THE END OF CHIMERICA:
AMICABLE DIVORCE OR CURRENCY WAR?

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Introduction

In February 2007, before the onset of the financial crisis, Moritz Schularick and I coined the term "Chimerica" to describe the combination of the Chinese and American economies, which together had become the key driver of the global economy.[2] We called it Chimerica for a reason: we believed this relationship was a chimera—a monstrous hybrid like the part-lion, part-goat, part-snake of legend. We identified it as one of the causes of the asset price bubble that was such a striking feature of the U.S. economy in the years from 2002 to 2006.[3] More recently, we have argued that we may be witnessing the death throes of this strange creature.[4] The central question the Committee must consider is whether U.S. policy should be to slay Chimerica, or to try to keep it alive. Should the U.S. Treasury brand Beijing a "currency manipulator" in its report due on April 15? Should Congress pass the "Currency Exchange Rate Oversight Reform Act",

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[1] Niall Ferguson is the author numerous works of financial history, including *The Cash Nexus: Money and Power in the Modern World, 1700-2000* (New York, 2001) and *The Ascent of Money: A Financial History of the World* (New York, 2008).

[2] Niall Ferguson and Moritz Schularick, "Chimerical? Think Again", *Wall Street Journal*, February 5, 2007.

[3] Niall Ferguson and Moritz Schularick, "'Chimerica' and Global Asset Markets", *International Finance* 10, 3 (2007), pp. 215–239. See also my *The Ascent of Money: A Financial History of the World* (New York, 2008).

[4] Niall Ferguson and Moritz Schularick, "The End of Chimerica", Harvard Business School Working Paper 10-037 (2009). Cf. Niall Ferguson and Moritz Schularick, "The Great Wallop", *New York Times*, November 16, 2009

paving the way for retaliatory tariffs against imports from countries with “fundamentally misaligned currencies”, as proposed by Senators Brown, Graham and Schumer?

These are questions of the utmost historical significance. The threat of tariffs has worked before to pressurize the Chinese into revaluing their currency. On the other hand, one of the most important lessons of the Great Depression was that protectionist measures, including competitive devaluations, tended to worsen the situation of the global economy in the early 1930s. A second historical lesson is that conflicts over currencies and trade are often the prelude to conflicts of another sort. The Chinese authorities, and China’s state-controlled media, are well aware of both these points, but they seem likely to respond pugnaciously to any pressure from the United States. The stakes are therefore high. We may be less than two decades from a major historical turning point, if there is any truth to the projections that China’s gross domestic product will overtake that of the United States in 2027. Yet America’s leaders seem to have given little thought to this momentous and imminent shift in the balance of economic power.[5]

1. What is Chimerica?

Chimerica combined Chinese export-led development with American over-consumption; to vary the metaphor, the result was an improbable financial marriage between the world’s sole superpower and its most likely future rival. For China, the key attraction of this marriage was its potential to propel the economy forward by means of export-led growth. Thanks to the Chimerican symbiosis, China was able roughly to quadruple its GDP since 2000, raise exports by a factor of five, import western technology and create tens of millions of manufacturing jobs for the rural poor. For America, Chimerica meant being able to consume more, save less and still maintain low interest rates and a stable rate of investment. Over-consumption meant that between 2000 and 2008 the United States outspent its national income by a cumulative 45 percent, i.e. total U.S. spending over the period was 45 per cent higher than total income. Purchases of goods from China in excess of income accounted for about a third of over-consumption.

[5] Niall Ferguson, “Complexity and Collapse: Empires at the Edge of Chaos”, *Foreign Affairs*, April/May 2010.

For a time, it seemed like a marriage made in heaven. Chimerica accounted for around 13 per cent of the world's land surface, a quarter of its population, more than a third of its gross domestic product, and around two fifths of global economic growth in the past ten years. It also seemed like a marriage with benefits for the rest of the world. Global trade boomed and nearly all asset prices surged. Yet, like many another marriage between a saver and a spender, Chimerica was always likely to end in tears.

China's integration into the world economy was by far the most important development of the economic history of the past decade. In the 1990s Zhu Rongji and his right-hand man Wen Jiabao embraced foreign trade and foreign direct investment (FDI) as cornerstones of a new Chinese development strategy. Following substantial renminbi devaluation in 1994 and the opening up of the economy to FDI, the strategy quickly bore fruit as multinational companies started to relocate production to China. The Chinese export machine went into overdrive after World Trade Organization accession in 2001. Exports in 2000 were in the range of $250 billion, but climbed to $1.3 trillion in 2008. China's current account surplus in 2001 was a mere $17 billion. By the end of 2008, it was approaching $400 billion.

As exports expanded, the authorities in Beijing consistently bought dollars to avoid appreciation of their currency. China's currency interventions served two goals: first, to promote export competitiveness, since export industries provided rapid productivity gains as well as new jobs and income; second, to build up reserves as a cushion against the risks associated with increasing financial integration, painfully illustrated by the experience of other countries in the 1997-8 Asian Crisis.

The historical record has shown time and again that policies of real exchange rate undervaluation can be sustained for a long time without generating the inflationary pressures predicted in economic theory. In a standard macroeconomic model, exchange rate intervention should lead to monetary expansion, which in turn drives up domestic prices, nullifying the real effect of intervention. China's financial system, however, is owned and managed by the government. Capital controls are in place for most non-FDI capital flows. Sterilization and bank lending policies are governed by decree, so that the government can force banks to buy trillions of low-yielding renminbi sterilization bonds or alter their reserve ratios. Deposit and lending rates are also set by the government. This has allowed China to intervene in the forex market while retaining control over domestic monetary aggregates.

2. Chimerica and the Crisis

Chimerica worked—for China. But the unintended consequence of sustained currency intervention was a vast accumulation of dollar-denominated securities in the reserves of the People's Bank of China and the State Agency for Foreign Exchange (SAFE). Already by 2000 China had currency reserves of $165 billion, slightly above 10 per cent of GDP. By the end of 2009 currency reserves had reached $2.4 trillion, equivalent to more than 50 per cent of China's annual output.

This unprecedented accumulation of reserves opened up a Pandora's box of financial distortions. Chinese purchases of U.S. Treasuries kept their prices above and hence their yields below where they would otherwise have been. Lower long-term interest rates enabled American households to increase consumption levels and widened the gap between savings and investment. And, because foreign savings were predominantly channeled through government (or central bank) hands into safe assets such as Treasuries, private investors turned elsewhere in search of higher yields. This encouraged financial engineers to develop new financial products such as collateralized debt obligations.

This is not to say that reserve accumulation was the only cause of the financial crisis that began in the summer of 2007. Beijing cannot be blamed for the reckless lending and borrowing engaged in by Western financial institutions, nor for the sins of omission of policy-makers and regulators. Yet had it not been for the Chinese willingness indirectly to fund America's consumption and real estate speculation, long-term interest rates in the United States would almost certainly have been higher, reducing the size of the housing bubble.

3. Export-led Growth and Reserve Accumulation in Perspective

An export-centered growth strategy is nothing new. After all, Western Europe and Japan as well as South Korea and Taiwan all successfully pursued similar strategies. In all cases, productivity gains coupled with wage restraint led to the rapid development of a manufacturing sector focused on foreign markets. Rising corporate profits financed rising investment, which in turn supported manufacturing capacity and productivity. For some commentators, the resemblance between these earlier growth strategies and modern China's was so close that it was legitimate to refer to "Bretton-Woods II", referring to the pre-1971 system of pegged exchange rates and capital controls.

At first sight, the analogy is indeed close. In terms of gross domestic product measured in current dollars, both West Germany and Japan in the 1960s were about 10-15 per cent of size of the United States. China's economy in the year 2000 was also about 12 per cent of the size of the U.S. economy (though it is much bigger on the basis of purchasing power parity). However, there the resemblances end.

At the height of post-war growth in the 1960s, West Germany and Japan grew their dollar reserves in line with U.S. GDP, keeping the ratio stable at about 1 per cent before moving slightly higher in the early 1970s when capital flows and valuation gains led to an increase. On a yearly basis, reserve accumulation was about 1 per cent of GDP on average in Germany, and not even 0.5 per cent in Japan. By contrast, a dramatic shift in Chinese reserve accumulation occurred in the early 2000s. Starting at a level of dollar reserves equivalent to about 1 per cent of U.S. GDP in 2000, China's reserves reached 5 per cent of U.S. GDP in 2005, rising to 8 per cent in 2007 and finally reaching about 10 per cent in 2008. At the end of 2009, China's dollar reserves are likely to be equivalent to 12 per cent of U.S. GDP, compared to about 1 per cent a decade ago.

Moreover, both West Germany and Japan did not resist currency appreciation in the way that China has. Between 1960 and 1978, for example, the deutsche mark appreciated cumulatively by almost 60 per cent against the dollar, while the Japanese yen appreciated by almost 50 per cent. One key lesson from post-war history is that exporters can live with substantial exchange rate revaluations when major gains in productivity are being achieved.

4. The Real Exchange Rate adjusted for Unit Labor Costs

By how much is the Chinese currency undervalued? Estimates for the undervaluation range widely from zero to 50 per cent depending on the methodology adopted. In our view, the most illuminating approach focuses on the unit labor cost based real exchange rate between the renminbi and the dollar. Unit labor costs are defined as the cost of the labor inputs (total wages) needed to produce a unit of output. If these productivity gains (relative to the productivity gains abroad) are not reflected in proportionate exchange rate changes, the economy will gain in competitiveness and more production will be relocated to the cheaper currency area. We find that, while wages and employment in China have grown rapidly in recent years, the increase in output has been even faster thanks to rapid productivity gains. Chinese unit labor costs fell in eight out of last nine years, sometimes substantially. Chinese unit labor costs today are about 40 per cent lower than in 1998, while the nominal exchange rate has only appreciated by 15 per cent, leaving a net gain in wage competitiveness of 25 per cent. Despite some modest currency adjustment, in other words, manufacturing production today in China is much cheaper in dollar terms than it was eight years ago.

5. The Case for Chinese Currency Adjustment

The Chimerican era is drawing to a close. After the bursting of the debt and housing bubbles, U.S. household savings are rising again. Washington has sought to buffer this necessary adjustment by running sizeable budget deficits. Public dis-saving can temporarily compensate for higher private savings to maintain final demand, but the American consumer still faces a lengthy adjustment period and will ultimately also have to pay the bill for today's deficits. Meanwhile, Beijing's response to the collapse in global demand has been to loosen credit and pump money into domestic construction and infrastructure projects. In the first six months of 2009 the government in Beijing ordered the banks to make new loans of close to 10 trillion renminbi or about 40 per cent of GDP. Here, too, stimulating domestic demand was the right short-run policy response.

But while these policies may have averted a second Great Depression, they do not constitute a sustainable answer to the problem of global imbalances. On the contrary, the U.S. trade deficit is widening again, and although China's trade surplus has been somewhat reduced (mainly as a result of increased imports from its Asian neighbors) it is hard to believe—as some claim—that is going to disappear altogether this year. As long as Chinese exchange rate policy implicitly taxes consumption and subsidizes exports, China's surpluses will surely persist. These leads some people in both China and America to hope for a return to the status quo ante. But this is an illusion.

In the depressed conditions caused by the financial crisis, China's dollar peg poses a quadruple threat. First, it limits U.S. recovery by overvaluing the dollar in key Asian markets and therefore artificially raising the price of U.S. exports. (In theory, to be sure, the United States could deflate to regain competitiveness against Asia, but deflation is out of the question for such a highly leveraged economy.) Secondly, with inflows of hot money straining the system of sterilization to breaking point, the renminbi-dollar peg is now contributing to a dangerous overheating of China's economy; appreciation of the currency would complement the recent increases in bank reserve requirements, helping to cool down the rampant over-investment in manufacturing capacity and urban real estate. Thirdly, renminbi undervaluation risks unleashing either a protectionist backlash or a rash of "currency wars" as the world's major fiat currencies jockey for competitive advantage. Fourthly, every additional dollar of reserves increases the potential cost of revaluation to China's monetary authorities, making a change of policy even less attractive.

Proponents of the Chimerican status quo make the following arguments. First, revaluation would seriously slow the Chinese economy in the absence of other major changes in Chinese economic policy—such as the creation of a modern welfare state, which some believe would encourage the Chinese to save more and spend less. We think such changes are indeed highly desirable; revaluation needs to be part of a package designed to reduce China's trade surplus.

Another argument for the status quo is that the United States needs China to continue acting as a source of cheap finance for its explosive fiscal deficit. However, China may already be winding down its accumulation of Treasuries. According to recent estimates, China lent just 4.6 per cent of the money the U.S. government raised in 2009. That compared with 20.2 per cent in 2008 and a peak of 47.4 per cent in 2006. Indeed, China appears to have been a net seller of Treasuries in recent months. But the removal of this prop for U.S. bond prices is also very welcome. It is high time American legislators began steering a course back to fiscal balance over the next decade, instead of imagining that the federal government can run trillion-dollar deficits for the rest of time.

Nothing would focus minds better on the urgency for fiscal reform than significant (say, 200 basis points) upward movement in nominal ten-year yields.

Finally, there is no need for Americans to fear some kind of overnight loss of reserve currency status by the dollar. Even if China adopted full capital account convertibility at some point in the next five years, history shows that it would take many decades for the renminbi to displace the dollar in the majority of international transactions. Path dependence means that transitions from one international reserve currency regime tend to lag behind changes in the geopolitical balance of power.

Conclusion

The world economy's most glaring structural imbalance today is that the second biggest economy in the world has pegged its currency to that of the largest economy at a strongly undervalued rate. There is no point pretending that this is not "currency manipulation", and in its April 15 report the U.S. Treasury should call a spade a spade. A renminbi revaluation would help both sides. By stimulating U.S. exports it would allow a quicker exit from the unsustainable policies currently being implemented by the Fed and the Treasury. It would also solve at a stroke the problem of China's excessively large international reserves and dollar exposure, while at the same time accelerating the necessary shift from the export sector to the consumer sector as the engine of China's growth. In short, revaluation would warm up the U.S. economy and cool down the Chinese. Moreover, as we have seen, history is on the side of revaluation. The lesson of German and Japanese history is that rapidly growing exporters can live with significant exchange rate appreciation when major gains in productivity are being made, as they clearly are in this case.

The question remains how best to persuade the Chinese to follow the German and Japanese example. Some critics of China have for some time been calling for retaliatory tariffs to force China to end its "currency manipulation". Others point to the effectiveness of the import surcharge imposed by the Nixon administration in 1971, which encouraged the Germans and Japanese to revalue their currencies upwards against the dollar. And, of course, the threat of tariffs was sufficient to prompt Chinese revaluation in 2005.

The situation today is very different, however. As an historian, I feel very uneasy about any steps in the direction of protectionism at a time of such economic fragility. I am even more worried about a race to the bottom among fiat currencies, as countries other than the U.S. try to relieve the pressure on their own manufacturers by letting their currencies slide against the dollar and renminbi. Last year, for example, Brazil imposed a tax on "hot money"—large, volatile flows of foreign investment that may exit an economy as quickly as they appeared—to try to slow the appreciation of its currency, the real. In Europe not everyone is sorry that the "Greek tragedy" of recent months has caused the euro to weaken. Similar competitive devaluations were a feature of the worst economic decade of the twentieth century, the 1930s. It goes without saying that not everyone can simultaneously have a weak currency.

It is for these reasons that I would urge the United States to pursue currency realignment on a multilateral rather than solely on a bilateral basis, using the G20 rather than just a Sino-American "G2" as the appropriate forum. After all, we should not fetishize the renminbi-dollar exchange rate.[6] The U.S. trade deficit is growing again not only because of China but also because of relatively high oil prices. The rise of China as an exporter of manufacturers has probably hurt other Asian exporters as much as, if not more than, it has hurt the United States. And if China were to increase its imports, the United States would not be the principal beneficiary.

Finally, there is good reason to doubt that the Chinese leadership will respond positively to pressure from the United States in the form of tariffs, even if these were wholly justified under International Monetary Fund and World Trade Organization rules. As Premier Wen Jiabao's recent statements on the subject have made clear, Beijing is in a more combative mood than it was five years ago, before the global financial crisis took the shine off the "Washington Consensus". And recent dollar strength should not lead is to forget that the longer-term trend has been for the dollar to depreciate relative to other currencies. Indeed, we have now lived through four significant periods of dollar weakness since the end of the Bretton Woods system.

[6] Here I find myself more in agreement with Stephen Roach, "Consumer-Led China", Morgan Stanley Research Paper, March 22, 2010, than with Paul Krugman, "Taking On China", *New York Times*, March 14, 2010.

It is not by chance that one of the best-selling works of economic history in China in recent years was *Currency Wars* by Song Hongbing. An excessively confrontational approach by the United States would only confirm the thesis of that book and might also contribute to a deterioration of Sino-American relations, the costs of which to financial market confidence might significantly outweigh the benefits of any revaluation that might be forthcoming.

Harvard University, March 22, 2010