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On the renminbi and economic convergence

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17 December 2009

Must China let its exchange rate appreciate to reduce global imbalances? This column says the appropriate yardstick to measure currency undervaluation is based on the Balassa-Samuelson effect. That measure says the renminbi is undervalued by only 12%. A gradual renminbi appreciation will be sustained only if Chinese corporate and public savings are lowered.

Many economists agree that the build-up and maintenance of international imbalances, with their accompanying capital flows, contributed to the overleveraging of finance and underpricing of risk. How to rebalance then? Many observers are increasingly emphasising that China should let its exchange rate appreciate.

For example, Cline and Williamson (2009) have recently estimated "fundamental equilibrium exchange rates" compatible with moderating external imbalances. They estimate that the required renminbi appreciation is more than 20% in real effective terms and 40% relative to the dollar. Ferguson and Schularick (2009) point to the manufacturing wage unit-costs to estimate the degree of undervaluation of the renminbi relative to the dollar and come up with the figure of 30% and 50%. Finally, the Bank of China's continuous intervention in the foreign exchange market also suggests that the renminbi would appreciate significantly if let loose; this intervention has accumulated $2.3 trillion of foreign exchange reserves.

Is this all there is to the story?

The rising US deficit corresponded to the surplus in the current accounts of about one hundred countries, most of them classified as developing and emerging economies. The creation of huge net asset positions and the emergence of a new lender and investor base developed as the US outspent its national income by an accumulated $4.7 trillion, 47% of GDP from 2000 to 2008. There is a clear political focus on the bilateral US-Chinese trade balance, but bilateral imbalances are of no economic interest – there are more than two countries in the world.

Even if analysed as a bilateral transfer problem between the US and China, the exchange-rate adjustment needed to produce sustainable current account balances may be limited. The US is unlikely to face a secondary transfer problem in terms of pressured export prices, as it is broadly the only debtor country to "effect the transfer". Generally, the required scope of dollar devaluation relative to the renminbi will depend on the degree to which lowered absorption in the US and higher absorption in China result in decreases and increases, respectively, in the demand for the same goods (Machlup, 1964, Part V). The rising middle class in China and other emerging markets will gradually add to global consumption, presumably along similar preferences as in the advanced countries.

It is true that a rising share of the US external deficit corresponded to China's savings surplus since 2005 (not much before, however). During 2000 and 2008, China's surplus was an accumulated $1.38 trillion (merely 30% of the US deficit). Another sizeable counterpart to US deficits has been the current account surplus of oil exporters, notably in the Arab Gulf region, as Asian drivers' voracious appetite increased oil prices much beyond the oil extraction cost, creating a second wave of asset build-up.

China and other emerging surplus countries are "immature" creditors that so far could not provide foreign lending in their own currencies. Therefore, they must contain the build-up of net foreign financial assets in foreign currencies, as this will widen the currency mismatch in their own financial institutions. Currency mismatches have been shown by the 1990s financial crises to be time bombs that can eventually impair balance sheets, produce bankruptcies and deep slumps. Asia, which still remembers the balance-sheet recession that resulted from the strong rise in the yen, wants to avoid a repetition of Japan's deflationary slump and low interest liquidity trap in 1990 (McKinnon and Schnabl, 2009).

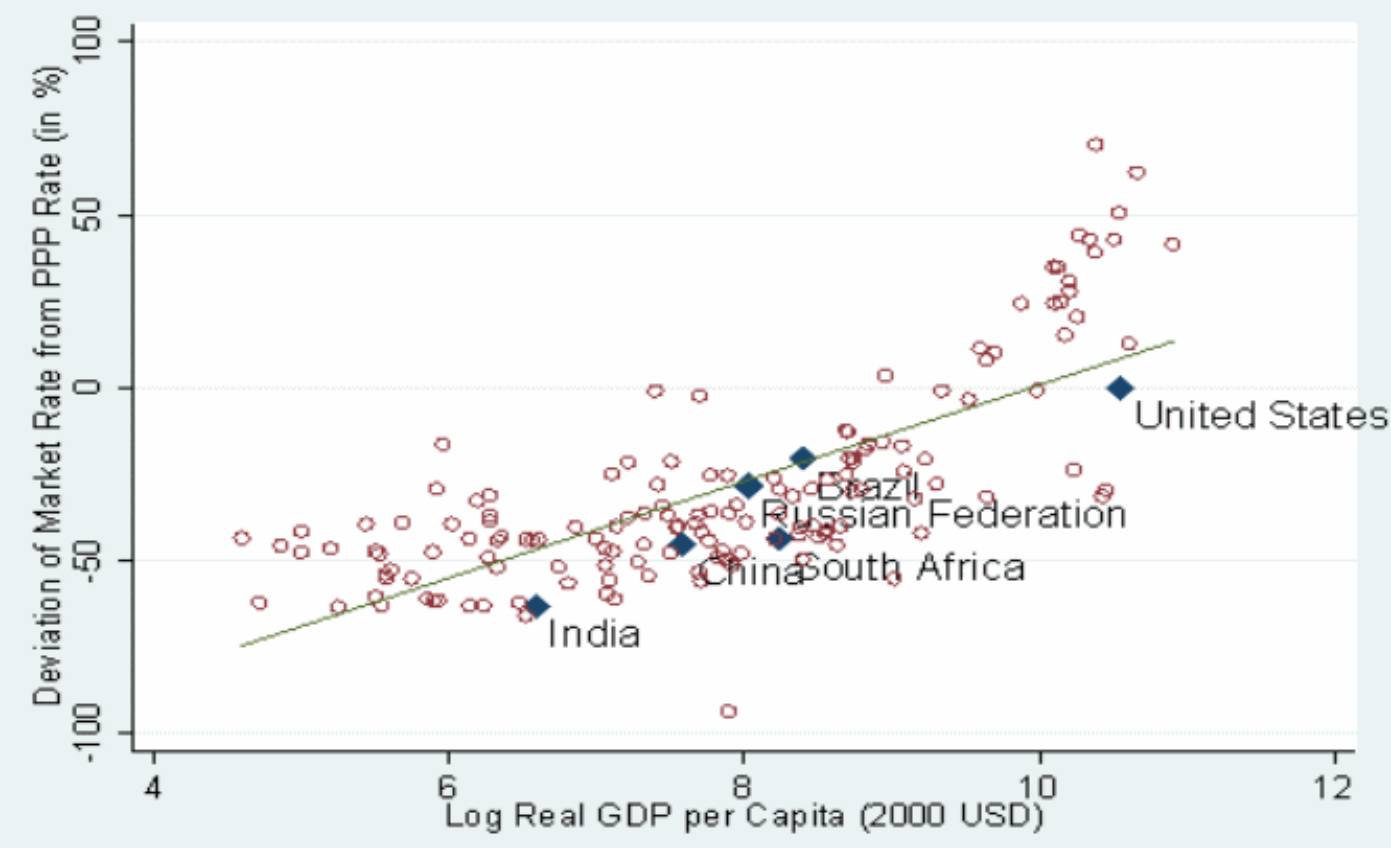
Nominal exchange rate appreciation will translate into real appreciation only if accompanied by higher absorption levels and by a switch in spending toward non-traded goods. As long as China's private households do not see a transfer from corporate and government savings, a nominal appreciation is unlikely to be sustained into a real currency appreciation. Using a large data set spanning 170 countries over the 1971–2005 period, Chinn and Wei (2008) find no robust evidence that the speed of current account adjustment increases with the degree of flexibility of an exchange rate regime. Note that China's real effective exchange rate, as measured by the JP Morgan index, has appreciated more than any other BRIC country over the past decade.

To be sure, poor-country currencies are normally undervalued in terms of purchasing power parity with rich countries. In fact, poorer countries do have undervalued exchange rates (due to the Balassa-Samuelson effect), and convergence will imply considerable correction of that undervaluation. Services (and wages) are cheap in poor countries and expensive in rich countries, while prices for internationally traded goods are roughly

equalised in a common currency. When the productivity in traded goods rises (while productivity growth for haircuts and other services are very limited), more income is generated and spent on services. The price ratio of non-traded to traded goods will rise. In other words, the real exchange rate will appreciate. Hence, part of the undervaluation ascribed to China's and other currencies results from market forces that make non-traded goods relatively cheap in poor countries, rather than from deliberate currency manipulation by China's authorities.

While growing and converging fast, China is still poor. Its per capita income in 2008 was 6.2% of the US's at market rates and 12.8% at PPP-adjusted rates, according to *World Development Indicator* data. Figure 1 relates the log of real per capita GDP as a fraction of the US level and the deviations of current market exchange rates per US dollar from PPP rates for the year 2008. It shows strong support for the Balassa-Samuelson effect and suggests a well-determined elasticity (0.2) by which the undervaluation of the currency will be eroded during the catch-up toward the US per capita income level. Real exchange rates can thus be expected to appreciate as economies grow, approaching PPP exchange rates as economies converge with US living standards, as posited by the Balassa-Samuelson effect.

Figure 1. Income convergence and exchange rates appreciation



To gauge a converging country's degree of undervaluation, the appropriate yardstick cannot be purchasing power parity; it should rather be the regression (over 145

countries) that provides the best fit for the Balassa-Samuelson effect. While the renminbi was undervalued by 60% in PPP terms, it was merely undervalued by 12%, if the regression fitted value for China's per capita income level is compared to the current value in 2008. Note that India and South Africa (which had a current account deficit) were more undervalued than China by that Balassa-Samuelson benchmark, by 16% and 20%, respectively, in 2008. The currencies of Brazil and Russia were appropriately valued, i.e. close to the regression line.

The overall current account surplus of China is the excess of China's national saving over China's domestic investment. China has seen a strong rise in retained corporate and surpluses of government-owned enterprises over recent years. After the reform of pension, housing and healthcare system in the 1990s, the "iron bowl" (lifelong secure job and welfare) system no longer existed and the enterprises stopped providing pension and housing for free. However, an effective social security system had not been in place either. As the real cost of labour took time to be reflected in the cost of the enterprises, the highly profitable corporate sector increased their savings while decreasing their contribution to social security. A structural, sustainable rebalancing of the world economy will also include the restoration of basic social services, such as in health and education, in China and other surplus emerging countries.

While China's surpluses are structural and linked to its unequal growth, the appreciation of its real exchange rate is bound to pay a significant role in rebalancing China's future growth performance toward consumption. It is worth to be stressed that any real effective renminbi appreciation will benefit first and foremost rich-country competitiveness, given the similarity in export structures reached meanwhile between China and the advanced countries. In contrast to Paul Krugman's (2009) conjecture, poor countries will benefit much less. China has been an engine of their recent growth, and they do not want to see it pushed into a precipitous, deflationary currency appreciation like Japan was until 1995. The growth impact for poor countries would likely be very negative, indeed.

Conclusion

The single-minded policy focus on the bilateral dollar/renminbi exchange rate should give way to a deeper understanding of past and present imbalances. The appropriate *global macroeconomic assignment* for a crisis-resistant recovery of the world economy is to tighten fiscal policy in the US, tighten monetary policy in China, and loosen fiscal policy in China. Today, the macroeconomic policy stance is the opposite – loose fiscal policy in the US in the wake of a $787 billion fiscal stimulus program approved in early 2009; fiscal expansion is bound to prolong external US deficits. Fiscal stimulus in the US has been mirrored by extraordinary credit growth in China since 2008, leading to lower regulatory

bank capital adequacy ratios and thus a higher level of desired official reserves. The current monetary stimulus in China and India increases domestic liquidity, feeds potentially dangerous asset bubbles and raises the desired level of foreign reserves as a defence against investor exit (Obstfeld, Shambaugh, and Taylor 2008a,b).

As for China, its gradual renminbi appreciation will be sustained only if corporate and public savings are lowered. Monetary restraint would diminish the precautionary motive for holding China's foreign exchange reserves and allow increased domestic consumption. To build a comprehensive social welfare, China needs to invest 5.74 trillion renminbi (about $0.9 trillion, 40% of its official reserves) by 2020, according to estimates by the China Development Research Foundation (China Daily, 26 Feb 2009).

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