

For every dollar of goods and services that U.S. producers sell to other countries, Americans import nearly \$1.50. Given the size of the U.S. economy, that creates a trade deficit that, as of 2011, was the largest in the world nearly five times over.

More than 40 percent of that trade deficit comes from trade with the People's Republic of China. To many observers, if it weren't for cheap goods from China, Americans would be spending more of their jobs-sustaining cash at home. And cheap Chinese goods are no accident. Most economists think that China's currency — known interchangeably as the yuan and the renminbi (RMB), or the "people's currency" — has been held artificially cheap by the Chinese government for much of the last 20 years. Currency manipulation, as such a policy is often called, gives a country an artificial edge in world trade, siphoning demand from the rest of the world and preventing production from flowing to the most efficient places. That's one reason it is prohibited under international law.

The backdrop to the debate, of course, is that American unemployment is high, the Fed has already employed extraordinary measures to stimulate the economy, and

the national debt is climbing. Pressuring China to allow its currency to appreciate might seem to be an easy way to address America's jobs shortfall without costing our government a penny in domestic programs. China's success in manufacturing — accounting for more than 90 percent of the country's rapid export growth since it joined the World Trade Organization (WTO) in 2001 — has been a particular sore spot among people concerned about the United States' steady decline in manufacturing as a share of total employment.

But there is more to the story. It is an open question how much demand we have lost to China's currency policy rather than, for example, China's rise as an efficient producer of consumer goods. There are even benefits to a cheap RMB, such as the discount it provides on the billions of dollars in Chinese goods that U.S. consumers buy each year. And the RMB has appreciated considerably since 2005. Economists are no longer so sure that it is undervalued to a worrisome degree.

Still, there are reasons to worry about China's exchange rate policy. It is part of a broader growth strategy that creates some potentially dangerous global imbalances,

SIZING UP CURRENCY MANIPULATION

THE CHINESE GOVERNMENT MAY BE HOLDING DOWN ITS CURRENCY TO INCREASE EXPORTS. BUT IT'S NOT CLEAR WHAT — IF ANYTHING — THE UNITED STATES SHOULD DO ABOUT IT

BY RENEE HALTOM



which economists say can't be maintained forever. That suggests China will eventually be forced to subject its currency to stronger market forces.

When Is It Manipulation?

China's official currency policy for most of the last 20 years has been some version of an exchange rate fixed to the dollar. That's the exchange rate in nominal terms, or the price at which one currency trades with another, as opposed to real exchange rates, which measure goods exchanged for goods. Many economists don't take issue with fixed exchange rates for creating stability for developing countries like China. The charge of "manipulation" comes into play when a currency is held substantially below its equilibrium value, or what it would trade at over the long run with no intervention from governments.

Currency manipulation is hard to spot, however. Exchange rates are meant to reflect the attractiveness of holding one currency versus another. If investment opportunities, purchasing power, or stability become greater in one country relative to another, its currency will probably rise. Since those are subjective concepts, there are different ways to define the equilibrium rate of exchange between two currencies. According to some theories, equilibrium is the exchange rate that balances trade or maintains a stable trade surplus. In others, it's the rate that equalizes prices or labor costs across countries. And those are just the conceptual issues; picking the appropriate measures for costs is another challenge in quantifying manipulation.

"What makes China unusual is that, as of five years ago, pretty much all the criteria gave the same answer," that the RMB was undervalued, says Jeffrey Frankel, an economist at Harvard University. That explains today's widespread belief that China is intentionally holding its currency low. But things have changed in just the last few years. After fixing

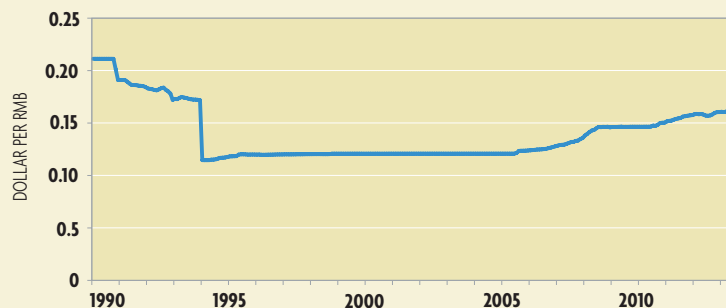
the RMB against the dollar from 1994 through 2005, China announced a new policy in 2005 that included an initial revaluation (a one-time strengthening of the RMB) of 2.1 percent. The RMB was then pegged to an unnamed basket of currencies — among which the dollar was still the most heavily weighted,

Frankel's research with Columbia University economist Shang-Jin Wei has shown — and was allowed to fluctuate by up to 0.3 percent a day. After gradually appreciating, the RMB was re-fixed to the dollar in 2008 during the tumult of the financial crisis, but in 2010 was again allowed to float slowly — very slowly — in the direction of strength. In all, the RMB has risen 35 percent in the last eight years (see chart).

It is no longer clear whether the RMB is substantially undervalued. Conventional

U.S.-China Exchange Rate

The RMB has appreciated by a third since its peg against the dollar was released in 2005. The amount it might be undervalued now is unclear.



SOURCE: Federal Reserve Board. Data through June 2013.

measures indicate a wide range: from a 49 percent undervaluation to even being overvalued, according to a recent paper by economist Yin-Wong Cheung at the University of California, Santa Cruz.

Since one cannot necessarily determine whether a currency has been manipulated just by looking at its price — as a Depression-era central banker put it, “only God could tell” what a currency should trade at — many people point to the Chinese government's interventions in foreign exchange markets as proof of currency manipulation. Hoarding foreign assets is the traditional way in which a country holds down its exchange rate. Most governments hold foreign assets, but buying them in extremely large quantities can shift exchange rates because a government must buy foreign currency to do it, which decreases the relative global demand for its own currency. China's central bank, the People's Bank of China (PBOC), holds almost \$3.5 trillion in foreign exchange reserves. China doesn't reveal how much of that is denominated in dollars, but based on past snippets of information, many economists estimate the number is around two-thirds, held mostly in U.S. Treasury securities. That would be more Treasuries than even the Federal Reserve owns. China holds nearly three times as many total foreign reserves as Japan, the world's second-largest holder, and almost as many as all advanced economies combined.

Effects on America

An undervalued RMB would provide American consumers with a lot of artificially cheap goods. Our top consumption imports from China include small electronics — like telephones, monitors, and ADP equipment — as well as clothing, furniture, and toys, all effectively subsidized by the Chinese government.

The size of that subsidy depends on how much the RMB is undervalued, says Mark Perry, an economist at the University of Michigan-Flint and the American Enterprise Institute. The United States imported \$425 billion in goods from China in 2012. If the RMB was undervalued by



5 percent — and it has most likely been undervalued by much more than that in the last decade — U.S. consumers and businesses saved \$21.3 billion, or about \$68 per person. But Perry emphasizes that’s a rough estimate because fewer Chinese goods would be purchased if the subsidy were no longer present.

In fact, that is the key question in the debate over China’s currency policy: How much has the policy actually boosted China’s trade balance? That’s a hard question to answer because many things affect bilateral trade between nations. Economist Joseph Gagnon at the Peterson Institute for International Economics recently took a novel approach. He looked directly at the dollars that governments spend on exchange rate intervention — purchases of foreign currency, which most governments share openly — and estimated how much showed up in each country’s total trade balance. He found that the effect of currency interventions on trade is large: On average, between 60 and 100 cents of every dollar of currency intervention shows up in the trade balance.

But that doesn’t necessarily mean ending China’s currency policy would send that demand back to American firms. For many goods, particularly the labor-intensive ones that China excels at producing, “if we don’t buy them from China, they’re still not going to be produced here,” Frankel says. And by removing China’s effective subsidy, U.S. consumers could end up paying higher prices by importing more expensive manufactured goods from other major players like South Korea. Moreover, some economists argue that the United States and European governments are also plenty protectionist, hurting foreign producers via ample subsidies to the domestic agriculture industry, among others.

The effects on U.S. jobs might start to look bigger if China’s currency policy encourages its competitors to follow suit. “By keeping its own currency undervalued, China has also deterred a number of other Asian countries from letting their currencies rise very much (if at all) against the dollar for fear of losing competitive position against China,” economist C. Fred Bergsten of the Peterson Institute said in congressional testimony. Bergsten and Gagnon estimated that currency manipulation by more than 20 countries — with South Korea, Hong Kong, Malaysia, Singapore, and Taiwan among the most active — has added between \$200 billion and \$500 billion to the U.S. trade deficit each year.

As for China alone, our bilateral trade imbalance — at almost a third of a trillion dollars last year — is not entirely what it seems. China has become a global platform for the “processing trade,” the name for taking raw materials imported from the rest of the world and assembling them into final manufactured goods. The share of Chinese exports that are produced by foreign-invested enterprises (FIEs) — operations owned by companies outside of China, like factories that assemble Apple’s iPhone — is now almost 60 percent, up from just 2 percent in the mid-1980s. Estimates of the amount in wages, land, and returns to capital that China contributes to that production — its value added — reach 55 percent at most. In other words, foreigners benefit

from production in China sometimes more than the Chinese do. According to a study by Robert Johnson at Dartmouth College and Guillermo Noguera at Columbia University, our bilateral trade imbalance with China would look 40 percent smaller if adjusted for value added.

Pressuring China

In sum, the offsetting effects of China’s currency policy make its net effect on American jobs difficult to assess. Historically, more immediate — some might say political — concerns have tended to drive U.S. action against currency manipulators. Research by Frankel and Wei found that the United States has been more likely to apply political pressure when its bilateral trade deficit with another country grows larger, and in election years when unemployment is high.

Nowadays, action from the United States would probably start with a declaration that China is a currency manipulator, a phrase that gained more notoriety during the 2012 presidential campaign. Since the 1988 Omnibus Trade and Competitiveness Act, the Treasury Department has been required to publish semiannual reports on suspected currency manipulators. The last report, issued in April 2013, declined to apply that label to China, citing the RMB’s gradual appreciation over the last decade. The declaration would open the door to tariffs, capital controls (that could, for example, prohibit China from buying Treasuries), or trade sanctions. At a minimum, the label requires the United States to hold talks with offending governments.

Eight countries have been mentioned in the report since 1988, all of them Asian with the exception of Russia. The reports received less attention during the East Asian financial crisis of the late 1990s, and didn’t even name any offenders in some years of the early 2000s. The United States has ramped up rhetorical pressure on China since 2003, however. Members of Congress proposed tariffs on Chinese goods, and the Treasury reports have once again recommended discussions with the Chinese government. Still, China has not been labeled a manipulator since the early 1990s.

The international path of recourse is less clear. Since the end of Bretton Woods, there have been very few cases of countries successfully pushed into revaluation, and no economically significant ones, Frankel and Wei argued. Membership rules for the International Monetary Fund (IMF) indicate that countries should “avoid manipulating exchange rates...to gain an unfair competitive advantage over other members,” but the words “manipulating” and “unfair” are left undefined, and the rules include no enforcement mechanisms. Some people argue that the IMF could nonetheless publicly criticize manipulators, suspend voting privileges, or even threaten expulsion. The WTO’s rules do include a resolution process, but its list of prohibited activities are limited to trade measures like tariffs and quotas, not so much exchange rates. The WTO process has never been invoked for currency manipulation, and would require the

cooperation of the IMF, which has thus far declined to act.

Enacting countervailing protectionist measures is tricky since tariffs on Chinese goods are equivalent to a tax on U.S. consumers, with skewed distributional effects. Few Americans work in the manufacturing plants that might compete with Chinese sellers, but hundreds of millions of Americans buy Chinese goods. In other words, the benefits of ending currency manipulation would be concentrated on a relatively small set of Americans at a cost to millions of others. For example, a 2009 tariff on Chinese tires saved at most 1,200 jobs but cost U.S. consumers \$1.1 billion in higher import prices — almost a million dollars per job — according to Gary Clyde Hufbauer and Sean Lowry at the Peterson Institute. Slightly higher prices might be considered worthwhile to reduce the severe outcome of job loss, even if for a relatively small set of people. But protectionism could have larger unintended consequences. Another recent IMF study found that the protectionist measures by all countries enacted during the 2007-2009 recession reduced global trade in affected product markets by as much as 8 percent.

“Studies repeatedly show that the consumer cost of trade protection typically exceeds, by a wide margin, any reason-

able estimate of what a normal jobs program might cost,” according to Hufbauer and Lowry.

For China’s Sake

Though the effects on the United States are up for debate, experts mostly agree the currency policy should eventually end — for China’s own sake.

The currency policy creates one direct problem for China: The central bank must accumulate ever more foreign assets to stop the RMB from appreciating. That creates a dangerous mismatch on its balance sheet. The PBOC’s dollar holdings are a significant share of its total assets, and they are mostly invested in low-yielding U.S. Treasury securities. That leaves the PBOC paying out more on its liabilities (denominated in RMB) than it earns on its assets (denominated in dollars). How long this can continue depends on its ability to sustain that funding imbalance. Moreover, it stands to incur huge capital losses if, or when, the RMB eventually does appreciate. With the PBOC now holding possibly more than \$2 trillion in dollar assets, those losses could be extraordinary. The mismatch gets larger each day that the currency policy continues.

More broadly, China’s currency policy is just one compo-

Is the Fed Pushing Down the Dollar?

After the Fed undertook quantitative easing (QE), the name for massive asset purchases to reduce U.S. interest rates and speed the economic recovery, developing countries complained. (The policies began in 2008 and continue today.) The developing countries argued that QE would weaken the dollar. That would not only siphon their exports, but also drive capital to their already inflated asset markets. Brazil’s finance minister, Guido Mantega, warned in September 2010 that the Fed’s policies had sparked an international “currency war” that would lead emerging markets to depreciate their own currencies to neutralize the effects. Japan and Britain have been the target of similar criticisms.

Currency manipulation and large-scale asset purchases are similar in that they are both strategies to stimulate a domestic economy. They could even have some similar byproducts, like a weaker currency and greater exports. But there’s one critical difference, says economist Joseph Gagnon at the Peterson Institute for International Economics: With asset purchases, “you’re trying to increase *total* spending, not just grab someone else’s spending.”

Still, negative spillovers from monetary easing are possible, and they happened during the Great Depression. Many countries supported their economies by expanding the money supply, which required exiting the gold standard. Countries that did so saw weaker currencies, which improved their trade balances at the expense of those that stayed tied to gold, according to a famous 1985 study by economists Barry Eichengreen at the University of

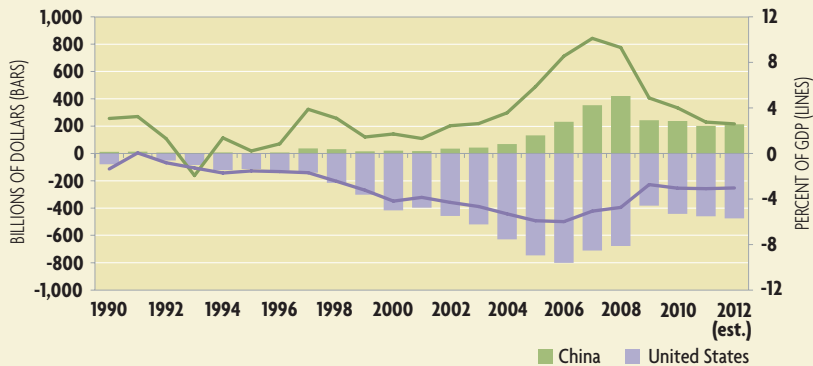
California, Berkeley and Jeffrey Sachs at Columbia University. In that situation, Eichengreen noted in a recent paper, there may have been an argument for matching currency depreciation with currency depreciation — what some now call a currency war, but is more favorably known as policy coordination. That would have given all countries a domestic boost while avoiding “beggar-thy-neighbor” effects on trade.

But it works only if countries have experienced the same shocks. The difference between the 1930s and now is that economic weakness is not global: Many emerging markets are booming. Those booms could be overstimulated by easier U.S. monetary policy, even as it restores global financial markets and developed-country demand for goods from emerging markets. Currency wars might avoid unwanted trade and capital flows, but they could add to economic overheating.

Eichengreen argued that emerging economies should pursue other options, like fiscal tightening, to offset excessive capital inflows — because in the long run, QE has the potential to benefit everyone by restoring developed-country health. A 2011 study by the International Monetary Fund suggested that the net spillover effects of QE on the output of U.S. trading partners were initially positive, especially due to improvements in financial markets that added to growth. In that way, Fed Chairman Ben Bernanke said in a March 2013 speech, QE is not a policy of “beggar thy neighbor” but rather one of “enrich thy neighbor.”

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Current Account Imbalances: Another Measure of Trade



SOURCE: International Monetary Fund, World Economic Outlook Database, April 2013

ment of a development strategy that some economists argue is widely out of balance. At more than 50 percent of GDP, China's national saving rate is the highest in the world. There are several reasons for it, according to Dennis Yang at the University of Virginia. As growth took off after 2001, government tax revenue nearly quadrupled; what the government does not spend adds to national savings. Also, the effects of China's movement away from its communist heritage amplified corporate profitability, profits which were held as retained earnings, another component of national savings. Meanwhile, household savings are high both due to demographic factors (especially the one-child policy and aging population) and less-developed social safety nets and financial markets. And while investment is very high in China, as in most fast-growing economies, saving is even higher. If more of China's extraordinary economic growth — averaging 10 percent annually since the late 1970s — were used for domestic consumption or investment, its exports would have been substantially lower.

China ensures that exports stay high through more than just the currency strategy. Regulations require that China's substantial foreign direct investment — second only to that of the United States — be oriented toward export production. For goods that are exported, producers are refunded both any tariffs paid on intermediate goods and the value-added taxes paid at each stage of production. The effect of these incentives, many of which have been in place since the late 1970s, were amplified considerably by China's entry into

the WTO, after which its exports soared by 25 percent each year. China's currency policy also plays a role, as does its historically cheap labor.

But these patterns can't go on indefinitely, because growth by exports doesn't create enduring wealth. "Long-term growth will ultimately depend on capital accumulation, size and quality of the labor force, technological advances, and other institutions," Yang says.

Several factors could trigger a rebalancing. China is likely to experience pressure from the international community while large trade imbalances persist. In addition, the risk on the PBOC's balance sheet could prove too great.

Or, the imbalances could be naturally unwound by a maturing economy. For example, wages are rising as China is reaching the limits of how much cheap labor can be drawn out from its rural provinces. That will reduce China's competitive edge in the processing trade. It will also eat away at corporate profitability and put more income in the hands of households, who could use it for consumption or imports, both which would reduce national saving and China's trade imbalance.

Finally, Chinese inflation is rising, a result of the PBOC creating money to accumulate foreign assets. "If you don't allow the currency to appreciate in nominal terms, your prices go up," Frankel says. "You end up getting a real appreciation either way."

The Chinese government is aware of the problems. Its most recent Five-Year Plans — its national development initiatives that are a relic from its central planning days — have indicated a goal of balanced trade, and policymakers have said they want the RMB to be governed more by market forces. These haven't yet come to fruition, but the recession temporarily alleviated the issue. Global demand for Chinese goods fell, trade imbalances eased (see chart), foreign money stopped pouring into China, and the PBOC had less appreciation pressure to offset. Thus, China has recently had the best of both worlds: a stable exchange rate without having to pile up additional reserves. But as China's trading partners regain strength, Chinese goods will once again be in demand. They'll have to make a decision, Gagnon says: "Do we let the renminbi go, or do we go back to the bad old days?"

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