

# CURRENCY MANIPULATION AND FREE TRADE

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# Currency Manipulation and Free Trade

## Executive Summary

Global commerce offers the United States significant opportunities to improve productivity and raise living standards. However, Chinese intervention in currency markets to maintain an artificially undervalued yuan is denying Americans many of the benefits of freer trade.

China's currency manipulation creates a subsidy on its exports equal to nearly 9 percent of its GDP and 21 percent of its exports. This practice, along with the constraints the yuan peg places on the currency policies of other Asian governments, is a major cause of the large and growing U.S. trade deficit. Now exceeding \$600 billion annually, the trade deficit is appreciably slowing U.S. growth and jobs creation, and causing real wages to stagnate, even as productivity advances at a brisk pace.

Were China and other Asian countries to phase out currency market intervention, the U.S. trade deficit would be cut by about half. U.S. GDP would increase by as much as \$500 billion, and employment would expand by as many as 5 million new jobs.

A resolution to these problems would also benefit China. Yuan revaluation would raise incomes and living standards immediately, and permit the Chinese government to spend more on much needed social investments. Longer-term, more balanced trade and a more rapidly growing U.S. economy would create a more secure and rapidly growing market for Chinese exports in the United States.

# Currency Manipulation and Free Trade

Peter Morici\*

## Introduction

Markets are the most basic building blocks of prosperity. By allowing individuals to specialize and bargain for what they want, well functioning markets help us to better feed and clothe our families, build comfortable homes, and invest in our future.

How well each person does is determined by his or her skill and enterprise and the laws regulating business conduct. For example, does the government adequately protect property and encourage competition? Or, does it countenance reckless torts and collusive businesses practices serving little public purpose? Does it apply different standards among individuals?

Treaties and laws encouraging international commerce are founded on a simple premise: wider markets create more opportunities for specialization and increased productivity. As with domestic markets, the rules and enforcement are critical. Do all countries grant equal access to foreign competitors? Do all governments exhibit similar restraint when fostering domestic development in ways that may disadvantage foreign competitors?

The World Trade Organization (WTO) agreements are intended to promote commerce and balance opportunities among countries by regulating how governments treat foreign suppliers and promote exports. In recent years, Americans have increasingly questioned the efficacy of these rules. Are we getting what we pay for? Are the costs exceeding the benefits?

In 2004, the U.S. trade deficit will exceed \$600 billion, a 66 percent increase over 2001.<sup>1</sup> This occurred, even as the dollar declined by an average of 14 percent against the currencies of U.S. trading partners, because the dollar actually rose against Asian and other developing country currencies.<sup>2</sup>

The dollar cannot fall in value enough to substantially reduce the trade deficit, because China intervenes in currency markets to maintain an exchange rate of 8.28 yuan per dollar. Other countries in Asia must follow China's lead, lest they lose export markets to China. Ultimately, China's currency manipulation constitutes a huge export subsidy equal to nearly 9 percent of its GDP and 21 percent of its exports.<sup>3</sup>

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<sup>1</sup> Census Bureau, Release FT900 <http://www.census.gov/foreign-trade/www/press.html#highlights>

<sup>2</sup> Federal Reserve Statistical Release, H.10 <http://www.federalreserve.gov/releases/H10/summary/>

<sup>3</sup> These data are presented below.

Exchange rates are prices, and the value of a nation's currency is the most fundamental price in a globalized economy. Without assurances that other governments will not resort to manipulating exchange rates to advantage their producers, the gains from trade can be wiped out.

That is exactly what is happening to the United States.

## **The U.S. Experience**

Since World War II, the United States has pursued an aggressive policy to broaden international markets through the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO), as well as through various bilateral and regional trade and investment agreements.

The most recent initiatives include the Uruguay Round Agreements, which established the WTO in 1995, and the North American Free Trade Agreement, implemented in 1994. These extend the tariff reductions accomplished in earlier rounds of GATT negotiations, and broaden the international rules governing national policies from border measures and a limited set of domestic policies directly affecting trade in goods to include rules that reach more deeply into domestic economic management. The latter include R&D assistance, industrial and regional aids, public procurement, technical standards, health and safety regulations, product labeling requirements, trade-related intellectual property and investments measures, and the regulation of a wide range of services, where the United States enjoys a comparative advantage. Notably absent from this list are explicit rules for currency manipulation.

The positive effects of international competition and globalizing technologies on U.S. specialization and efficiency are apparent in the productivity statistics. Since 1995, output per hour in the U.S. private business sector has increased more than 3.1 percent per year—that is exactly double the rate of the previous decade.<sup>4</sup> Manufacturing productivity has been increasing at a rate of 4.4 percent per year since 1995, as compared to about 3 percent for the previous 9 years.<sup>5</sup>

Even casual observation of new product introductions and production methods indicates U.S.-based enterprises and workers are advancing their competitive capabilities at a brisk pace, rivaling the performance of any period in U.S. economic history. Americans are going to college in record numbers, boast a vast network of fine engineering schools, and exhibit the same ingenuity and competitive spirit they did in the age of Edison, Ford, and Firestone.

Yet, real GDP growth has not picked up nearly as much as the productivity statistics and pace of innovation warrant. From 1995 to 2004, real GDP grew 3.3 percent a year. That was not much

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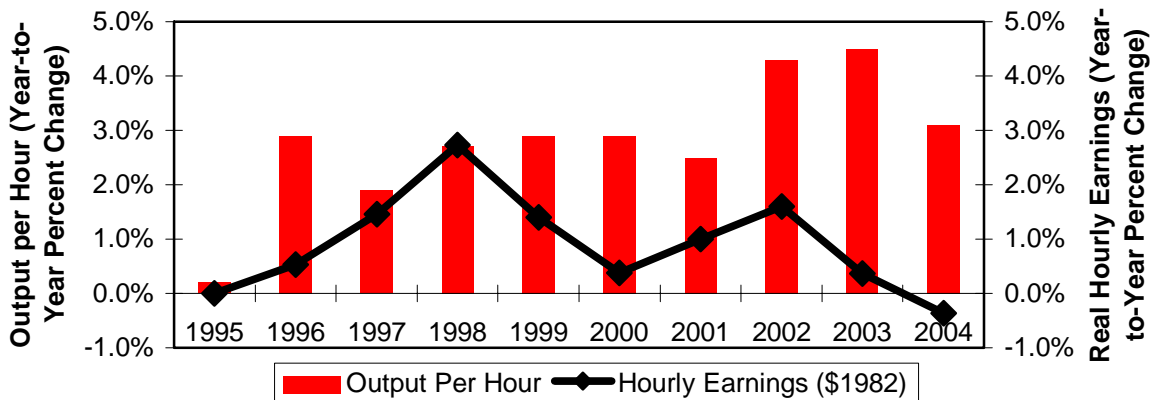
<sup>4</sup> Bureau of Labor Statistics productivity data is at:  
[http://data.bls.gov/servlet/SurveyOutputServlet?data\\_tool=latest\\_numbers&series\\_id=PRS85006092](http://data.bls.gov/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=PRS85006092)

<sup>5</sup> Bureau of Labor Statistics manufacturing productivity data is at:  
[http://data.bls.gov/servlet/SurveyOutputServlet?data\\_tool=latest\\_numbers&series\\_id=PRS30006092](http://data.bls.gov/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=PRS30006092)

more than the 2.8 percent annual growth posted from 1985 to 1995, and over the last five years, through recession and recovery, GDP growth has been 2.8 percent a year, a bit less than the earlier norm.<sup>6</sup>

This begs the question: Why hasn't the productivity boom translated into higher economic growth? The simple answer is that the pace of jobs creation has slowed markedly, unemployment has been rising, and the adult labor force participation rate has been falling. From 1985 to 1994, employment grew about 1.6 percent a year, while over the last ten years it has grown about 1.1 percent per year. Since 1999, employment growth has slowed to less than one percent a year, unemployment has risen from 4.2 percent to 5.5 percent,<sup>7</sup> and real wages have not risen nearly as fast as productivity—only about one percent a year since 1995 and much less than that since 1999.<sup>8</sup> Exhibit 1 shows the extent to which increases in real wages have fallen behind increases in productivity.

**Exhibit 1**  
**Productivity Growth Has Exceeded Growth in Real Wages**



Source: Output per hour from Bureau of Labor Statistics at <http://data.bls.gov/labjava/outside.jsp?survey=pr>; hourly earnings, Joint Economic Committee at <http://frwebgate.access.gpo.gov/cgi->

Some observers blame productivity growth for the slow pace of jobs creation—we have become a victim of our own success, these pundits imply.<sup>9</sup> However, in the past, the U.S. economy has

<sup>6</sup> Department of Commerce GDP data at: <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp>, Table 1.1.5 and 1.1.6.

<sup>7</sup> Bureau of Labor Statistics employment data: at <http://www.bls.gov/webapps/legacy/cpsatab1.htm>

<sup>8</sup> Joint Economic Committee, *Economic Indicators* (September, 2004), p. 15.

<sup>9</sup> James C. Cooper, “The Price of Efficiency: Stop blaming outsourcing. The drive for productivity gains is the real culprit behind anemic jobs growth,” *Business Week* (March 22, 2004) and other articles in that issue focusing on the jobs drought. [http://www.businessweek.com/@\\_@1YfwzoYQsschdAEA/magazine/content/04\\_12/b3875603.htm](http://www.businessweek.com/@_@1YfwzoYQsschdAEA/magazine/content/04_12/b3875603.htm) and [http://www.businessweek.com/magazine/toc/04\\_12/B38750412jobs.htm](http://www.businessweek.com/magazine/toc/04_12/B38750412jobs.htm).

accomplished rapid productivity, jobs and real wage growth. The early 1960s provides a good example—productivity growth was robust and unemployment fell to 3.8 percent, while real compensation in the private business sector grew 3 percent a year.<sup>10</sup> If we had statistics like that today, few would be questioning the blessings of productivity growth or free trade.

Since the discovery of fire and the wheel, the practical application of technology to make goods more cheaply and move them around more quickly have reduced the number of workers necessary to achieve both tasks. However, productivity growth has generally instigated higher incomes and more demand for even more goods and services. In turn, that creates more jobs and growth.

An important difference between our recent experience and the 1960s is a large and growing trade deficit. Since 1995, the trade deficit has increased from \$91 billion to about \$610 billion. This has kept domestic demand for U.S. made goods and services from growing rapidly enough to absorb the additional pool of workers made available by productivity growth.

It is absolutely disingenuous to assign the label “protectionists” to critics who point to the flood of imports and manipulated currencies and ask: How is free trade good for America if we can’t cash in our increased productivity for a better life? History says we can, yet we are not.

Instead of labeling people who see contradictions between theory and experience as “protectionist,” it might be better to put economics to positive purpose, skip the polemical mischief, and ask: What is not working as it should?

## **The Theory of Free Trade and Exchange Rates**

At the most basic level, removing trade barriers should raise average incomes in all countries by permitting each country to specialize more in what it does best — Ricardo’s law of comparative

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<sup>10</sup> Productivity growth is an important variable in the jobs equation, but historically, it has not been the cause of rising unemployment.

We have enjoyed periods of rapid productivity growth—caused by the practical application of major inventions. In the post Civil War period, industrialization and the consolidation of national markets accelerated through the spread of steam power, railroads, and the telegraph. In the 1910s and 1920s, the application of electricity in factories and offices and the national telephone system were critical to the pre- and post-WWI progress.

In the early- and mid-1960s, jet travel, the mainframe computer and better telecommunication were key. Automation was the buzzword. I remember, as a young student of economics, it seemed everyone was afraid of being replaced by a machine!

Looking at the early and mid 1960s, productivity growth averaged about 4.1 percent for the six years spanning 1961 to 1966; the civilian unemployment rate fell from 6.7 percent to 3.8 percent and more than seven million jobs were created. Real compensation grew 3 percent a year.

As now, a war was heating up and income taxes were cut, a federal surplus in 1960 turned into significant deficits through 1968.

Unlike now, however, the dollar was not overvalued; the U.S. had a steady trade surplus--that's right a budget deficit and a trade surplus!

advantage. Since productivity and labor force growth are almost always positive, freer trade should increase the rates, not just the levels, of productivity and GDP growth.

As barriers to trade come down, each country imports, exports, and specializes more. This raises productivity, wages, and incomes *if* full employment is maintained. The latter is a critical assumption in the modern theory of comparative advantage—for all countries to gain, trade needs to be balanced enough to maintain employment. If not, countries whose imports grow a great deal more than their exports may see their employment levels decline and real GDP growth slowed in the process.

Inevitably, the impacts of trade liberalization on individual countries' balances of trade are uneven, because specialization, productivity, and cost competitiveness advance more rapidly in some places than others, and some countries lower barriers to imports more than others, even under the most carefully calibrated trade agreements. Imbalances in trade and employment among countries emerge, but exchange rates should adjust to correct these imbalances, maintain employment, and permit trade to create higher average incomes in all countries. If exchange rates do not adjust to rebalance trade, then some countries may enjoy trade surpluses and very rapid growth, while others may endure large trade deficits, rising unemployment, and slower growth.

China has vast supplies of underemployed and redundant workers in rural areas and large state-owned enterprises. As it opened to foreign investment and competition, and the United States and other countries opened their markets to Chinese goods, Chinese workers were deployed in large numbers to make goods having greater value in global markets, and these workers acquired more capital and modern methods. Consequently, China is enjoying superior productivity growth, as evidenced by a pace of GDP growth that vastly outruns its population and labor force growth, and China's trade surplus is swelling. Although in some industries and segments of others Chinese productivity is comparable to ours, overall China still lags behind the United States by a great deal. It is playing catch up, much like Japan did in the 1950s and 1960s.

With the yuan pegged at 8.28 per dollar, China's rapid productivity growth causes its exports to rise more rapidly than its imports. The resulting trade surplus creates many new jobs in China but unemployment in other economies. The yuan should rise in value to correct these imbalances, create new exports and opportunities for employment among its trading partners, and make both Chinese workers and its trading partners wealthier in the bargain.

Specifically, for Chinese workers, their currency would buy more in global markets and they would enjoy a higher standard of living. For workers in other countries, increased exports to China would create higher value-added jobs in industries making those products, and opportunities for higher wages. Higher growth among its trading partners would create even larger and more secure markets for Chinese goods.

However, since 1995, China has frustrated this market adjustment process by pegging the yuan, and depriving its own workers, and workers in the United States and other countries, of many of the gains from freer trade. The Chinese government is essentially taxing its workers to subsidize employment growth in export industries.

## Currency Market Intervention and Exchange Rates

The process plays out as follows. To buy Chinese goods, Americans and others must purchase yuan with dollars and other currencies. To buy foreign goods, the Chinese must offer yuan to purchase dollars and other currencies. A Chinese trade surplus creates an excess demand for yuan and excess supplies of dollars and other currencies.

To clear currency markets, the yuan should rise in value against the dollar and other currencies. That would increase the prices and reduce the volumes of Chinese exports, and lower the prices and increase the volumes of Chinese imports. To block these price movements, Chinese monetary authorities satisfy the excess demand for yuan and sweep up the excess supplies of dollars and other currencies by making “official purchases” in foreign exchange markets. That maintains China’s trade surplus and imposes continuous trade deficits on everyone else. Exhibit 2 shows the relationship between China’s purchases of U.S. and other currencies and the trade deficits between other countries and China.

### Exhibit 2

#### China's Trade Surpluses, as Recorded by Trading Partners and Official Reserve Purchases

(Billions of Dollars)

	Global Trade Balance	Trade With U.S.	Official Reserve Purchases
1999	140.5	68.7	8.5
2000	171.5	83.9	10.6
2001	169.7	83.2	47.3
2002	189.3	103.2	75.5
2003	210.9	124.1	117.0
2004e	252	161	134

Sources: China Currency Coalition, *Petition for Relief Under Section 301(a) of the Trade Act of 1974, as Amended* (September, 2004)

<http://www.chinacurrencycoalition.org/pdfs/petition.pdf>; U.S. Department of Commerce, Bureau of Economic Analysis, U.S. International Transactions, Table 2, Line B-94

[http://www.bea.gov/bea/international/bp\\_web/list.cfm?anon=71&registered=0](http://www.bea.gov/bea/international/bp_web/list.cfm?anon=71&registered=0); [www.census.gov/foreign-trade/Press-Release/current\\_press\\_release/exh14.pdf](http://www.census.gov/foreign-trade/Press-Release/current_press_release/exh14.pdf); International Monetary Fund, *International Financial Statistics*, Line 11.d (year over year change).

By keeping the yuan below its market clearing value, this process reduces the real wages of Chinese workers, with much the same effect as a tax, and artificially reduces the cost of Chinese

exports, with much the same effect of as a direct cash subsidy. The above data indicate how large a tax China is imposing on its workers and subsidy it is placing on exports. The values of its foreign exchange purchases are about 9 percent of its GDP and at least 21 percent of the value of its exports.<sup>11</sup>

In the United States and elsewhere, China uses the currency it obtains to purchase government securities, and these purchases are large enough to lower interest rates in the United States. In the United States, these purchases, for example, have contributed to the housing and mortgage refinancing booms. These help finance easy terms on credit cards and home-equity lines. That's how consumers get the extra cash to buy more Chinese goods.

In a country without adequate public health care, schools, sanitation, and other basic amenities, it is reasonable to ask whether subsidizing foreign consumers is a good use for 9 percent of GDP.

Lots of Americans feel good. They have access to inexpensive credit to bid up resale values on homes, take equity out of their properties and access easy credit card terms to buy more imported cars and low-priced goods at Wal-Mart and other retailers, but many of our citizens are deprived of employment in import-competing and export industries.<sup>12</sup> They must accept lower wages than they would otherwise, or they may find no work at all.

On average, Americans may feel better off but they are selling assets and piling up debt to enjoy those low-priced imports. At some point, Americans will run out of assets to sell and creditors may grow weary of rolling over the debt.

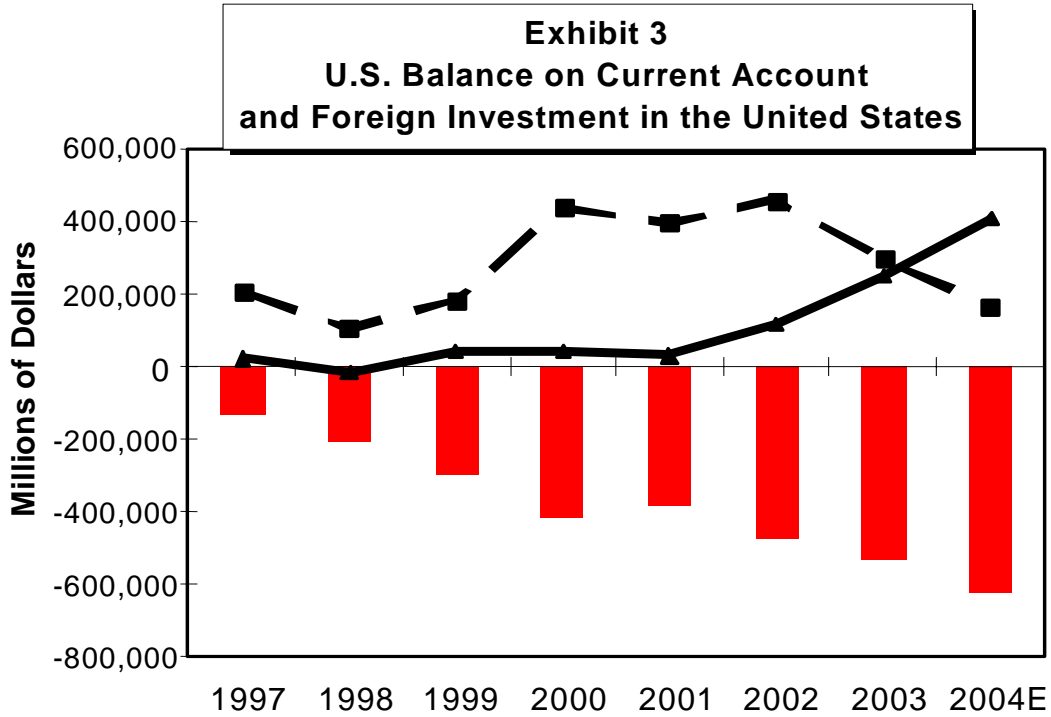
China is not alone in buying U.S. securities to suppress its currency and maintain trade surpluses with the United States. Exhibit 3 shows the annual U.S. trade deficit and "official purchases by foreign governments." Collectively, these purchases help keep the dollar from falling in value, and help sustain a large and growing U.S. trade deficit.

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<sup>11</sup> According to the National Bureau of Statistics, China's GDP was 11.7252 trillion yuan in 2003 (*China Daily* [http://www.chinadaily.com.cn/english/doc/2004-10/17/content\\_383022.htm](http://www.chinadaily.com.cn/english/doc/2004-10/17/content_383022.htm)); applying a 9 percent growth rate for 2004 and dividing by the official exchange rate of 8.28 yields \$1.5435 trillion. \$133.9 (which is based on two quarters of data) is 8.67 percent of GDP.

According to official Chinese data, exports were \$438.4 billion, and according to data reported by its 40 largest trading partners to the International Monetary Fund, these were \$549.6 billion. China's official currency purchases were \$117 billion or 27 to 21 percent of the latter figures.

<sup>12</sup> As discussed below, U.S. industries that export or that compete with imports enjoy much higher productivity; hence, these pay higher wages.



■ U.S. Balance on Current Account  
 ■ Net Foreign Private Investment  
 ▲ Foreign Official Purchases of U.S. Assets

Source: U.S. Department of Commerce, Bureau of Economic Analysis, U.S. International Transactions, Table 1, Line 76 for Balance on Current Account, Line 56 for Foreign Official Purchases of U.S. Assets, and Lines 63, Other Foreign Assets in the United States, net and Line 50, U.S. Private Assets, net have been combined to reflect Net Foreign Private Investment. Please note that 2004 data are based on data through the second quarter of 2004 and the second quarter data are preliminary.

Also, official currency market intervention is not the only factor keeping the dollar high. Private foreign investment in the United States and the sale of U.S. assets to foreigners also supply Americans with foreign currency. To the extent these transactions are not offset by U.S. investments and purchases of assets abroad, Americans can use the foreign currency to purchase imports. In recent years, net private capital flows into the United States have tailed off, as the strong dollar, rising trade deficits and other factors have dampened growth prospects for U.S.-based business activities. Rather than let their currencies rise in value against the dollar, foreign governments have filled the void by purchasing additional sums of U.S. securities.

With foreign governments purchasing \$249 billion dollars in U.S. portfolio assets in 2003, and acquiring assets at a \$403 billion annual rate during the first six months of 2004, it is safe to conclude that were these activities to cease, or be phased down in an orderly way, the U.S. dollar would fall and the trade deficit, which in 2004 will likely be about \$600 billion, would fall by several hundred billion dollars.

The problem is not uniform across trading partners. Since the beginning of 2001, as trade deficits have mounted and the stock market has been sluggish, the value of the dollar has gradually

fallen, albeit in fits and starts. However, this decline has been largely against the currencies of other major industrialized countries.

Exhibit 4 shows changes in trade-weighted indexes of the dollar compiled by the Federal Reserve. The broad index covers the 25 countries and the Euro Zone (10 countries). Essentially, the major currencies index covers other developed countries, and the Other Important Trade Partners (OITP) includes important developing and industrializing countries, like China, India, Taiwan, Korea, Mexico, Russia, and Brazil.

**Exhibit 4**  
**Exchange Rate Indexes**

	<i>Broad</i>	<i>Major</i>	<i>OITP</i>
	Nominal		
January 2002	128.79	111.2	137.2
November 2004	111.41	82.23	143.95
Change	-13.5%	-26.1%	4.9%
	Real		
January 2002	112.89	115.69	118.65
November 2004	96.9	87.08	119.73
Change	-14.2%	-24.7%	0.9%

Source: Federal Reserve Statistical Release, H.10  
<http://www.federalreserve.gov/releases/H10/summary/>

The dollar has fallen against the currencies of other major industrialized countries but it has risen in value, on average, against the currencies of developing countries.

It is important to recognize that other Asian governments are hostage to this process. Lest they lose their export markets in the United States and elsewhere to China, these governments cannot let their currencies rise too much against the yuan, and hence the dollar, euro or other western currencies.

Meaningful currency market reform will not be possible without full cooperation from China. Given the size of its economy and trade flows, currency reform in Asia would not be difficult with China on board.

### **Costs to the U.S. Economy**

The trade deficit imposes costs on the U.S. economy both in the short run, by reducing GDP and increasing unemployment, and in the long run, by reducing investments in R&D and human resources, and hence, growth.

#### *Near-Term Effects*

The trade deficit is a subtraction from GDP:

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{X}-\text{M})$$

Where: C is consumption

I is investment

G is government spending

(X-M) is exports minus imports—the balance on the current account

From a macroeconomic policy perspective, each dollar purchased by a foreign central bank, to suppress the value of its currency against the dollar, reduces the demand for U.S. goods and services just like a reduction in government spending, an increase in federal income taxes or an increase in municipal property taxes. As this reduction in demand works through the economy, it has a multiplier effect on the amount of goods and services produced—for example, a farmer buys more imported bread and less domestic bread, the U.S. baker buys less flour, the miller buys less grain, the farmer buys less bread, and the cycle continues.

In 2004, foreign government purchases of U.S. securities will likely top \$300 billion (in the first half, those were \$203 billion). The resulting increase in U.S. imports reduces aggregate demand, initially, by that amount, and reduces current dollar (nominal) GDP, through the multiplier effect, by \$750 billion, or about 6.6 percent. Conversely, if foreign governments phased out these purchases in an orderly way, the U.S. trade deficit would be reduced by about \$300 billion and nominal GDP could increase by \$750 billion.

If the economy were operating at full employment, the additional aggregate demand would drive up prices, or the Federal Reserve would have to take some steps to dampen aggregate demand by raising interesting rates. The real effect on the economy would be limited to the productivity gain achieved by shifting workers from nontrade-competing industries to export and import-competing sectors of the economy.

Since workers in trade-competing industries are about 50 percent more productive than the average for the economy as a whole, reducing the trade deficit by \$300 billion would increase GDP by about \$150 billion<sup>13</sup>—the workers moving from nontrade-competing industries would be that much more productive in export and import-competing activities. In addition, a more robust labor market would likely accelerate productivity growth and immigration; consequently, \$150 billion is a lower bound estimate.

The U.S. economy is far from full employment. According to the Federal Reserve, industrial capacity utilization is at 77.2 percent for all industries and 76.3 for manufacturing, or more than 9 percent below the full employment levels of 83 or 84.<sup>14</sup>

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<sup>13</sup> Peter Morici, *The Trade Deficit: Where Does It Come From and What Does It Do?* (Washington, DC: Economic Strategy Institute, October 1997), p. 18.

<sup>14</sup> From, 1972 to 2003, the average utilization rate was 81.1 and 80 for all industries and manufacturing, respectively. The peak values for, through recession and recovery, for each are above 85. Federal Reserve Statistical Release, G.17, Table 7 <http://www.federalreserve.gov/releases/H10/summary/>

Increasing GDP by \$750 billion would require about 7.9 million workers, or a 5.7 percent increase in the number of persons employed.

In September 2004, the unemployment rate was 5.5 percent, and at its low point in April 2000, it was 3.8 percent—getting down to that level again would provide 1.7 of the 5.7 percentage points of additional workers needed.

In September 2004, the labor force participation rate among adults was 65.9 percent, whereas in April 2000 it was 67.3 percent. Were those adults attracted back into the labor market by more favorable conditions, the labor force would increase by 2.1 percent.<sup>15</sup>

Overall employment could be increased by 3.8 percentage points, if the economy were at its April 2000 level, and GDP could be increased by about \$500 billion. To increase real GDP any more would require further additional increases in immigration and productivity. Some of that would likely be forthcoming but suffice it to say, the Fed would have to constrain demand, through higher interest rates, were foreign governments to stop interfering in currency markets.

Overall, U.S. real GDP could be increased by \$500 billion, and 5.3 million jobs could be created, if foreign governments let their currencies float, or at least increase target values for their currencies to ones consistent with privately balanced trade and investment flows, and the Fed got monetary policy right.

We can quarrel about how far down unemployment can be pushed, or how far up participation can be pushed, but there are a lot of jobs and GDP to be found by reducing the trade deficit.<sup>16</sup> Even if no unemployed labor were available, the economy would still gain at least \$150 billion from improved specialization and productivity. More likely, though, employment could be increased by at least half or two-thirds of the amount posited above. Those assumptions imply GDP gains between \$250 and \$300 billion.

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<sup>15</sup> For this paper, 2004 GDP was estimated to be \$11,430 billion, and the adult population, labor force and employment were estimated to be 224, 149 and 139.25 million, respectively. That puts average labor productivity at \$82,083 per worker and in tradable sectors, \$123,797.

Producing \$750 billion requires \$300 billion of tradables and \$450 billion of “everything” GDP. That requires 2.423 and 5.482 million workers, respectively, or a total of 7.905 million workers—5.3 percent of labor force and 5.7 percent of the current number of employed workers.

Reducing the unemployment rate from 5.5 to 3.8 percent would provide 2.367 million workers, or 1.7 of the 5.7 percentage points of required additional workers.

Increasing the labor force participation rate from 65.9 to 67.3 percent would increase the number of participants by 3.136 million, 2.1 percent of the current labor force and 2.3 percent of the current number of employees.

The employed labor force could be increased by 3.8 percentage points—1.7 percentage points from reducing the unemployment rate from 5.5 to 3.8 percent and 2.1 percentage points from increasing the adult participation rate to levels historically consistent with that unemployment rate. GDP could be increased  $(3.8/5.7) \times \$750 \text{ billion} = \$500 \text{ billion}$ .

<sup>16</sup> We could also quarrel about the size of the multiplier (2.5 was assumed above) but a multiplier of 2 would increase nominal GDP by \$600 billion and leave the potential gain in real GDP at around \$500 billion.

### *Weighing the Costs and Benefits*

To put these figures in perspective, in 2004, U.S. imports of goods and services will likely be \$1.8 trillion and exports about \$1.2 trillion. Workers in exporting industries are about 10.6 percent more productive than workers in import-competing industries, and the \$1.2 trillion in imports paid for with \$1.2 trillion in exports creates efficiency gains of 10.6 percent—\$125 billion.<sup>17</sup>

The \$600 billion Americans get “free” is not free at all. Americans and their government are selling assets and writing IOUs that pay dividends and interest — the Chinese government expects interest on those bonds it has purchased.

Moreover, we are forsaking about \$500 billion in GDP. We can quibble about the size of the latter number, but it dwarfs the \$125 billion current efficiency gains from trade.

That’s how currency manipulation is wiping out the gains from trade!

It is also worth noting that the trade deficit, by reducing GDP, measurably reduces tax revenues and increases federal, state and local budget deficits. Were the trade deficit reduced enough to increase GDP by \$500 billion, tax revenues would increase by an estimated \$137.5 billion.<sup>18</sup> It may be true that foreign central bank purchases of U.S. securities help finance the federal budget deficit, but it is a supply of credit that creates some of its own demand.

### *Other Scenarios*

Foreign government purchases of U.S. assets can be erratic because governments vary their purchases to accommodate changes in the targets they set for exchange rates and variations in the excess demand for their currency, which in turn are caused by shifts in private capital flows and all the variables that make those erratic. However, even if private direct investment in the United States was larger and official purchases were smaller, the potential impact on U.S. gains from trade would still be large.

Suppose, for example, the trade deficit remained at about \$600 billion, private foreign investment were much larger, and foreign government purchases of U.S. securities were only \$200 billion (much less than the 2003 level or the anticipated 2004 level). At full employment, reducing foreign government purchases of U.S. assets would reduce the trade deficit by \$200 billion. Assuming full employment would imply a lower bound estimate of the efficiency gain

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<sup>17</sup> Export industries are about 10.6 percent more productive than imports. Morici, *The Trade Deficit*, p. 18. For this study, 2004 exports are estimated to be \$1177.90 billion. Multiplying .1059 by 1177.90 yields the \$125 billion estimate.

<sup>18</sup> In 2003, total government revenues were 27.5 percent of GDP. That rate was applied. Data at Department of Commerce GDP data at: <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp>, Table 3.1.

equal to \$100 billion. If the economy were at current levels of unemployment, reducing those purchases by \$200 billion would increase real GDP by up to an estimated \$500 billion.

### **How Currency Realignment Would Play Out**

China could not let the yuan float all at once, as this would cause a great deal of instability in both U.S. and Chinese capital markets. In China, for example, citizens sitting on large yuan bank accounts will want to rebalance their portfolios and acquire foreign assets, and Chinese financial institutions would be subject to considerably more foreign competition through greater convertibility of the yuan. In the United States, for example, the boom in housing prices has been in part financed by Chinese purchases of U.S. securities, which have contributed to lower interest rates, and the Fed pursued a low interest policy longer, in part, to accommodate the drag of large trade deficits on aggregate demand; the latter further biased U.S. investment portfolios and real investment toward real estate and structures. With currency realignment, we could expect a pause in housing and real estate prices, as household incomes catch up and the ratio of household income to housing prices returns to historic norms.

Those are one-time adjustments that can be accommodated in a period of two to three years. The longer revaluation is put off the more difficult many of those inevitable adjustments become. As those adjustments are accomplished, China will import more and export less, and can turn its attention to providing needed social investments and improving domestic living standards. The U.S. will import less and export more, but U.S. growth will pick up, and in the end, both U.S. imports and exports would grow more briskly than is likely now.

China and the United States, with highly integrated economies, would progress together, much like two hulls of a catamaran on a swift current, accomplishing rapid growth. The potential complementarities of the two economies, if engaged in approximately balanced trade and investment, are enormous.

The potential for joint progress would in part be determined by other major trading nations refraining from currency intervention as well. Given the size and scope of China's emerging capabilities, it is very difficult for the United States to accomplish currency reform without it. With a market-valued currency, China would have a strong incentive to join the United States in persuading other governments to follow suit. The United States and China, growing briskly together, would be a highly persuasive combination.

### **Longer-Term Effects on Growth**

Long term, U.S. import-competing and export industries spend about five times as much on R&D and encourage more investments in skills and education than other sectors of the economy. By shifting employment away from these trade-competing industries, the trade deficit is reducing U.S. investments in knowledge-based industries and skills, thus reducing long-term growth.

Persistent trade deficits of about \$300 billion dollars a year reduce potential GDP by about 1.1 percent a year.<sup>19</sup>

Since 1995, U.S. trade deficits have averaged about \$330 billion as measured in 2004 dollars. Potential GDP—the economy at full employment—is about ten percent smaller than it would have been had trade been balanced.

## Conclusions

Free trade can offer Americans great opportunities to improve their prosperity and quality of life. By permitting Americans and workers in other countries to do what they do best, it raises incomes and living standards, and widens the range of goods and services available. However, currency manipulation, and other forms of government intervention, can thwart the gains from trade by permitting some countries to subsidize exports on a massive scale and run up large trade surpluses.

In the case of China, the currency market intervention necessary to maintain its yuan peg imposes a tax on Chinese firms and workers equal to nearly 9 percent of GDP, which China uses to subsidize exports to the United States and other countries. This lowers U.S. GDP by up to \$500 billion or 4.4 percent, and overwhelms the U.S. efficiency gains from trade, estimated at \$125 billion.

In the near term, consumers enjoy lower prices at discount stores and shopping malls, but the effects on American prosperity and economic leadership are highly corrosive. The trade deficit is significantly reducing GDP and jobs creation, stifling wage increases, reducing tax revenues and increasing the federal deficit, undermining U.S. investments in R&D and long-term growth, and creating a burdensome debt to foreign governments and individuals. Longer-term, the continued tax on U.S. prosperity, imposed by currency manipulation and the trade deficit will undermine public support for the WTO and other trade agreements, and limit U.S. foreign policy options and leadership.

The United States should seek an orderly resolution to the currency issue with China as a matter of highest priority. Further, the United States should seek discussions at the ministerial level to establish a framework for evaluating the trade effects of currency policies on trade and rules for disciplining the manipulation of currencies in the WTO and International Monetary Fund.

Beginning with China, a resolution to these problems would benefit both the United States and China. Initially, yuan revaluation would raise the incomes of Chinese workers by increasing what their currency and wages could buy from the United States and other countries. It would permit the Chinese government to expand domestic demand through greater expenditures on

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<sup>19</sup> In Morici, *The Trade Deficit*, a \$100 billion persistent trade deficit was estimated to reduce growth, through its effects on R&D investment, by 0.559 percent. Adjusting this figure for changes in nominal GDP, the comparable figure in 2004 is \$155 billion.

much needed social investments. It would increase U.S. exports and accelerate U.S. growth. Longer-term, more balanced trade would permit both countries to grow more rapidly, in tandem, and encourage more robust prosperity in both places.