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The internationalisation of the renminbi

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Let me start by thanking the organisers for inviting me to this Second Annual International Conference on the Chinese Economy of the Hong Kong Institute for Monetary Research.¹ Travelling from Switzerland to China to comment on the renminbi would seem a risky journey for an investment banker, much less for a central banker. Let me emphasise that I am taking that risk personally: these are my views are not necessarily those of the BIS.

Let me approach this challenge by posing five questions:

- What are the precedents for the managed internationalisation of the renminbi?
- What benefit can an economy enjoy from an internationalised currency?
- Would the development of the offshore market encourage the use of the renminbi as a reserve currency?
- Where does the internationalisation of the renminbi stand?
- Where do we go from here?

1. The internationalisation of the renminbi: no precedents

One cannot find any precedent for the effort of the Chinese authorities to develop an offshore market while keeping in place extensive controls on the cross-border flows of capital. No other country has set out to develop an offshore market, no more than any country's broadcast authority has set out to develop offshore radio stations.²

¹ Thanks are also due to Carlos Mallo, Denis Petre and Michela Scatigna for help with the turnover data, the bond data and research assistance.

² Robert Z Aliber, *The new international money game, 6th edition*, University of Chicago, 2002, chapter 7, “Radio Luxembourg and the eurodollar market are both offshore stations”.



In offshore markets, non-residents can hold bank accounts, borrow from banks, buy or sell bonds, all in the currency of the onshore jurisdiction, mostly governed by someone else's law. The archetypical offshore transaction is between two non-residents and bears little relationship to the country of issue. Examples of dollar offshore transactions might include:

- A Korean firm receives US dollars in a Hong Kong bank from a Chinese importer.
- A Singaporean investor buys a Philippine government US dollar bond.

Historically, authorities have tended to respond to offshore markets in a manner that recalls the Kübler-Ross model of grief.³

- *Denial*: The offshore market in our currency is an irrelevant side-bet among those uninvolved in our economy.
- *Anger*: How dare speculators make a plaything of our currency?
- *Bargaining*: Can we persuade offshore financial centres to impose reserve requirements?
- *Depression*: What's the use?!
- Finally, *acceptance*: if we can't beat them, then let's join them:
 - by carving out lightly regulated onshore international banking facilities;
 - or by lowering reserve requirements or paying interest on them;
 - and by streamlining the issuance of bonds in the domestic market.

China departs from this pattern. The authorities there have paid attention to the signals coming from the offshore, nondeliverable market for the renminbi for a decade. Rather than deny the importance of this market, authorities have recently implicitly recognised its inevitability and sought to shape its development.

A useful parallel that helps to highlight the usual and unusual features of renminbi internationalisation is the Indian rupee. The Indian authorities, similarly maintaining extensive capital controls, have tended to view the offshore markets with scepticism.

The challenge is not to explain the conventional responses of the Indian authorities, but rather the unconventional responses of the Chinese authorities. Not least is the challenge presented by the timing of the Chinese moves to encourage the development of an offshore market in renminbi.

Many experts told the Chinese authorities that the development of an offshore market must await the end of capital controls. Yet even an economist, confronted with the fact of China's developing of an offshore renminbi market *within* a regime of capital controls, must admit its possibility. Perhaps a sense of manifest currency destiny—the conviction that the renminbi was fated to a world historical role by China's size and international trading prowess—led the Chinese authorities to brush aside so much expert opinion.

In fact, capital controls have a complex relationship to the development of offshore markets. The US dollar market in London arose in the late 1950s, when British capital controls still limited what banks in London could do in sterling.⁴ UK merchant banks

³ Elisabeth Kübler-Ross, *On death and dying*, Routledge, 1973.

⁴ Catherine Schenk, "The origins of the Eurodollar market in London", *Explorations in Economic History*, vol 35, 1998, pp 221-238.



applied their international financial experience to the US dollar, which the Bank of England gladly permitted. And US banks found a congenial place to do dollar business free of reserve requirements and deposit insurance.

In 1963, a Secretary of the Treasury from Wall Street imposed US capital controls in the form of the 15% Interest Equalisation Tax (repealed in 1974) on US investors' receipts of interest on foreign securities. This measure, taken at a time when the US was running a current account surplus, spurred the development of the Eurodollar bond market. In 1965 the Treasury followed up with the Voluntary Foreign Credit Restraint Program, which pushed US firms to finance foreign operations offshore. Loud cheers in London greeted its stimulus of dollar banking there. US policy promoted the dollar offshore market as a side-effect of a misguided defence of the dollar's gold link. These interactions between capital controls and the offshore market highlight its role in getting around restraints on what can be done in the home currency or home country.

In the case of the renminbi in Hong Kong, the Mainland authorities have entered into agreements in Hong Kong to set the interest rate payable on deposits held by the clearing bank and, initially, their flow back to the Mainland. These arrangements have no parallel in the history of the euromarket.

2. What benefit can an economy enjoy by having an internationalised currency?

Yin-Wong Cheung, Guonan Ma and I have identified an advantage that China could reap from the internationalisation of the renminbi, namely sharing some of the foreign exchange risk that China runs with the rest of the world.⁵ Our benchmark is the yen, which most observers consider a moderate success as an internationalised currency.⁶ Even in this case, however, a significant part of Japan's substantial net claim on the rest of the world is denominated in yen. Thus, the borrower outside of Japan, be it a sovereign or a firm, bears the risk of yen appreciation.

In the case of China today, because of both current account surpluses and capital inflows, on the one hand, and the controls and the consequent lack of internationalisation of the renminbi, on the other, China bears all the risk of an appreciation—which lowers the value of claims denominated in foreign currency. Offshore renminbi bond markets would allow governments and firms outside of China to borrow in renminbi and thereby allow Chinese life insurers and pension funds to diversify credit while matching renminbi liabilities.

As things stand, it is as if Japanese investors were bearing all the financial risk of an earthquake in Japan. A more international renminbi would work like the international reinsurance market in spreading this risk.

⁵ "Renminbising China's foreign assets", HKIMR Working Paper No.16/2010, June 2010.

⁶ See Shinji Takagi, "Internationalising the yen, 1984-2003: Unfinished agenda or Mission Impossible?" paper presented to the BIS-Bank of Korea Seminar on "Currency Internationalisation: Lessons from the International Financial Crisis and Prospects for the Future in Asia and the Pacific", 19-20 March 2009, Seoul. For a comparison of the internationalisation of the yen and the yuan, see Yosuke Tsuyuguchi, "Developments in capital account and foreign exchange controls: Comparison between China and Japan", paper presented to Shanghai Forum, 30 May 2010.



3. Can the development of the offshore market promote the use of the renminbi as a reserve currency?

Dong He and I have argued that the internationalisation of the US dollar is bound up with the offshore use of the US dollar.⁷ Most officially held dollar bank accounts are held outside the United States, and mostly in non-US banks. In the bond market, global investors in dollar bonds disproportionately hold bonds issued by issuers outside the United States. From the US experience, it would seem unlikely that the renminbi can be internationalised in general, and be much used as a reserve currency in particular, without an active offshore market.

The renminbi is already garnering interest as a reserve asset. An early, if not the first, reserve asset that included Chinese government bonds was the Asian Bond Fund 2.⁸ This initiative of 11 East Asian and Pacific central banks pooled some of their reserves and invested them in government and quasi-government bonds denominated in eight local currencies, including the renminbi.

Some central banks, especially in countries with extensive trade with China and whose currencies co-vary with the renminbi, would like to hold official reserves in renminbi. Barry Eichengreen and Marc Flandreau have recently highlighted the speed of the emergence of the US dollar as a reserve currency after the creation of the Federal Reserve.⁹ Some of the renminbi bonds issued in Hong Kong would meet the investment guidelines for reserve managers in terms of credit quality.

4. Where does the internationalisation of the renminbi stand?

The managed internationalisation of the renminbi has accelerated in the past year.¹⁰ In short order, a single-digit share of China's imports is denominated in renminbi, and an order of magnitude smaller share of China's exports is renminbi-denominated. This has fed supply of deliverable renminbi in Hong Kong ("CNH"). Hong Kong residents took fuller advantage of their ability to purchase renminbi and the renminbi share of bank deposits in the territory has reached single digits in a banking system already highly (US) dollarised. Trading of "CNH" has reached the hundreds of millions of dollars per day. Banks, the Chinese government and major multinational firms with operations in China have issued so-called dim sum bonds denominated in renminbi in Hong Kong.

These impressive developments must be kept in perspective. In the foreign exchange market the renminbi punches well below the weight of China as an international trader with a rising income per capita. In April 2010, global central banks reported daily trading in the renminbi of \$34 billion.¹¹ Even if turnover in China is underreported, this is little more than the current account transactions of China, which makes it a very low figure for a country of China's

⁷ "Offshore markets for the domestic currency: monetary and financial stability issues", BIS Working Paper 320, September 2010.

⁸ See the June 2006 report of the EMEAP Working Group on Financial Markets, <http://www.emeap.org/emeapdb/upload/WGMeeting/ABF2ReviewReport.pdf>.

⁹ "The Federal Reserve, the Bank of England and the rise of the dollar as an international currency, 1914-39", BIS Working Paper no 328, November 2010.

¹⁰ Norman T L Chan, "Briefing on the latest developments of renminbi business in Hong Kong", 23 December 2010 <http://www.info.gov.hk/hkma/eng/speeches/index.htm>.

¹¹ BIS, *Triennial central bank survey of foreign exchange and derivatives market activity in 2010 - Final results*, December 2010; Michael King and Carlos Mallo, "A user's guide to the Triennial Central Bank Survey of foreign exchange market activity", *BIS Quarterly Review*, December 2010, pp 71-83.



income per capita ([Graph 1](#)). Thus, renminbi trading hardly shows the effect of financial transactions at all.

By contrast, the Indian rupee traded \$37 billion a day. This sounds close, but measured against Indian current account transactions, it is an order of magnitude larger. Given India's income per capita, the rupee punches well above India's weight.

Paradoxically, the barely financialised trading in the renminbi is highly internationalised, albeit in a virtual manner (ie without delivery). Reported renminbi trading on the Mainland reached about \$10 billion per day in April 2010. But turnover in Hong Kong reached a similar amount; that in Singapore, \$7 billion, that in London, \$7 billion and that in New York, \$3 billion ([Graph 2, left-hand panel](#)). Overall, the strictly offshore trading of the renminbi amounted to three-quarters of the total.

Even allowing again for under-reporting by the Chinese authorities, this fraction is well above what one would expect at China's income per capita, and closer than one would expect to the norms of major currencies. If the renminbi is below par in overall turnover, it is above par in the offshore fraction. That half the Indian rupee foreign exchange turnover took place offshore ([Graph 2, right-hand panel](#)) surprised many observers, but it should not have ([Graph 3](#)).¹²

Recall however that the renminbi trades offshore without delivery. Virtual internationalisation reflects the gap between the world's interest in the renminbi and its access to it. Trading of CNH has begun to bridge that gap. In sum, the offshore market trades over \$20 billion a day, the onshore \$10 billion or more and the Hong Kong deliverable as much as \$1 billion.¹³

Since by covered interest parity, forward markets are money markets, these figures imply a big nondeliverable money market in RMB. And virtual money rates strung together make for a virtual bond market. The April 2010 central bank survey found that renminbi cross-currency swaps traded \$70 million a day offshore, and that interest rate swaps and other fixed income instruments traded \$500 million per day. Thus, investors and obligors can switch between dollar cash flows and renminbi cash flows to the extent of tens of millions of dollars per day and between renminbi floating rates and renminbi fixed rates to the extent of hundreds of billions of dollars per day, all virtually. The tools available to the authorities to affect NDF yields are not obvious, but may include influence over state-owned multinational enterprises, including banks, which trade as counterparties to foreign investors in the NDF market.

Now in addition, a CNH money market is developing. To affect yields in it, the authorities have both quantity tools (the quota of conversion by the clearing bank for settling exports) and interest rate tools (the interest rate that the PBoC pays on deposits of the clearing bank).

Turning to the bond market proper, it is interesting to compare the offshore renminbi bond market development, benefitting from unprecedented official encouragement, and that of the Indian rupee offshore bond market. Issuance in the dim sum market has been dominated by Chinese policy banks, commercial banks and foreign-based banks' subsidiaries in China.

Offshore issuance by the Ministry of Finance is a marvellous natural experiment, since these bonds are basically identical to those issued on the mainland. The November 2010 issuance came in at 170 basis points on average lower than the domestic yields ([Graph 4](#)).¹⁴ (In

¹² Mobis Philipose, "BIS data on overseas dollar-rupee market surprises one and all", *MINT*, 8 December 2010.

¹³ See Mirza Baig, Linan Liu and Dennis Tan, "CNH market monitor: Moving into top gear", *Deutsche Bank Global Markets Research*, 5 January 2011, for pricing differences across the three markets.

¹⁴ Pin Ru Tan and Woon Khien Chia, "China MOF sets new benchmark", *RBS Emerging Markets Strategy*, 1 December 2010.



passing, note that this is another piece of evidence supporting the hypothesis of efficacy of Chinese capital controls.) Such issuance underscores the official strategy of developing the offshore market.

Two recent issues by Hong Kong real estate firms further highlight the Mainland government role. For the Shui On Land and Evergrande Real Estate bonds, payments are in US dollars but are linked to the USD/RMB rate.¹⁵ While the issuance of renminbi bonds is not subject to official queuing, remittance of the renminbi proceeds into China is currently subject to official approval that is not fast or predictable. These renminbi linked bonds lead to more normal dollar investment inflows into China and highlight the important role of the Chinese authorities in the flow of funds associated with issues in the Hong Kong renminbi bond market.

By contrast, issuance of Indian rupee bonds is dominated by AAA-rated international financial institutions. This is the norm as seen in the Australian government bond market.¹⁶ A recent exception is an rupee issue by the Export-Import Bank of Korea, the proceeds of which are thought to be earmarked for the use of Korean firms operating in India.

This is only the most visible part of the offshore rupee market. Less visible are small rupee issues sold under medium-term note programs. These are generally unannounced, and may be investor driven or sold to private banking clients. The issuers are large international banks. It may be presumed that the ultimate obligors in the currency swap are Indian firms. The issuers profit to the extent that investors, with rationed access to the Indian bond market, are willing to accept a lower yield than the ultimate obligors are willing to pay.

In short, the Indian offshore market recruits well-know issuers to front for ultimate borrowers, with arbitrage profits arising from effective capital controls shared among issuer, arranger, currency swap counterparty and ultimate borrower. See how different this spontaneous market is from the Hong Kong renminbi market, where issuers with real need for renminbi dominate—including McDonalds and Caterpillar.

5. Where do we go from here?

There are two related but different questions. The first is how the market structure evolves. And the second is the eventual character of the internationalisation of the renminbi.

The evolution of market structure

What will be the relationship between the managed and the spontaneous internationalisation of the renminbi? One hypothesis is that the CNH market displaces the NDF market, while both of them remain distinct from the domestic market. An alternative hypothesis is that all three markets continue to develop with various interactions until the end of the relevant capital controls.

The evidence to date does not speak for one or the other of these hypotheses. A variant of the first hypothesis is that big international banks will find themselves having to choose between deeper involvement in the NDF market, on the one hand, and their role in the CNH and its descendents, on the other hand. It might be recalled that before the euro, the

¹⁵ Peter Stein, "A no-yuan approach to yuan-bond sales", *Wall Street Journal*, 21 December, 2010, p C7; Henry Sanderson, "Developers start synthetic bond market to feed yuan appetite: China credit", *Bloomberg News*, 14 January 2011.

¹⁶ "Internationalising the Australian dollar", in Chang Shu and Wensheng Peng, eds, *Currency internationalization: international experiences and implications for the renminbi*, Palgrave Macmillan, Basingstoke, 2010.



Bundesbank managed to stifle the internationalisation of the Deutsche mark not because it had the raw power to block developments in other jurisdictions. Rather, the powerful central bank made clear that participation in the full range of Deutsche mark markets depended on acceptable behaviour outside of Germany.¹⁷

Lopsided internationalisation

Writing about the yen in the 1980s, Eisuke Sakakibara coined the phrase, “lopsided internationalisation”.¹⁸ He fretted that the rest of the world would want only yen assets and not yen liabilities. He was wrong on the sign, but the useful concept endures. The yen has turned out to be an international borrower’s currency, the inverse of the Australian dollar, a lender’s currency. The US dollar and the euro by contrast are much more balanced, with non-residents both borrowing and lending.

This problem of lopsided internationalisation has appeared in the renminbi in the past months. The denomination of trade in the renminbi has progressed much faster with China’s imports than with China’s exports. In other words, China’s trading partners have proved keener to accumulate renminbi trade receivables than to allow a build-up of renminbi trade payables. There is a relative shortage of renminbi assets in Hong Kong.

Ultimately, firms and governments outside of China must be willing to run unhedged liability positions in the renminbi. In India in December markets digested the news that an Indian telecommunications firm was buying Chinese equipment and borrowing from a Chinese policy bank in US dollars.¹⁹ What would it take for such a firm to accept a renminbi obligation?

When one poses this question, one can see immediately the importance of a sense of two-way risk in the renminbi exchange rate. Also very important is the renminbi’s orientation to the major currencies. Guonan Ma and I take more seriously than many observers the basket orientation of the renminbi.²⁰

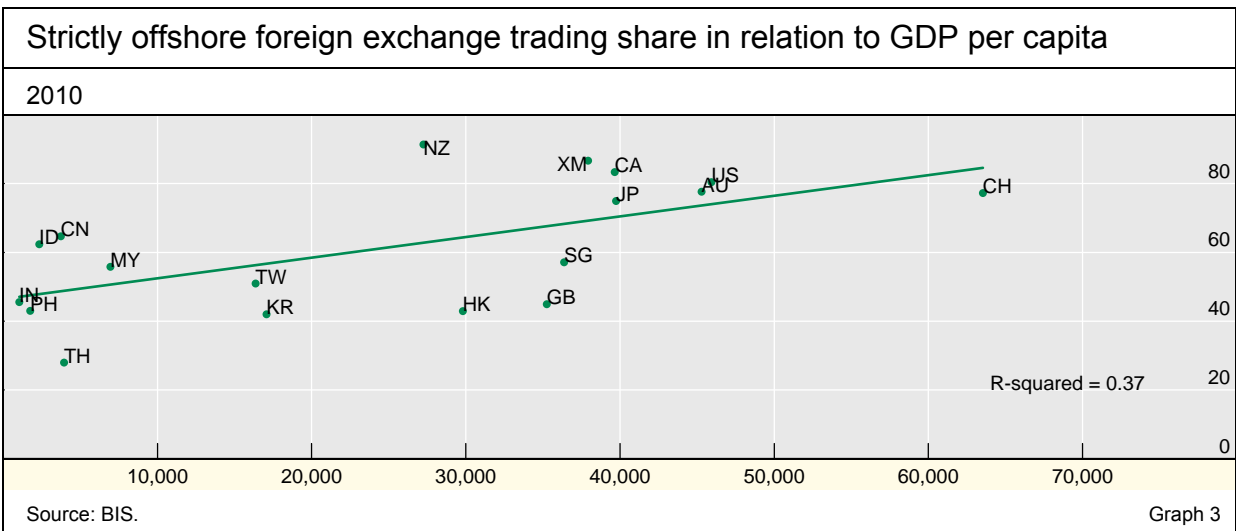
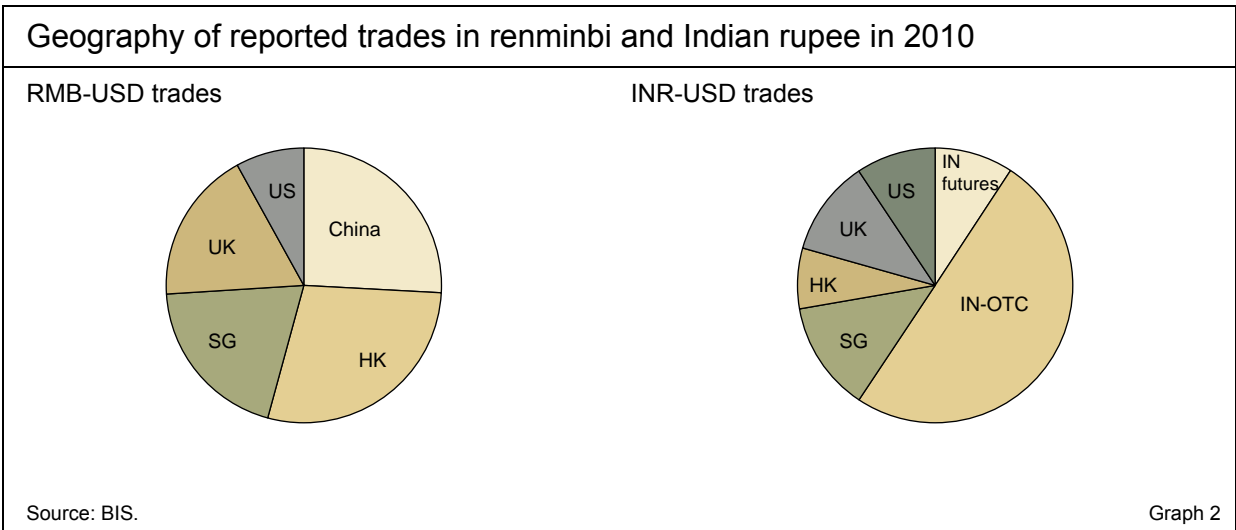
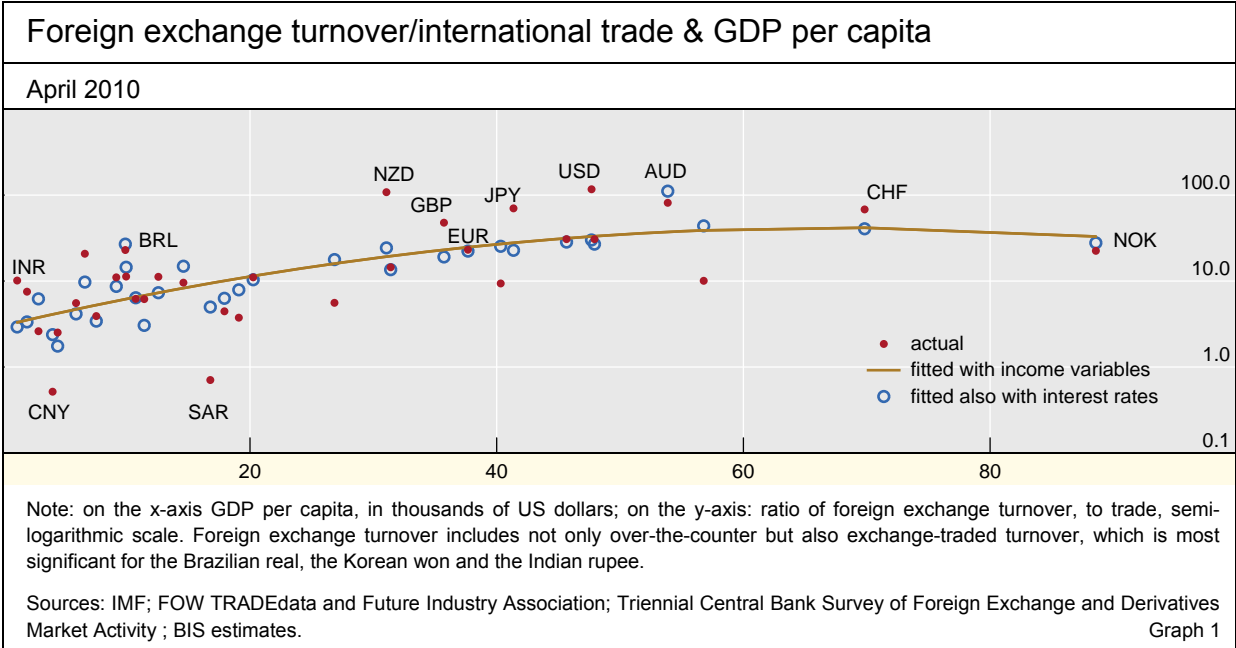
Yields matter too. How will the gap between the Chinese nominal growth rate and the renminbi’s yield evolve over time?

¹⁷ Günter Franke, “The Bundesbank and the markets”, in *Fifty Years of the Deutsche Mark: Central Bank and the Currency in Germany since 1948*, Oxford: Oxford University Press, 1999.

¹⁸ E Sakakibara and A Kondoh, “Study on the internationalisation of Tokyo’s money markets”, Japan Center for International Finance Policy Study Series, no 1, June 1984.

¹⁹ Ranjit Shinde, “Rcom: Latest loan will not improve financials much”, *The Economic Times (Mumbai)*, 17 December 2010, p 17. “RCom [Reliance Communications] on Wednesday availed of a syndicated loan of \$1.9 billion...from China Development Bank Corporation. RCom negotiated for a longer loan tenure of 10 years at low interest rates. A major chunk, \$1.6 billion, will be used to replace its high-cost debt contracted for third-generation, or 3G, spectrum fees. The country’s second biggest listed telecom player has been grappling with high debt”.

²⁰ “The evolving renminbi regime and implications for Asian currency stability”, *Journal of the Japanese and International Economies*, forthcoming.





Onshore China government yield curve and offshore issue pricing

30 November 2010, in percent

