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Appreciate This:

Chinese Currency Rise Will Have a Negligible Effect on the Trade Deficit

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Introduction

The Chinese currency issue has roared back to life with a vengeance and once again threatens U.S.-China relations and the global trading system. Official dialogue has descended into an exchange of finger-pointing and tongue-lashings. And Washington is abuzz with sanctions talk, as lawmakers from both major parties throw their support behind legislation intended to compel China to revalue the Renminbi (RMB).

The catalyst for this latest flare-up is the impending Treasury Department report to Congress on currency manipulation, which is due on April 15. Although Treasury has never branded China as a currency manipulator—which is a label that would spark negotiations on an “expedited basis” and open the door to “remedial” legislation—there is increasing speculation that a new precedent will be set with the forthcoming report.

The president has expressed concern that an undervalued RMB “artificially inflates the price of U.S. goods” and, by extension, undermines the goal of his just-unveiled National Export Initiative to double U.S. exports in five years. Reducing imports—the perennial goal of America’s very vocal import-competing industries and unions—seems to be the primary motivation for Congress in the currency debate.

Before they do something rash, the administration and Congress should take deep breaths and consider whether RMB appreciation would even lead to the outcomes they desire—namely, more balanced trade. The evidence does not support their objective. They also should consider the likely consequences of taking the provocative actions under review. Although the short-term political benefits may be all that matter to some politicians, real economic costs will be borne without any economic benefits to show.

There are less provocative alternatives for encouraging China to recycle its accumulated foreign reserves, which is probably a worthy objective. Unfortunately, policymakers’ fixation on the politically charged, but economically meaningless, bilateral trade account only spells trouble.

The Renminbi Is Likely Undervalued

Many economists believe that the Renminbi is undervalued, but there is disagreement about the magnitude. Disagreement is to be expected. After all, nobody can know the true value of the RMB unless, and until, it is allowed to float freely and restrictions on China’s capital account are removed.¹ Short of that, economists produce estimates of undervaluation—and those estimates vary widely. So that begs a practical question: How will we know when we are there?

That question is important because Congress is once again agitating to consider legislation to compel the Chinese to allow RMB appreciation under the threat of sanction. Of course, that approach assumes that China will respond more “favorably” to public condemnation and arm-twisting than it would if the issue were allowed to migrate to the back burner. But U.S. politics won’t allow that.

Laser-like Focus on the Trade Deficit

For Congress, the issue is not that the currency is undervalued per se, but that the United States has a large bilateral trade deficit with China, which is popularly attributed to the undervalued RMB.² Currency revaluation for many policymakers is just a proxy for reducing the trade deficit to zero, or better still, turning it into a surplus. There should be little doubt that many will take the position that the RMB is undervalued as long as U.S. imports from China exceed U.S. exports to China.

Leaving aside the question of whether bilateral deficit reduction should even be an explicit objective of policymaking in the first place, there is reason to be skeptical that currency revaluation would have the “desired” effect. It is assumed that Americans will reduce their purchases of Chinese products and that the Chinese will increase their purchases of American products if the value of the RMB increases against the dollar. But whether those trends would work to reduce the U.S. deficit with China depends on the

extent to which consumers in both countries are responsive to the relative price changes.

What matters for the trade account is *how much* Americans reduce their purchases of Chinese goods and *how much* the Chinese increase their purchases of U.S. goods. Import value equals price times quantity, so if the percent increase in price (appreciation of the RMB) exceeds the percent reduction in quantity of imports consumed (in absolute value), then import value will increase. For example, if the RMB appreciates by 25 percent and U.S. consumers reduce consumption of Chinese imports by only 10 percent, then the value of U.S. imports from China will be greater than before (*adding* to the trade deficit). The same 25 percent increase in RMB value, however, should lead to an unequivocal increase in U.S. exports to China because the dollar price charged (the price used to measure U.S. exports) remains the same, while the quantity sold to China increases because Chinese consumers, by virtue of RMB appreciation, face lower relative prices, and demand more goods. Thus, RMB appreciation should unambiguously increase U.S. export value, reducing the trade deficit. But its effect on U.S. import value is ambiguous.

Whether the aggregate change in U.S. import and export value results in a lower trade deficit depends on the relative responsiveness (price elasticity) of American and Chinese consumers to the price changes they face. If U.S. consumers are responsive (they reduce the quantity of their purchases by a *percentage greater than the price increase*), then the trade deficit will decline, regardless of the degree of Chinese responsiveness. If U.S. consumers are not responsive (they reduce the quantity of their purchases by a smaller percentage than the price increase), then import value will rise and Chinese consumers would have to increase their purchases of American goods by a large enough percentage to offset the increased U.S. import value, if the U.S. trade deficit is to be reduced.³

Weak Link between Currency Values and Trade Flows

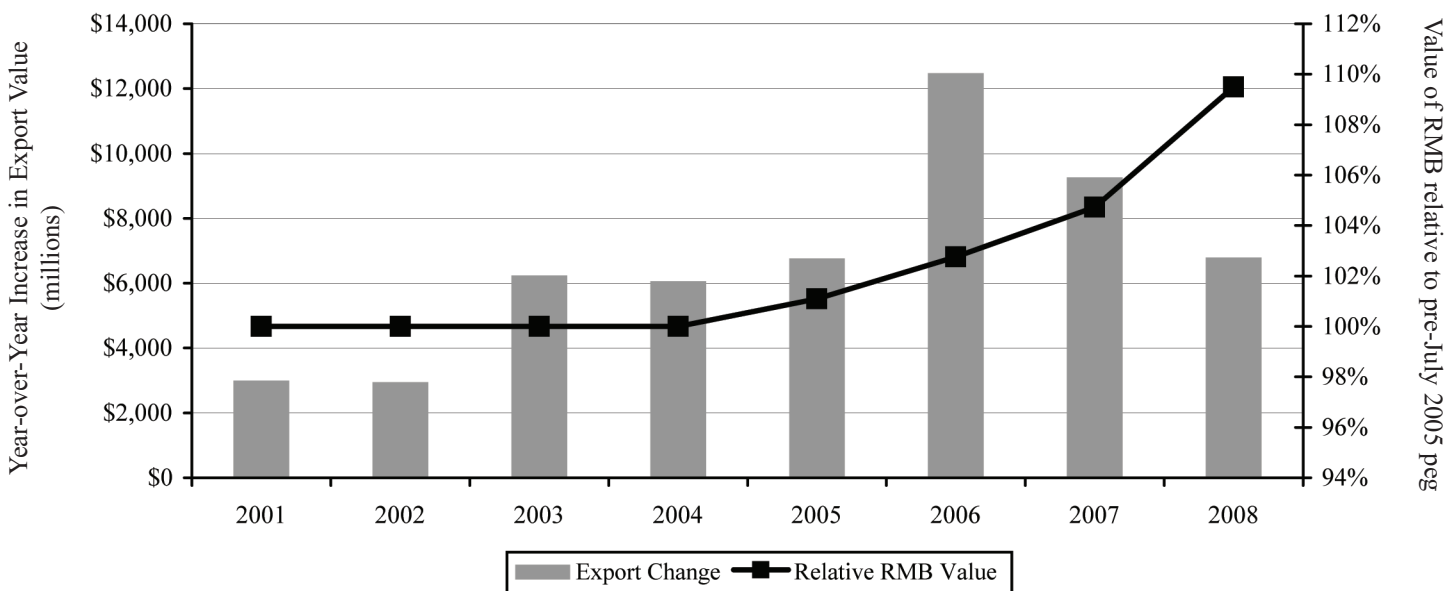
Recent evidence suggests that RMB appreciation will not reduce the U.S. trade deficit and undermines the common political argument for compelling China to revalue. Between July 2005 and July 2008, the RMB appreciated by 21 percent against the dollar—from a value of \$.1208 to \$.1464.⁴ During that same period (between the full year 2005 and the full year 2008), the U.S. trade deficit with China increased from \$202 to \$268 billion.

U.S. exports to China increased by \$28.4 billion, or 69.3 percent. But how much of that increase had to do with RMB appreciation is very much debatable. Figure 1 shows that U.S. exports to China were already on an upward trajectory, increasing by \$3 billion in 2001, \$3 billion in 2002, \$6.2 billion in 2003, and \$6.1 billion in 2004, when the exchange rate was consistently at 8.28 RMB per dollar. Natural sales growth from the confluence of market penetration and cultivation of Chinese demand was already evident.

In 2005—the first year in which there was a slight RMB appreciation—the value of exports increased by \$6.8 billion. Exports jumped another \$12.5 billion in 2006, a year in which the RMB appreciated by 2.8 percent. But in 2007, despite an even stronger 4.7 percent RMB appreciation, the increase in exports was only \$9.3 billion. And in 2008, the RMB appreciated by a substantial 9.5 percent, but the increase in exports fell to \$6.8 billion. If currency value were a strong determinant, then export growth should have been much more robust than it was in 2007, and in particular, 2008.

On the import side, recent experience is even more troubling for those who seek deficit reduction through currency revaluation. The evidence that an appreciating RMB deters the U.S. consumption of Chinese goods is not very compelling. During the period of a strengthening RMB from 2005 to 2008, U.S. imports from China increased by \$94.3 billion, or 38.7 percent. Not only did Americans demonstrate

Figure 1
RMB Appreciation and Changes in U.S. Export Value to China 2001–2008



strong price inelasticity, but they actually *increased* their purchases of Chinese imports, in seeming defiance of the law of demand. One reason for continued U.S. consumption of Chinese goods despite the relative price increase is that there may be a shortage of substitutes in the U.S. market for Chinese-made goods. In some cases, there are no domestically produced alternatives. Accordingly, U.S. consumers are faced with the choice of purchasing higher-priced items from China or foregoing consumption of the item altogether.

It is doubtful that members of Congress, who support action to compel Chinese currency appreciation, would proudly announce to their constituents that they intentionally reduced their real incomes. But that is the effect of relative dollar depreciation.

Globalization Mutes the Effect of Currency Changes

Something else is evident about the relationship from those 2005 to 2008 data. The fact that a 21 percent increase in the value of the RMB was met with a 38.7 percent increase in import value means that the quantity of Chinese imports demanded after the price change increased by nearly 15 percent.⁵ Higher prices being met with greater demand would seem to defy the law of demand.

Chinese exporters must have lowered their RMB-denominated prices to keep their export prices steady. That would have been a completely rational response, enabled by the fact that RMB appreciation reduces the cost of production for Chinese exporters—particularly those who rely on imported raw materials and components. According to a growing body of research, somewhere between one-third and one-half of the value of U.S. imports from China is actually Chinese value-added.⁶ The other half to two-thirds reflects costs of material, labor, and overhead from other countries. China's value-added operations still tend to be low-value manufacturing and assembly operations, thus most of the final value of Chinese exports was first imported into China.

RMB appreciation not only bolsters the buying power of Chinese consumers, but it makes Chinese-based producers and assemblers even more competitive because the relative prices of their imported inputs fall, reducing their costs of production. That reduction in cost can be passed on to foreign consumers in the form of lower export prices, which could mitigate entirely the intended effect of the currency adjustment, which is to reduce U.S. imports from China. That process might very well explain what happened between 2005 and 2008, and is probably a reasonable indication of what to expect going forward.

In a 2006 Cato paper on exchange rates and trade flows, this author found that despite considerable dollar depreciation between 2002 and 2005 against the Canadian dollar, the Euro, the Japanese yen, the Korean won, and the Brazilian real, the U.S. trade deficit expanded during that period with Canada, Europe, Japan, Korea, and Brazil.⁷ Factors other than currency movements, such as income and the availability of substitutes, impact trade flows, particularly when exporters are willing to absorb the costs of those currency changes.

In a recently published paper from the U.S. International Trade Commission, economist Cathy L. Jabara observes a

weak relationship between exchange rates and U.S. import prices, particularly with respect to imports from Asia. Exchange rate pass-through is quite low because exporters often “price to market” to absorb costs and maintain market share. She notes that the economic literature supports her findings of low exchange rate pass-through, particularly for consumer goods. Ironically, she also notes that economist Paul Krugman, who is among the most outspoken advocates of U.S. intervention on the currency issue, was one of the first to explore and describe the potential for exchange-rate pass-through to mitigate the impacts on trade flows.⁸

Congressional Action Would be Costly and Misplaced

Despite the evidence of a weak relationship between currency values and trade flows, Congress has been pushing the Commerce Department—and is now considering legislation—to treat currency manipulation as a subsidy to be remedied under the U.S. Countervailing Duty law. Of course there are many immediate practical problems with this idea, not the least of which is determining how to measure the alleged subsidy. If one takes note of the fact that the economists are in disagreement about the level of undervaluation—estimates from respectable sources range from 10–50 percent—one would conclude that there is more than one way to skin the cat. How would the Commerce Department justify its subsidy measurement methodology? Whatever method it chose would likely be subject to an immediate WTO challenge, inviting similar frivolity from China and undermining the credibility of the WTO at a time when the United States is planning to hold other members more accountable to their own commitments.

Less Provocative Alternatives

Another reason China may be loathe to see the RMB appreciate too rapidly is that it owns \$800 billion of U.S. debt. A 25 percent appreciation in the RMB would reduce the value of those holdings to approximately \$640 billion. That's a high price for China to pay, especially in light of the fact that U.S. inflation is expected to rise in the coming years, which will further deflate the value of those holdings (and ease the burden of repayment on U.S. taxpayers). Likewise, mass dumping of U.S. government debt by Chinese investors—the much ballyhooed “leverage” that China allegedly holds over U.S. policy—would precipitate a decline in the dollar as well, which also would depress the value of Chinese holdings. The assertion that China holds U.S. debt as a favor to America, and would withdraw that favor on a whim, is a bit far-fetched.

China, it seems, is guilty of a failure to heed the first law of investment: it failed to diversify its portfolio adequately. The overwhelming investment focus on U.S. public debt has left China exposed to heavy losses from dollar inflation and RMB appreciation. The fact that the inflation rate is in the hands of U.S. policymakers makes China even more reluctant to allow large-scale or, at least, precipitous, RMB appreciation.

As of the close of 2008, Chinese direct investment in the United States stood at just \$1.2 billion—a mere rounding

error at about 0.05 percent of the \$2.3 trillion in total foreign direct investment in the United States. That figure comes nowhere close to the amount of U.S. direct investment held by foreigners in other big economies. U.S. direct investment in 2008 held in the United Kingdom was \$454 billion; \$260 billion in Japan; \$259 billion in the Netherlands; \$221 billion in Canada; \$211 billion in Germany; \$64 billion in Australia; \$16 billion in South Korea; and even \$1.7 billion in Russia.⁹

If it is desirable that China recycle some of its estimated \$2.4 trillion in accumulated foreign reserves, U.S. policy (and the policy of other governments) should be more welcoming of Chinese investment in the private sector. Indeed, some of China's past efforts to take equity positions or purchase U.S. companies or buy assets or land to build new production facilities have been viewed skeptically by U.S. policymakers—and scuttled—ostensibly over ill-defined security concerns.

A large inflow of investment from China would have a similar impact as a large increase in U.S. exports to China on the value of both countries' currencies, and on the level of China's foreign reserves. In light of China's large reserves and its need and desire to diversify, America's need for investment in the real economy, and the objective of creating jobs and achieving sustained economic growth, U.S. policy should be clarified so that the benchmarks and hurdles facing Chinese investors are better understood. Lowering those hurdles would encourage greater Chinese investment in the U.S. economy and a deepening of our mutual economic interests.

Conclusion

The world would be better off if the value of China's currency were truly market-determined, as it would lead to more optimal resource allocations. But compelling China to revalue under threat of sanction could produce adverse consequences—including reductions in Americans' real incomes and damaged relations with China—without even achieving the underlying, but misguided, policy objectives.

For now, it would be better to let the storm pass and allow China to appreciate its currency at its own pace.

1. To float its currency and let markets determine the value,

China would have to remove restrictions on its capital account, so that investment can flow in and out of the country freely. If China did this, it is not entirely clear that the value of the RMB would appreciate. It is possible that there would be more capital flight than inflow, as domestic savings are able to pursue investment options outside of China. This capital flight would have a depreciating effect on the value of the RMB.

2. Of course, there are many other important determinants of the trade account besides relative currency values.

3. There is also an "income effect" from the change in currency values. When the dollar declines in value, U.S. consumers experience a decline in real income, which affects their consumption choices. Even though Chinese imports might be relatively more expensive than they were before the currency rise, they may still be less expensive than the alternatives. Accordingly, U.S. consumers with lower real incomes might be inclined to purchase more Chinese imports.

4. Federal Reserve Board, *Federal Reserve Statistical Release G5.A, Foreign Exchange Rates (Annual)*, release dates January 4, 2010 and January 2, 2009. Since July 2008, the value of the Yuan against the dollar has not changed measurably.

5. Assume that the price of imports is \$1 and the quantity demanded is one unit. The import value is then \$1. If a 15.2 percent increase in price leads to a 38.7 percent increase in value, then quantity must increase by 20.4 percent because: $(1.152 \times \text{price}) * (1.204 \times \text{quantity}) = 138.7$.

6. Robert Koopman, Zhi Wang, and Shang-jin Wei, "How Much of Chinese Exports Is Really Made in China? Assessing Foreign and Domestic Value-Added in Gross Exports," U.S. International Trade Commission, Office of Economics, Working Paper no. 2008-03-B, March 2008.

7. Daniel J. Ikenson, "Currency Controversy: Surplus of Controversy, Deficit of Leadership," *Cato Free Trade Bulletin* no. 21, May 31, 2006.

8. Cathy L. Jabara, "How Do Exchange Rates Affect Import Prices? Recent Economic Literature and Data Analysis," U.S. International Trade Commission, Office of Industries Working Paper no. ID-21 (revised), October 2009.

9. Bureau of Economic Analysis, "Foreign Direct Investment in the United States: Selected Items by Detailed Industry of U.S. Affiliate," 2004–2008, <http://www.bea.gov/international/xls/LongIndustry.xls>.