12 Why exchange rate changes will not correct global trade imbalances

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In this chapter the authors suggest that the prevailing wisdom that a country's exchange rate should be used to bring its external trade into better balance is based on faulty economic theorising and should not apply in a globalised financial system where capital flows freely internationally. Under financial globalisation, forcing a creditor country such as China to appreciate its currency is neither necessary, sufficient nor even helpful for reducing its trade surplus.

Nobody disputes that almost three decades of US trade (net saving) deficits have made the global system of finance and trade more accident-prone. Outstanding dollar debts have become huge, and threaten the US' own financial future. Insofar as the principal creditor countries in Asia (Japan in the 1980s and 1990s, China since 2000) are industrial countries relying heavily on exports of manufactures, the transfer of their surplus savings to the saving-deficient US requires that they collectively run large trade surpluses in manufactures. The resulting large American trade deficits have worsened the "natural" decline in the relative size of the American manufacturing sector, and eroded the US industrial base.

One unfortunate consequence of this industrial decline has been an outbreak of protectionism in the US, which is exacerbated by the conviction that foreigners have somehow been cheating with their exchange rate and other commercial policies. The most prominent of these have been associated with New York's Senator Charles Schumer. In March 2005, he co-sponsored a bill to impose a 27.5% tariff on all US imports from China until the renminbi was appreciated. His bill was withdrawn in October 2006, when shown to be obviously incompatible with America's obligations under the WTO. But Schumer threatens to craft a new China bill for 2010 that is WTO compatible.

Furthermore, Congressional legislation requires the Secretary of the Treasury to investigate any country that runs a trade surplus with the US and to pronounce on whether or not the surplus country is manipulating its exchange rate. So far in 2010, the current Secretary— Timothy Geithner— has narrowly avoiding having to label China a "currency manipulator", which would involve as yet unspecified sanctions that could lead to a trade war.

However, the prevailing idea that a country's exchange rate could, and indeed should, be used to bring its external trade into better balance is often wrong. Unfortunately, this conventional wisdom is based on faulty economic theorising.

It need not apply in a globalised financial system where capital flows freely internationally. Under financial globalisation, forcing a creditor country such as China to appreciate its currency is neither necessary nor sufficient—and need not be even helpful—for reducing its trade surplus. What are the issues involved?

The exchange rate and the trade balance: The debate

For a "home" country, consider the identity from the national income accounts:

$$X - M = S - I = \text{Trade (Saving) Surplus}$$

where X is exports and M is imports (both broadly defined), and S is gross national saving and I is gross domestic investment

Most economists and commentators focus just on the left-hand side of this accounting identity. It suggests that a depreciation of the home currency will make exports cheaper in world markets, and they will expand. Similarly, the home country's imports will become more expensive in domestic currency, so they should contract. Thus conventional wisdom has it that the overall trade balance should improve if the underlying price elasticities for exporting and importing are even moderately high. This seemingly plausible result is very intuitive, so even journalists can understand and perpetuate it.

But this elasticities approach is basically microeconomic and quite deceptive. The export function X is looked at on its own— and so is the demand for imports M—even by supposedly sophisticated econometricians who purport to measure separately the price elasticities of exports, and of imports, to exchange rate changes. Thus it is called the elasticities approach to the trade balance.

However, if you analyse the right-hand side (S - I) of the identity, the emphasis is macroeconomic. For the trade balance to improve with exchange depreciation, overall domestic expenditures must fall relative to aggregate output. This is the same as saying that domestic saving must rise relative to domestic investment. Looked at this way, one cannot presume that US net saving will rise when the dollar is devalued.

Indeed, the presumption may go the other way when domestic investment (fueled in part by multinational firms) is sensitive to the exchange rate. Suppose the renminbi were to appreciate sharply against the dollar. Potential investors—either foreign or domestic, would now see China as a more expensive place in which to invest and the US less expensive. This might set off a minor investment boom in the US,where investment expenditures rise from a relatively small base, and a major slump in China's huge investment sector— which is currently about 45% of GNP. Overall, investment-led expenditures in China would fall, the economy would contract, Chinese imports could fall.

This is what happened to Japan from the 1980s into the mid-1990s when the yen went ever higher. Japan became a higher-cost place in which to invest, so that large Japanese firms decamped to invest in lower cost Asian countries, and

in the US itself. Even though yen appreciation slowed Japan's export growth, the trade surplus of the slumping economy increased.

No wonder China is reluctant to appreciate! Like Japan in the 1980s and 90s, its trade (saving) surplus would likely not diminish because domestic saving is relatively insensitive to the exchange rate even though investment in a globalised financial-industrial world is sensitive. However, foreign critics in the US and Europe, with the misleading elasticities model (which doesn't take international investment choices into account) in their heads, would come back and say "you just didn't appreciate enough". With this adverse expectation of continual renminbi appreciation, the upshot would be further hot money inflows. The People's Bank of China would be, as it has been, forced to intervene to buy dollars on a grand scale to prevent an indefinite upward spiral in the renminbi. But the accumulation of dollar foreign exchange reserves threatens a loss of internal monetary control as base money in China's banking system expands at an equal rate, and somehow has to be sterilised.

Currency mismatches and the impossibility of a free renminbi/ dollar float

While a discrete appreciation of the renminbi— by moving the government-controlled peg for the renminbi/ dollar rate—would be deleterious, isn't there an alternative market-based solution for determining the exchange rate?

> It is China's decision about what to do with the exchange rate -- they're a sovereign country," Geithner said. "But I think it is enormously in their interest to move, over time, to let the exchange rate reflect market forces, and I am confident that they will do what is in their interest," he said while visiting Boeing and other exporters in Washington State.
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Secretary Timothy Geithner's tone here is much more measured and careful than in previous episodes of US "China bashing" where various congressmen, journalists, industrialists, union officials, and economists— intellectually trapped by the elasticities model— have called for a large appreciation of the renminbi against the dollar. But would Secretary Geithner's more moderate and seemingly reasonable approach to let the renminbi/dollar rate reflect "market forces" i.e., by floating, work?

China has a large ongoing net saving (trade) surplus that somehow has to be financed by lending to foreigners. But the renminbi is not (yet) an internationally accepted currency. Thus the buildup of financial claims on foreigners is largely denominated in dollars—and not renminbi.

Moreover, with the threat that the renminbi might appreciate in the future, foreigners become even more loath to borrow in renminbi. So we have the making of a severe currency mismatch if the People's Bank of China were to withdraw

from the foreign exchange market, i.e., stop buying the dollars necessary to stabilise the renminbi/dollar rate.

Under such a free float, Chinese private (nonstate) financial institutions such as banks, insurance companies, and pension funds, would become responsible for financing the trade surplus. So they would have to build up dollar claims on the asset side of their balance sheets even though their liabilities—domestic bank deposits, annuity and pension obligations— were denominated in renminbi. Because of this mismatch, they would face the threat of bankruptcy should the dollar depreciate.

China's current account surpluses have been so large, between $200 billion and $300 billion per year, that when cumulated they would quickly dwarf the net worth of China's private financial institutions. Thus, except for transitory transacting, these private institutions would refuse to accumulate the dollar claims being thrown off by the current account surplus once the People's Bank of China left the market. Under such a free float with no willing buyers of dollars, the renminbi would just spiral upward indefinitely with no well-defined upper bound for its dollar exchange rate. (And remember that the appreciated renminbi need not reduce China's trade surplus.)

Of course the People's Bank of China could not just stand idly while a continually appreciating renminbi caused both exports and domestic investment to slump. So it would revoke its free float and re-enter the foreign exchange market to buy dollars to re-stabilise the renminbi/dollar rate. But this adventure in floating would have further undermined expectations, and make it more difficult to re-establish a credible renminbi/dollar rate from which hot money inflows were absent. The People's Bank of China and State Administration of Foreign Exchange could well find themselves with much larger dollar exchange reserves than the current incredibly high $2.5 trillion, and with the economy knocked off its high growth path.

What is the more general lesson here? Suppose a creditor country continues with high net saving (S – I) leading to a large buildup of foreign currency claims. The resulting currency mismatch within its domestic financial system will cause a free float to break down. Unlike what Secretary Geithner suggests, there is no market solution. So the best that the country can do is to stabilise its exchange rate through official intervention sufficiently credibly that hot money flows are minimised. And this is the strategy that China has been trying to follow, but is continually knocked off course by US and European "China bashing" to appreciate the renminbi.

The way out

1. In the short term (and forever?), foreigners should stop bashing China on the exchange rate. A credibly stable exchange rate would eliminate hot money inflows into China and make it much easier for the People's Bank of China to continue with its huge domestic credit expansion, which has made China the leading force in global economic recovery.

2. In the medium term, better balance net saving in the US and China. The US should cut back on its huge fiscal deficits and constrain private consumption while China continues stimulating private consumption. With trade better balanced, American manufacturing could recover and protectionist pressures would lessen.
3. In the long term, China should continue to encourage the "internationalisation" of the renminbi. With a stable renminbi/dollar rate, foreigners would be more willing to borrow in renminbi from Chinese banks and even be willing to issue renminbi-denominated bonds in Shanghai. By gradually escaping from its internal currency mismatch, China would be well on the road to becoming a "mature" international creditor.

About the Author

Ronald I. McKinnon is William D. Eberle Professor of International Economics at Stanford University. He is an applied economist whose primary interests are international economics and economic development-with strong secondary interests in transitional economies and fiscal federalism. Understanding financial institutions in general, and monetary institutions in particular, is central to his teaching and research. His interests range from the proper regulation of banks and financial markets in poorer countries to the historical evolution of global and regional monetary systems. His books, numerous articles in professional journals, and op-eds in the financial press such as *The Economist*, *The Financial Times*, and *The Wall Street Journa*l reflect this range of interests.