China’s Currency: A Summary of the Economic Issues

Wayne M. Morrison
Specialist in Asian Trade and Finance

Marc Labonte
Specialist in Macroeconomic Policy

April 13, 2009
Summary

Many Members of Congress charge that China’s policy of accumulating foreign reserves (especially U.S. dollars) to influence the value of its currency constitutes a form of currency manipulation intended to make its exports cheaper and imports into China more expensive than they would be under free market conditions. They further contend that this policy has caused a surge in the U.S. trade deficit with China and has been a major factor in the loss of U.S. manufacturing jobs. Although China made modest reforms to its currency policy in 2005, resulting in a gradual appreciation of its currency (about 19% through mid-April 2009), many Members contend the reforms have not gone far enough and have warned of potential punitive legislative action.

Although an undervalued Chinese currency has likely hurt some sectors of the U.S. economy, it has also benefited others. For example, consumers have gained from the supply of low-cost Chinese goods (which helps to control inflation), as well as U.S. firms using Chinese-made parts and materials (which helps such firms become more globally competitive). In addition, China has used its abundant foreign exchange reserves to buy U.S. securities, including U.S. Treasury securities, which are used to fund the Federal budget deficit. Such purchases help keep U.S. interest rates relatively low.

The current global economic crisis has further complicated the currency issue for both the United States and China. Although China is under pressure from the United States to appreciate its currency, it is reluctant to do so because it could cause further damage to export sector and lead to more layoffs. China has halted its gradual appreciation of its currency, the renminbi (RMB) or yuan to the dollar in 2009; keeping it at about 6.83 yuan per dollar (from January 1 through April 13, 2009). The federal budget deficit has increased rapidly since FY2008, causing a sharp increase in the amount of Treasury securities that must be sold. The Obama Administration has encouraged China to continue purchasing U.S. debt. However, if China were induced to further appreciate its currency against the dollar, it could slow China’s accumulation of foreign exchange reserves, thus reducing the need to invest in dollar assets, such as Treasury securities.

China’s currency policy appears to have created a policy dilemma for the Chinese government. A strong and stable U.S. economy is in China’s national interest since the United States is China’s largest export market. Thus, some analysts contend that China will feel compelled to keep funding the growing U.S. debt. However, Chinese officials have expressed concern that the growing U.S. debt will eventually spark inflation in the United States and a depreciation of the dollar, which would negatively impact the value of China’s holdings of U.S. securities. But if China stopped buying U.S. debt or tried to sell off a large portion of those holdings, it could also cause the dollar to depreciate and thus reduce the value of its remaining holdings, and such a move could further destabilize the U.S. economy. Chinese concerns over its large dollar holdings appear to have been reflected in a paper issued by the governor of the People’s Bank of China, Zhou Xiaochuan on March 24, 2009, which called for the replacing the U.S. dollar as the international reserve currency with a new global system controlled by the International Monetary Fund. China has also signed currency swap agreements with six of its trading partners, which would allow those partners to settle accounts with China using the yuan rather than the dollar.

This report summarizes the main findings in CRS Report RL32165, China’s Currency: Economic Issues and Options for U.S. Trade Policy, by Wayne M. Morrison and Marc Labonte.
## Contents

Introduction ................................................................................................................... 1  
China Reforms the Peg..................................................................................................... 1  
U.S. Concerns Over China’s Currency Policy .............................................................. 2  
China’s Concerns Over Modifying Its Currency Policy ................................................. 2  
Implications of China’s Currency Policy for its Economy .............................................. 3  
Implications of China’s Currency Policy for the U.S. Economy .................................... 3  
  Effect on Exporters and Import-Competitors ............................................................... 3  
  Effect on U.S. Consumers and Certain Producers ......................................................... 4  
  Effect on U.S. Borrowers .............................................................................................. 4  
  Net Effect on the U.S. Economy ................................................................................... 4  
  The U.S.-China Trade Deficit in the Context of the Overall U.S. Trade Deficit .......... 5  
The Global Financial Crisis and China’s Currency ......................................................... 5  

## Figures

Figure 1. China’s Accumulation of Foreign Exchange Reserves: 2001-March 2009 .......... 7  

## Contacts

Author Contact Information ............................................................................................ 8
Introduction

From 1994 until July 2005, China maintained a policy of pegging its currency, the renminbi or yuan, to the U.S. dollar at an exchange rate of roughly 8.28 yuan to the dollar. The Chinese central bank maintained this peg by buying (or selling) as many dollar-denominated assets in exchange for newly printed yuan as needed to eliminate excess demand (supply) for the yuan. As a result, the exchange rate between the yuan and the dollar basically stayed the same, despite changing economic factors which could have otherwise caused the yuan to either appreciate or depreciate relative to the dollar. Under a floating exchange rate system, the relative demand for the two countries’ goods and assets would determine the exchange rate of the yuan to the dollar. Many economists contend that for the first several years of the peg, the fixed value was likely close to the market value. But in the past few years, economic conditions have changed such that the yuan would likely have appreciated if it had been floating. The sharp increase in China’s foreign exchange reserves (which grew from $403 billion in 2003 to $1.95 trillion as of March 2009) and China’s large trade surplus with the world ($297 billion in 2008) are often viewed by critics of China’s currency policy as proof that the yuan is significantly undervalued.

China Reforms the Peg

The Chinese government modified its currency policy on July 21, 2005. It announced that the yuan’s exchange rate would become “adjustable, based on market supply and demand with reference to exchange rate movements of currencies in a basket” (it was later announced that the composition of the basket includes the dollar, the yen, the euro, and a few other currencies) and that the exchange rate of the U.S. dollar against the yuan was adjusted from 8.28 to 8.11, an appreciation of 2.1%. Unlike a true floating exchange rate, the yuan would be allowed to fluctuate by up to 0.3% (later changed to 0.5%) on a daily basis against the basket.

Since July 2005, China has allowed the yuan to appreciate steadily, but very slowly. It has continued to accumulate foreign reserves at a rapid pace, which suggests that if the yuan were allowed to freely float it would appreciate much more rapidly. The current situation might be best described as a “managed float”—market forces are determining the general direction of the yuan’s movement, but the government is retarding its rate of appreciation through market intervention. From July 21, 2005 to April 13, 2009, the dollar-yuan exchange rate went from 8.11 to 6.83, an appreciation of 18.7%. The effects of the yuan’s appreciation are unclear. The price index for U.S. imports from China in 2008, rose by 3.0% (compared to a 0.9% rise in import prices for total U.S. imports of non-petroleum products). In 2008, U.S. imports from China rose by 5.1% over the previous year, compared to import growth of 11.7% in 2007; however, U.S. exports over this period were up 9.5% compared with an 18.1% rise in 2007.

---

1 The official name of China’s currency is the renminbi (RMB), which is denominated in yuan units. Both RMB and yuan are used to describe China’s currency.

U.S. Concerns Over China’s Currency Policy

Many U.S. policymakers and business and labor representatives have charged that China’s currency is significantly undervalued vis-à-vis the U.S. dollar (even after the recent revaluation), making Chinese exports to the United States cheaper, and U.S. exports to China more expensive, than they would be if exchange rates were determined by market forces. They further argue that the undervalued currency has contributed to the burgeoning U.S. trade deficit with China (which was $266 billion in 2008) and has hurt U.S. production and employment in several U.S. manufacturing sectors that are forced to compete domestically and internationally against “artificially” low-cost goods from China. Furthermore, some analysts contend that China’s currency policy induces other East Asian countries to intervene in currency markets in order to keep their currencies weak against the dollar in order to compete with Chinese goods. Critics contend that, while it may have been appropriate for China during the early stages of its economic development to maintain a pegged currency, it should let the yuan freely float today, given the size of the Chinese economy and the impact its policies have on the world economy.

China’s Concerns Over Modifying Its Currency Policy

Chinese officials argue that its currency policy is not meant to favor exports over imports, but instead to foster economic stability through currency stability, as many other countries do. They have expressed concern that floating its currency could spark an economic crisis in China and would especially be damaging to its export industries at a time when painful economic reforms (such as closing down inefficient state-owned enterprises) are being implemented. They further contend that the Chinese banking system is too underdeveloped and burdened with heavy debt to be able to deal effectively with possible speculative pressures that could occur with a fully convertible currency. The global financial crisis has had a significant impact on China’s trade and foreign direct investment (FDI) flows. China’s trade (exports and imports) and inflows of FDI declined each month from November 2008 to February 2009 on a year-on-year basis. In February 2009 exports and imports were down 25.7% and 24.1%, respectively (year-on-year basis), the biggest monthly decline every recorded.3 Thousands of export-oriented factories have reportedly been shut down. The Chinese government has estimated that 20 million migrant workers lost their jobs because of the global financial crisis in 2008. Chinese officials view economic stability as critical to sustaining political stability; they fear an appreciated currency could cause even more employment disruptions and thus could cause worker unrest. However, Chinese officials have indicated that their long-term goal is to adopt a more flexible exchange rate system and to seek more balanced economic growth through increased domestic consumption and the development of rural areas, but they claim they want to proceed at a gradual pace.

Implications of China’s Currency Policy for its Economy

If the yuan is undervalued vis-à-vis the dollar (estimates rage from 15% to 40% or higher), then Chinese exports to the United States are likely cheaper than they would be if the currency were freely traded, providing a boost to China’s export industries (and, to some degree, an indirect subsidy). Eliminating exchange rate risk through a managed peg also increases the attractiveness of China as a destination for foreign investment in export-oriented production facilities. However, an undervalued currency makes imports more expensive, hurting Chinese consumers and Chinese firms that import parts, machinery, and raw materials. Such a policy, in effect, benefits Chinese exporting firms (many of which are owned by foreign multinational corporations) at the expense of non-exporting Chinese firms, especially those that rely on imported goods. This may impede the most efficient allocation of resources in the Chinese economy. Another major problem is that the Chinese government must expand the money supply in order to keep purchasing dollars, which has promoted the banks to adopt easy credit policies. In addition, in the past, “hot money” has poured into China from investors speculating that China will continue to appreciate the yuan. At some point, these factors could help fuel inflation, overinvestment in various sectors, and expansion of nonperforming loans by the banks—each of which could threaten future economic growth.

Implications of China’s Currency Policy for the U.S. Economy

Effect on Exporters and Import-Competitors

When exchange rate policy causes the yuan to be less expensive than it would be if it were determined by supply and demand, it causes Chinese exports to be relatively inexpensive and U.S. exports to China to be relatively expensive. As a result, U.S. exports and the production of U.S. goods and services that compete with Chinese imports fall, in the short run. Many of the affected firms are in the manufacturing sector. This causes the trade deficit to rise and reduces aggregate demand in the short run, all else equal. Some analysts contend that China’s currency policy constitutes a de facto or indirect export subsidy and should be subject to U.S. countervailing laws.

4 Many such firms contend that China’s currency policy constitutes one of several unfair trade advantages enjoyed by Chinese firms, including low wages, lack of enforcement of safety and environmental standards, selling below cost (dumping) and direct assistance from the Chinese government.

5 U.S. production has moved away from manufacturing and toward the service sector over the past several years. U.S. employment in manufacturing as a share of total nonagricultural employment fell from 31.8% in 1960, to 22.4% in 1980, to 10.2% in 2007. This trend is much larger than the Chinese currency issue and is caused by numerous other factors.

6 Putting exchange rate issues aside, most economists maintain that trade is a win-win situation for the economy as a whole, but produces losers within the economy. Economists generally argue that free trade should be pursued because the gains from trade are large enough that the losers from trade can be compensated by the winners, and the winners will still be better off.
Effect on U.S. Consumers and Certain Producers

A society’s economic well-being is usually measured not by how much it can produce, but how much it can consume. An undervalued yuan that lowers the price of imports from China allows the United States to increase its consumption through an improvement in the terms-of-trade. Since changes in aggregate spending are only temporary, from a long-term perspective the lasting effect of an undervalued yuan is to increase the purchasing power of U.S. consumers. Imports from China are not limited to consumption goods. U.S. producers also import capital equipment and inputs to final products from China. An undervalued yuan lowers the price of these U.S. products, increasing their output.

Effect on U.S. Borrowers

An undervalued yuan also has an effect on U.S. borrowers. When the U.S. runs a current account deficit with China, an equivalent amount of capital flows from China to the United States, as can be seen in the U.S. balance of payments accounts. This occurs because the Chinese central bank or private Chinese citizens are investing in U.S. assets, which allows more U.S. capital investment in plant and equipment to take place than would otherwise occur. Capital investment increases because the greater demand for U.S. assets puts downward pressure on U.S. interest rates, and firms are now willing to make investments that were previously unprofitable. This increases aggregate spending in the short run, all else equal, and also increases the size of the economy in the long run by increasing the capital stock.

Private firms are not the only beneficiaries of the lower interest rates caused by the capital inflow (trade deficit) from China. Interest-sensitive household spending, on goods such as consumer durables and housing, is also higher than it would be if capital from China did not flow into the United States. In addition, a large proportion of the U.S. assets bought by the Chinese, particularly by the central bank, are U.S. Treasury securities, which fund U.S. federal budget deficits. According to the U.S. Treasury Department, China held $740 billion in U.S. Treasury securities as of January 2009, making it the largest foreign holder of such securities. If the U.S. trade deficit with China were eliminated, Chinese capital would no longer flow into this country on net, and the government would have to find other buyers of U.S. Treasuries. This could increase the government’s interest payments.

Net Effect on the U.S. Economy

In the medium run, an undervalued yuan neither increases nor decreases aggregate demand in the United States. Rather, it leads to a compositional shift in U.S. production, away from U.S. exporters and import-competing firms toward the firms that benefit from Chinese capital flows. Thus, it is expected to have no medium or long run effect on aggregate U.S. employment or unemployment. As evidence, one can consider that the U.S. had a historically large and growing trade deficit throughout the 1990s at a time when unemployment reached a three-decade low. However, the gains and losses in employment and production caused by the trade deficit will not be dispersed evenly across regions and sectors of the economy: on balance, some areas will gain while others will lose. And by shifting the composition of U.S. output to a higher capital base, the size of the economy would be larger in the long run as a result of the capital inflow/trade deficit.

Although the compositional shift in output has no negative effect on aggregate U.S. output and employment in the long run, there may be adverse short-run consequences. If output in the trade
sector falls more quickly than the output of U.S. recipients of Chinese capital rises, aggregate spending and employment could temporarily fall. This is more likely to be a concern if the economy is already sluggish than if it is at full employment. Otherwise, it is likely that government macroeconomic policy adjustment and market forces can quickly compensate for any decline of output in the trade sector by expanding other elements of aggregate demand. The deficit with China has not prevented the U.S. economy from registering high rates of growth.

The U.S.-China Trade Deficit in the Context of the Overall U.S. Trade Deficit

While China is a large trading partner, it accounted for only 16.1% of U.S. merchandise imports in 2008 and 33% of the sum of all U.S. bilateral trade deficits.7 Over a span of several years, a country with a floating exchange rate can consistently run an overall trade deficit for only one reason: a domestic imbalance between saving and investment. Over the past two decades, U.S. saving as a share of gross domestic product (GDP) has been in gradual decline. On the one hand, the U.S. has high rates of productivity growth and strong economic fundamentals that are conducive to high rates of capital investment. On the other hand, it has a chronically low household saving rate, and recently a negative government saving rate as a result of the budget deficit. As long as Americans save little, foreigners will use their saving to finance profitable investment opportunities in the United States; the trade deficit is the result.8 The returns to foreign-owned capital will flow to foreigners instead of Americans, but the returns to U.S. labor utilizing foreign-owned capital will flow to U.S. labor.

More than half of China’s exports to the world are produced by foreign-invested firms in China, many of which have shifted production to China in order to gain access to low-cost labor. (The returns to capital of U.S. owned firms in China flow to Americans.) Such firms import raw materials and components (much of which come from East Asia) for assembly in China. As a result, China tends to run trade deficits with East Asian countries (such as Taiwan, South Korea, and Japan) and trade surpluses with countries with high consumer demand, such as the United States. These factors imply that much of the increase in U.S. imports (and hence, the rising trade deficit with China) is largely the result of China becoming a production platform for many foreign companies, rather than unfair Chinese trade policies.

The Global Financial Crisis and China’s Currency

The impact of the global financial crisis has raised concerns in the United States over the future course of China’s currency policy. Prior to the crisis, there were high expectations among many analysts that China would continue to appreciate its currency and implement financial reforms to pave the way towards eventually adopting a floating currency. However, China’s economy has

---

7 This figure is somewhat misleading because the United States run trade deficits with some countries and surpluses with others. A different approach would be to sum up the balances of those countries in which the United States ran a trade deficit with. In 2008, the United States ran trade deficits with 91 countries in 2008, totaling $951.9 billion; the U.S. trade deficit with China was equal to 27.9% of this amount.

8 Most economists believe that the United States runs a trade deficit because it fails to save enough to meet its investment needs and must obtain savings from other countries with high savings rates. China has one of the world’s largest savings rate.
China’s Currency: A Summary of the Economic Issues

slowed significantly in recent months, due largely to a fall in global demand for Chinese products. The Chinese government appears to have halted the yuan’s appreciation over the past few months. The rate of exchange between the yuan and the dollar on January 1, 2009 and April 13, 2009 was nearly the same at about 6.83.

Some analysts have urged China to take a greater leadership role in responding to the current global financial crisis by combining the policies of boosting domestic consumption with appreciating the currency in order to boost imports and thus contribute to the economic recovery of its trading partners. (China’s economy has slowed as a result of the crisis, but is still growing faster than the rest of the world.) Many analysts have warned that efforts by the Chinese government to weaken its currency in order to boost its exports could further strain U.S.-China economic relations and could prompt the introduction of new congressional legislation to counter the perceived effects of an undervalued Chinese currency. Numerous bills were introduced in the 110th Congress to address China’s currency. Proposals included imposing an additional 27.5% tariff on Chinese goods if the President determined that China was manipulating its currency, requiring the U.S. Trade Representative to bring a trade dispute case against China in the World Trade Organization over its currency policy, and making currency manipulation or misalignment a factor in U.S. countervailing and anti-dumping cases.

The Obama Administration has encouraged China to continue purchasing U.S. debt. Secretary of State Hillary Clinton was reportedly quoted as saying,

Well, I certainly do think that the Chinese government and the central bank here in China is making a very smart decision by continuing to invest in treasury bonds for two reasons.... (Second,) the Chinese know that, in order to start exporting again to its biggest market, namely, the United States, the United States has to take some very drastic measures with this stimulus package, which means we have to incur more debt. It would not be in China's interest if we were unable to get our economy moving again. So, by continuing to support American Treasury instruments, the Chinese are recognizing our interconnection.9

China’s currency policy appears to have created a policy dilemma for the Chinese government. A strong and stable U.S. economy is in China’s national interest since the United States is China’s largest export market. Thus, some analysts contend that China will feel compelled to keep funding the growing U.S. debt. However, Chinese officials have expressed concern that the growing U.S. debt will eventually spark inflation in the United States and a depreciation of the dollar, which would negatively impact the value of China’s holdings of U.S. securities. But if China stopped buying U.S. debt or tried to sell off a large portion of those holdings, it could also cause the dollar to depreciate and thus reduce the value of its remaining holdings, and such a move could further destabilize the U.S. economy. Chinese concerns over its large dollar holdings appear to have been reflected in a paper issued by the governor of the People’s Bank of China, Zhou Xiaochuan on March 24, 2009, which called for replacing the U.S. dollar as the international reserve currency with a new global system controlled by the International Monetary Fund.10 China has also signed currency swap agreements totaling 650 billion yuan (or about $95 billion) with Hong Kong, Argentina, Indonesia, South Korea, Malaysia, and Belarus, which would allow those partners to settle accounts with China using the yuan rather than the dollar in

9 Secretary Clinton, Interview With Yang Lan of Dragon TV, Beijing, China, February 22, 2009.
order to facilitate bilateral trade and investment.\(^{11}\) It is not clear if such a move signifies a gradual effort on the part of the Chinese government to eventually make the yuan an internationally traded currency.

Chinese data indicate that its accumulation of foreign exchange reserves has slowed sharply in 2009. From the end of December 2008 to the end of March 2009, those reserves grew by only $7.7 billion, reflecting sharp decreases in China’s net exports, foreign direct investment, and hot money inflows (see Figure 1). If this trends continues, it will lessen China’s need to intervene to keep the value of yuan against the dollar within its targeted range. However, it could also slow China’s purchases of U.S. securities.\(^{12}\)

![Figure 1. China’s Accumulation of Foreign Exchange Reserves: 2001-March 2009](image)

**Source:** End-year of end-month data

**Notes:** Chinese State Administration of Foreign Exchange.

---

\(^{11}\) Under a currency swap arrangement, two parties exchange currencies for a certain length of time and agree to reverse the transaction at a later date. See, the Federal Reserve Bank of New York, *the Basics of Foreign Trade and Exchange*, available at http://www.ny.frb.org/education/fx/foreign.html.

Author Contact Information

Wayne M. Morrison  
Specialist in Asian Trade and Finance  
wmorrison@crs.loc.gov, 7-7767

Marc Labonte  
Specialist in Macroeconomic Policy  
mlabonte@crs.loc.gov, 7-0640