currency was devalued to a low of 8.62 CNY per USD by 1994. Between 1997 and 2005, the currency remained steadily pegged at 8.27 CNY per USD.

As a result of the CNY's low peg and concerted industrialization, international trading activities intensified and PRC's current account surplus increased rapidly. These factors exerted upward pressure on CNY and the reference peg was amended as of July 2005, resulting in an immediate revaluation to 8.11 CNY per USD.



A peg was reintroduced in July 2008 in response to the financial crisis. But the PBOC announced in June 2010 that it would take further steps to reform its exchange rate regime, introducing enhanced flexibility. Since then, the CNY has generally strengthened vs. other world currencies albeit with some recent retreats in response to slowing economic growth. Still, by some analyses, the official exchange rate of the CNY may be as much as 30-40% undervalued relative to the USD.

The CNY remains subject to a "managed float" exchange rate regime which permits the currency to float within a specified range about the value of basket of world currencies. The basket is reported to largely be comprised of the U.S. dollar (USD), Euro (EUR), Japanese yen (JPY), Korean won (KRW) with smaller proportions referencing the value of the Australian dollar (AUD), British pound (GBP), Canadian dollar (CAD), Russian ruble (RUB), Singapore dollar (SGD) and Thai baht (THB).

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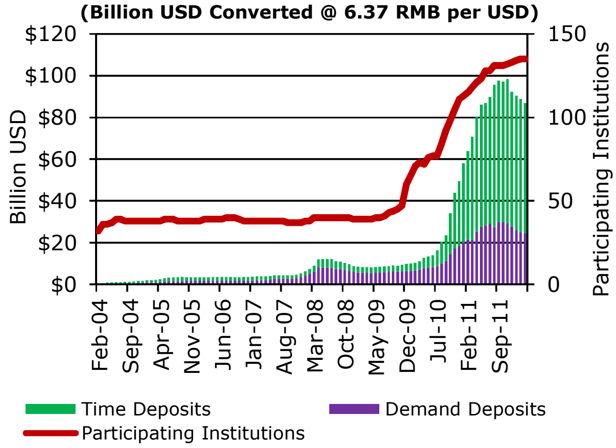
[1] Note that CME Group had introduced futures and options on futures based on the Chinese renminbi vs. U.S. dollar on August 27, 2006. These contracts are quoted in terms of USD per RMB; and, are settled in cash by reference to the reciprocal of the Chinese renminbi per U.S. dollar fixing (or "midpoint") rate published by the PBOC. CME Group subsequently listed U.S. Dollar/Chinese Renminbi (CNY) futures on October 16, 2011, both as a standard 100,000 U.S. dollar- and an E-micro 10,000 U.S. dollar-size. These contracts are quoted in Chinese renminbi per U.S. dollar with daily pays and collects in notional RMB converted into U.S. dollars.

[2] The "kuai" represents a slang reference for RMB and is analogous to the term "buck" in the U.S. Similar references may be found in the United Kingdom where the British Pound may alternatively be referred to as "sterling" (a formal reference), "pound" (in everyday usage) or "quid" (in slang).

The range or band within which CNY is allowed to float about the official PBOC rate had been established at 0.3% on a daily basis. But the band was expanded to 0.5% as of May 2007. The band was further expanded to 1.0% in April 2012, a policy that is expected to promote increased two-way interest in trading the currency.

About CNH – RMB has been rather grossly underutilized as a medium for international trade relative to the significance of the Chinese economy. The Chinese economy has grown rapidly in recent years with 2011 GDP estimated at $11.29 trillion and second only to U.S. GDP estimated at $15.04 trillion. [3] The PRC is the world's largest exporter. Still, it is estimated that only 0.24% of international trade payments are denominated in RMB.

RMB Held in Hong Kong Banks
(Billion USD Converted @ 6.37 RMB per USD)



Source: Hong Kong Monetary Authority

As a result, concerted steps have been taken to "internationalize" the RMB. This began with a December 2008 announcement from Premier Wen of a pilot program for cross border trade settlement of RMB with Hong Kong, Macau and other ASEAN countries. The RMB became officially deliverable in Hong Kong on July 19, 2010 with a joint announcement between the PBOC and HKMA. Thus, the market for CNH was officially commenced.

Any offshore corporate entity or individual investor is allowed to buy, hold or sell CNH. Corporate or individual investors not domiciled in Hong Kong may participate in CNH markets by establishing CNH denominated nostro or non-resident accounts in Hong Kong, frequently facilitated by a local bank with correspondent Hong Kong banking relationships.

The CNH market has grown rapidly to the extent that some 135 Hong Kong institutions held some 554.317 billion CNH, or the equivalent of $87.02 billion USD, in time and demand deposits as of March 2012. [4]

Offshore FX market participants are, however, restricted from participating in the onshore CNY market with some exceptions. Specifically, Qualified Foreign Institutional Investors (QFIIs) are granted quotas to participate in specified onshore trading and investment activities.

Certain corporate entities are allowed to participate in foreign direct investment (FDI) in PRC proper. Offshore corporate entities are permitted to transact in CNY if the FX exchange is part of a cross-border trade settlement process. By the same token, onshore (or PRC domiciled) entities are generally constrained from participating in the CNH marketplace.

Because the CNH market is limited to Hong Kong domiciled entities or those holding a nostro account in Hong Kong, the market is effectively regulated by the Hong Kong Monetary Authority. However, the HKMA is not authorized to intervene in the market and, therefore, the market is open and operates akin to the markets for other deliverable currencies in Hong Kong.

While the People's Bank of China and the State Administration of Foreign Exchange (SAFE) regulate onshore CNY markets, they have no direct oversight in Hong Kong. Still, these bodies regulate RMB flows between onshore and offshore accounts and, therefore, may affect the supply and liquidity of CNH as well as the alignment between CNH and CNY rates.

Different Markets – While there is but a single Chinese renminbi, the onshore and offshore environments for trading CNY and CNH are sufficiently insulated one from the other that two distinct markets have emerged for the two variations on the general theme.

Thus, we observe somewhat different exchange rates in the CNY vs. CNH markets by design. Large divergences may motivate cross-border flows of funds which will ensure convergence in the longer

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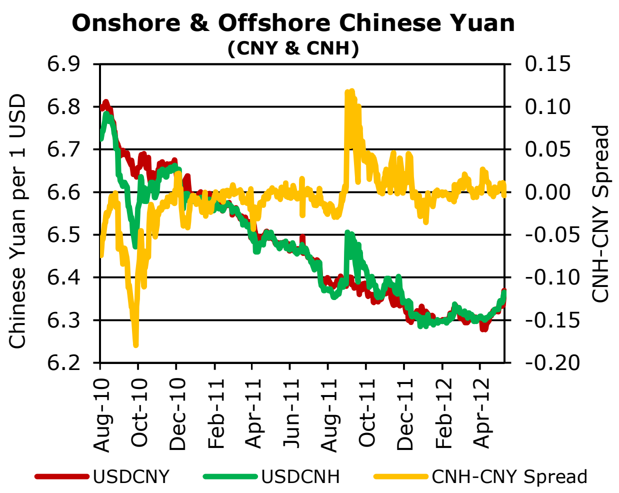
[3] CIA World Factbook at hyperlink: https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html

[4] Hong Kong Monetary Authority (HKMA) Monthly Statistical Bulletin (May 2012, Issue No. 213) at hyperlink http://www.hkma.gov.hk/eng/market-data-and-statistics/monthly-statistical-bulletin/table.shtml

term. But in the shorter term, divergent supply and demand factors may create short term disconnects, noting that the supply of CNH remains relatively limited compared to CNY.



Further adding to the complexity, we may also reference the traditional offshore market for RMB in the form of USD settled non-deliverable forwards (NDFs). These NDFs tend to trade independently of both onshore CNY and offshore CNH. Further, some current account trade transactions entered into by offshore corporate entities may be settled at yet another distinct rate, sometimes referred to as "CNT."

Pricing differentials observed in the various RMB markets are a reflection of the comparative difficulties associated with cross-border transfers. Ultimately, the market valuation differentials should converge to zero once the flows are fully convertible between onshore and offshore markets.

Operational and Settlement Issues – The RMB settlement system in Hong Kong is administered under the auspices of HKMA. The service uses the Hong Kong Real Time Gross Settlement (RTGS) infrastructure, which is further deployed for the settlement of Hong Kong dollars (HKD), USD and Euros along with the Central Clearing and Settlement System (CCASS). RTGS is operated by HK Interbank Clearing Ltd.

The Bank of China (BOC) Hong Kong acts as the central clearing bank for the RMB Settlement System. Hong Kong banks wishing to use the service open accounts with BOC and payments are cleared across those accounts.

The service covers check clearing, an automated system for remittance processing and RMB bank card payments as well as interbank payments. Banks can square their RMB positions on a Payment versus Payment (PVP) basis. It further permits USD/RMB, HKD/RMB and EUR/RMB transactions to be concluded on a PVP basis.

Participating banks are allowed to convert foreign currency into RMB and vice-versa by buying or selling the foreign currency with BOC at the onshore exchange rate if the RMB is related to trade flows. BOC then squares their positions by buying or selling currency with PBOC in Shanghai vs. RMB. Thus, RMB may be transferred between onshore and offshore sources.

PBOC has an annual quota of CNY 8 billion as well as a quarterly conversion quota for BOC. A quarterly settlement quota of CNY 4.0 billion may be transacted with BOC. In the event that this quota is exceeded, HKMA has a currency swap line with PBOC to provide emergency liquidity.

As of the conclusion of 2011, HKMA reported that a total of 187 banks participated in the RMB clearing platform in HK. Some 165 of these banks were branches and subsidiaries of foreign banks and overseas presence of Chinese banks.

The RTGS system can now handle a global payment network covering more than 30 countries across 6 continents. There are over 900 RMB correspondent banking accounts with banks in HK to meet the increasing demand of offshore RMB business from their local customers.

Looking Forward - Hong Kong now stands out as the largest offshore RMB trading center with approximately 81% of all RMB payments passing via Hong Kong facilities.

Hong Kong financial institutions now offer a wide range of RMB-denominated retail banking services including deposit-taking, currency exchange, remittance, debit and credit cards, checks, subscription and trading of RMB-denominated fixed income securities as well as RMB settlement.

RMB-denominated capital markets are developing and expanding quickly in Hong Kong. Trading in so-called Dim Sum bonds, or RMB-denominated bonds issued in Hong Kong, rose from RMB 200 million in January 2011 to RMB 3 billion in July 2011. In April 2011, the first RMB-denominated IPO was listed on the Hong Kong Exchange by Hui Xian, part of Cheung Kong Group.

In June 2011, more than 900 financial institutions in over 70 countries, engaged in RMB transactions across various financial markets. Projections from SWIFT suggest that trading in RMB will account for upwards to 5% of the FX spot and derivatives business by 2020, up from the current level of 0.9%.

The City of London has been positioning itself as the next major offshore RMB center with government officials and key market participants on both sides meeting on a regular basis to discuss how best to develop this market. In January 2012, U.K. Treasury and HKMA officials launched a joint private sector forum that aims to improve cooperation between the UK and Hong Kong to support the development of offshore RMB trading.

Conclusion – The rapid emergence of offshore trading in Chinese renminbi (the "CNH" market) domiciled in Hong Kong represents a significant development towards the internationalization of the RMB as the PRC continues to assert itself on the world economic stage. These developments merit close consideration in light of the economic significance of the PRC now and continuing into the future.

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