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## **China, the United States and the IMF: Negotiating Exchange Rate Adjustment**

**March 13, 2006**

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# China, the United States and the IMF: Negotiating Exchange Rate Adjustment

## Summary

In recent years, the United States and other countries have expressed considerable concern that China's national currency (the yuan or renminbi) is seriously undervalued. Some analysts say the yuan needs to rise by as much as 40% in order to reflect its equilibrium value. Critics say that China's undervalued currency provides it with an unfair trade advantage that has seriously injured the manufacturing sector in the United States. Chinese officials counter that they have not pegged the yuan to the dollar in order to gain trade advantages. Rather, they say the fixed rate promotes economic stability that is vital for the functioning of its domestic economy.

On July 21, 2005, China announced a new foreign exchange system which is intended to allow more flexibility and to permit the international value of the yuan to be established by market forces. The yuan was increased in value by 2% and a "managed float" was introduced. However, the value of the yuan has changed little since then. Despite the publication of many studies, scholars do not agree whether or by what percent the yuan is undervalued. The wide range of estimates suggests that there is no reason to believe that any particular figure is correct. It is not clear that the U.S. trade deficit would be lower or U.S. manufacturers would benefit if China raised the value of the yuan. In the short run, U.S. producers might be able to sell higher-priced products to U.S. consumers if the inflow of Chinese goods were reduced. In the long run, though, as long as the United States is a net importer of capital, it will have a trade deficit and other countries will ultimately replace China as suppliers of low-cost goods to the U.S. market.

The Treasury Department has strongly urged China in recent years to adopt procedures that would allow the yuan to rise in value. Congress is considering legislation that would penalize China if its currency is not revalued. The United States has pursued the yuan-dollar exchange rate issue as a bilateral U.S.-China issue. Other countries are also affected by the presumably undervalued yuan — some more than the U.S. — but they have allowed the United States to take the lead.

There are at least five ways the United States could deal with the yuan exchange rate issue. Some of these would involve other countries more explicitly in the process. First, the United States could continue pressing China publicly to raise the value of the yuan on the assumption that change will not occur without foreign pressure. Second, it could stop pressing China publicly, on the expectation that China might move more rapidly towards reform if it is not pressured. Third, the United States could restrict imports from China pending action to revalue the yuan. Fourth, the U.S. could ask the IMF to declare that China is manipulating its currency in violation of IMF rules. Fifth, the United States could refer the issue to the World Trade Organization (WTO), asserting that the United States has been injured by unfair trade practices linked to the undervaluation of China's currency. The WTO, in turn, could authorize trade remedies (tariffs on Chinese goods, for example) aimed at correcting this abuse. This report will be updated as new developments arise.

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# China, the United States and the IMF: Negotiating Exchange Rate Adjustment

## Scope and Content

### Overview

In recent years, there has been growing concern in the United States and elsewhere that China may be manipulating the value of its currency to gain unfair trade advantages. Many believe that China's national currency, the yuan or renminbi (RMB), may be seriously undervalued compared to the dollar and other major currencies.<sup>1</sup> The United States and other countries have urged China to raise the value of its currency. Chinese officials say they want to make their exchange rate system more flexible, but they say China also needs long-term stability in its currency value in order to avoid internal dislocations. Discussion of this question has taken place at the International Monetary Fund (IMF) and at other multilateral fora such as the periodic meetings of the G-8 (the seven largest industrial countries plus Russia.) The United States and other countries have also spoken directly to China on a bilateral basis about this issue.

The key issue is what — if the yuan is undervalued — China and the world should do about it. China is currently undergoing a major shift from a state-dominated to a market-based economy. It has pursued a policy of export-led growth in order to generate the employment and income necessary to facilitate change in the overall structure of its economy. It has priced its currency in order to facilitate that policy.

In July 2005, China adopted reforms aimed at giving market forces a possible role in the valuation of the yuan. Most observers say the initial changes (a 2% rise in value) were too small and they note that little change has occurred since. Chinese officials retain firm control over the mechanisms which produce the yuan-dollar exchange rate and the criteria they use in this process remain opaque. International discussions have sought to persuade China to accelerate the process but — while the concerns of other countries may bear weight in the thinking of Chinese officials —

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<sup>1</sup> For a comprehensive discussion of the China exchange rate issue, see CRS Report RS21625, *China's Currency Peg: A Summary of the Economic Issues* and CRS Report RL32165, *China's Exchange Rate Peg: Economic Issues and Options for U.S. Trade Policy*. See also CRS Issue Briefs IB91121, *U.S.-China Trade Issues* and CRS Report RS22338, *China's Currency: A Brief overview of U.S. Options*. The term "renminbi" means "people's currency" while "yuan" is the unit of account (one yuan, two yuan, etc.) In this report, for simplicity, China's currency will be called the "yuan" except in instances where the term "renminbi" is used in a quotation or official statement.

there are no effective “teeth” in the International Monetary Fund that could compel China to change its policies and procedures more rapidly than it wishes to do so.

Many in the United States believe that the large volume of Chinese exports to the United States is damaging the U.S. manufacturing sector and feeding the U.S. trade deficit. They believe that the undervalued yuan is an important reason why China is able to price its goods so competitively and why production in many areas is shifting to China. Other analysts believe that — by virtue of its undervalued currency — China is damaging the world trading system and denying export opportunities to other countries whose currencies are more fairly priced. Congress is considering legislation which would place countervailing duties or special tariffs on Chinese goods entering the U.S. in order to offset the trade benefits China presumably gains from its present exchange rate policies.

## This Report in Four Parts

**Events and Issues.** This report has four parts. The first part discusses the issues and events surrounding the yuan-dollar controversy. It describes the actions which Chinese authorities have taken to revalue the yuan and, arguably, to lay the groundwork for a larger future role for market forces in its valuation. It also describes the methods the Chinese authorities have used and still use to hold the value of the yuan at the level they prefer. This section discusses the efforts the International Monetary Fund, the U.S. Government and other governments have made to encourage or press China to revalue its currency. It also reviews the U.S. Treasury Department’s discussion of China in its semi-annual report on currency manipulation and legislation currently pending in Congress which would levy special duties on Chinese goods if the yuan is not increased considerably in value.

**Five Questions which Frame the Controversy.** The second part of this report looks at five central questions. **First, is the yuan undervalued and, if so, by how much?** This question may be harder to answer than many people assume. Most economists agree the yuan is undervalued, but the 17 studies reviewed in this report show widely different conclusions. Some say the yuan is slightly *overvalued*, others say it is 15% or 25% or perhaps 49% *undervalued*, while several say it is impossible to make an accurate computation. The data are poor, China is changing rapidly, and scholars use different assumptions in their studies. Moreover, new economic data published in December 2005 seem to render all previous studies obsolete, as they give a very different picture of the Chinese economy than was available before. In recent studies, IMF experts say the yuan is undervalued but they also say it is impossible to know how large the distortion might be. The IMF also says that it is impossible to separate the trade effects of that distortion from the other factors (labor costs, productivity, etc.) which also affect the price of Chinese goods.

Without some objective way of determining what the “real” value of the yuan might be, it may be difficult for China and other countries to agree what size increase is “enough.” Likewise, without knowing the proper rate, it might be difficult to design special U.S. tariffs which the world would consider fair and compensatory rather than arbitrary or punitive. It might be helpful if China, the United States and other countries could agree on criteria by which to decide how an appropriate exchange rate for the dollar and yuan might be determined.

**Second, does China manipulate the value of the yuan?** The IMF rules state that countries may not manipulate the value of their currency in order to gain unfair trade advantage. The second section of this report examines China's behavior in light of the five standards the IMF uses to judge whether manipulation is taking place. For whatever reason, the IMF has not publicly declared that China is manipulating its currency. However, China's actions seem to meet three of the IMF's criteria in this regard. The IMF has no "teeth," however, nor any means other than persuasion to make countries comply with its rules. In this context, it is not clear that an IMF announcement that China was violating its rules would help or hinder the current discussions aimed at persuading China to raise the value of the yuan.

**Third, how fast could China revalue the yuan if it wanted to?** Theoretically, the People's Bank of China could raise the exchange value of the yuan to any specified level overnight. However, Chinese officials are concerned about the growth and employment effects any change in the value of the yuan may have on their economy. A too-rapid increase might have serious negative effects on employment, output and growth. Some also worry that "hot money" could complicate the process of revaluation and may require China to delay any changes until the perceived speculative pressure abates. Many experts believe that a gradual and measured approach to currency revaluation is appropriate for China. The IMF says, for example, that emerging market countries generally do not handle rapid and large exchange rate movements well and that serious dislocations can occur. Others believe, however, that basic fairness to other countries requires China to raise the value of its currency. Some analysts believe China could suffer serious damage to its economy if it does not change its economic strategy. Its heavy reliance on export-led growth makes it vulnerable, for example, to a slowdown in world demand. Higher currency values would stimulate growth of its domestic economy.

**Fourth, has China "cooked the books" in terms of its trade surplus?** Some analysts believe that China's actual net income from trade is many times larger than that which China publishes in its official trade statistics. Indeed, data published by the IMF show that, while China reports that it had a net trade surplus of \$41 billion in 2004, its trading partners report that they had a combined trade deficit of \$267 billion with China. Some people say that a trade surplus this large is proof that China's currency is substantially undervalued.

Others would ask, however, where — if China is accruing an extra \$200 billion annually in trade income beyond the amounts accounted for in its balance of payments figures — that money might be. It might be hard, for example, for China to hide all this additional income year after year in secret undeclared foreign exchange reserves without somebody discovering that it exists.

Trade data for other countries also show (though on a smaller scale) this same mismatch between the amount reported by exporter countries and the amounts reported by those who import their products. Bad data collection by individual countries and methodological problems in the reporting system seem to be better explanations for these discrepancies than is the uniform prospect that exporters fudge their data while importers report their incoming trade data correctly.

**Fifth, would the U.S. economy benefit if China revalued the yuan?**

Correcting the international value of the yuan may improve the efficiency of international trade. But will it reduce the U.S. trade deficit and strengthen the U.S. manufacturing sector? Most economists believe not. The U.S. and Chinese economies have become increasingly interdependent in recent years. China is pursuing a policy of export-led growth and the United States provides a ready market for its goods. Meanwhile, the United States imports large quantities of capital from abroad (by borrowing or by opening its economy to foreign investment) and — in order (more money chasing the same quantity of goods) to avoid turning that imported money into inflation — it must also import goods and services for the imported money to buy. If China raised the value of the yuan, its exports to the United States will likely shrink and the amount of money it could place in the U.S. economy would decline.

Temporarily, the decline in these imports might allow U.S. producers to take some of the market (albeit at higher prices) previously supplied by China. From a longer perspective, though, it is likely that production will shift to other low-cost countries and these will ramp up their exports in order to supply the U.S. market previously supplied by Chinese goods. On the other hand, the inflow of foreign goods will decline and U.S. manufactured goods might be more competitive in U.S. and foreign markets if the U.S. savings rate increased, the United States borrowed less and received fewer investments from abroad, and the international value of the dollar declined.<sup>2</sup>

**Three Dilemmas for China.** The third section of this report looks at some of the monetary and financial dilemmas which affect China's views about exchange rate policy. **First, what should China do about its foreign exchange (forex) reserves?** China has \$819 billion in foreign exchange reserves (rough 70% in dollars). These are an important source of income, influence, and future spending power. However, they are also a problem. For one thing, the growth in China's forex reserves fuels domestic inflation. For every dollar the People's Bank of China buys (to hold down the value of the yuan and to increase its reserves), it injects 8 yuan into China's economy. China's reserves grew by \$100 billion in 2005, so this is a lot of new "printing press" money. The central bank has tried with limited success to bottle up the inflationary effect of this money with public debt transactions and tight monetary policy. If China raised the value of the yuan, the growth in its foreign exchange reserves would slow or stop and — if it relaxed its monetary policy — the growth and reform prospects of its internal economy might be enhanced.

On the other hand, revaluation would cost China a great deal of money. If the yuan increased in value by 20%, the purchasing power of China's foreign reserves would go down corresponding. It would lose, from China's perspective, about 1.3 trillion yuan (about \$200 billion) in purchasing power. If China began withdrawing assets from the U.S. market and converting them to other currencies, in order to reduce its exposure, it would lose money because its actions would push down the

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<sup>2</sup> For a further discussion of the effects of the undervalued yuan on the U.S. economy, see CRS Report RS21625, *China's Currency Peg*, pp. 4-6 and CRS Report RL32165, *China's Exchange Rate Peg*, pp. 19-2, note 1.

value of the securities and the dollars it sold. When it purchased other currencies and foreign assets to replace its former U.S. holdings, it would lose money again because its actions would also push up their prices. Chinese officials may want to reduce the inflationary pressure which comes from growth in their foreign exchange reserves but they may not be happy about the prospect of major financial losses if they revalue or if they move their current assets elsewhere.

**Second, where is the money coming from that fuels those growing reserves?**

Many people believe that exports and incoming foreign investment account for most of the increase in China's foreign exchange reserves. Some suggest, however, that "hot money" — speculative inflows of foreign funds seeking to profit from revaluation of the yuan — may account for most of the growth in China's reserves.

Depending on the source of the money, the policy implications for China are very different. If trade and investment are the main source of the funds, then — if Chinese officials want to slow the growth in reserves — they should raise the value of the yuan. However, if speculative inflows are the primary source, then China's policy choices are more difficult. A large quick revaluation would stop the speculative pressure but it might also damage China's economy. Gradual increases would allow the Chinese economy to adjust but it might also encourage speculators to bring more money into China in hopes of profiting as the currency goes up in value. A refusal to consider any change in the value might discourage the speculators over a long period of time. But if the status quo prevailed during that period, this would also make China's trading partners angry and give them reasons to doubt whether Chinese officials are sincere when they say they want to revalue the yuan.

**Third, would revaluation strengthen or weaken China's banking system?**

China's banks are riddled with bad debt and their competitiveness weakened by years of state control. If the yuan were increased in value, would the shock cause Chinese banks to strengthen their procedures or would it put the system at risk? A change in exchange rates which weakened the export sector without simultaneously stimulating domestic commerce could hold bad news for China's banks.

Some experts point out that Chinese banks hold only a small portion of their assets in foreign currencies and the government has recently established asset management companies (similar to the mechanisms the U.S. Government used in the 1980s to resolve the U.S. savings and loan crisis) to take bad debt off the books of the banks. However, export-related activities account for a major share of the customers in China's banking system. Nevertheless, most experts agree that bad debts (non-performing assets) account for perhaps 30% of the assets of Chinese banks and they say the government will need to spend hundreds of billions of dollars in yuan to recapitalize and restructure the major banks. The IMF says that the strength of China's banking system should not be an impediment to a gradual increase in the value of the yuan. However, Chinese officials have expressed reservations and may not be willing to revalue the yuan very quickly until their concerns about the impact on their national banking system have been alleviated. External pressure to revalue rapidly might be seen as an effort by foreigners to create more opportunities for their firms to buy ailing Chinese banks.

**Policy Options for the United States.** The fourth part of this report identifies five major options which U.S. policy-makers might consider if they want to encourage China to revalue the yuan. They are not mutually exclusive, though it might be difficult for some of them to be pursued simultaneously.

First, the United States could continue pressing China publicly for further changes in its foreign exchange system, in order that the yuan's value would better reflect market conditions and economic realities. If Chinese reformers need outside pressure to help them persuade other officials to consider reform, this strategy might help. Second, as a reciprocal of the first option, U.S. policy-makers might refrain from pressing China to move more quickly with its reforms. This might be an effective strategy if the Chinese proponents of change find that outside pressure strengthens the hand of those resisting reform.

Third, the United States could levy special tariffs on Chinese imports in an effort to encourage China to be more accommodating in their discussions with the United States about the yuan. However, such duties may violate WTO rules. Also, Chinese exporters may be able to absorb some of the cost of the new duties. Further, if the yuan were revalued, the price of Chinese exports would need not increase by the same rate as did the yuan. Chinese exports include a high proportion of inputs imported from other countries. The price of those inputs would not change if the yuan went up in value. To break even, producers in China would only need to increase the price of their exports by an amount which reflects the higher dollar-equivalent cost of Chinese-produced inputs and labor paid in yuan.

Fourth and fifth, the United States might refer the dollar-yuan controversy to the IMF or the World Trade Organization. As noted above, this issue has been discussed at the IMF for some time. Proposed changes in the power of the IMF might give it more authority over country exchange rate policies, including authority to address problems of manipulation. Whether China would be the main country affected, whether the United States and other countries would allow the IMF to determine their exchange rates, and what impact these rule changes might have on the policies of the countries with the world's largest economies are matters for speculation.

An appeal to the WTO might be based on the grounds that China's undervalued currency allegedly constitutes a subsidy to its export sector. The WTO can evaluate trade disputes and it can authorize countries to levy trade penalties in order to enforce its decisions. However, it has no authority to judge exchange rate issues. The WTO and IMF have an agreement, though, specifying that any exchange rate issues which arise in WTO deliberations shall be referred to the IMF and the IMF's decision shall be final. In effect, the WTO would be the enforcer if the IMF decided that a country was manipulating its currency to gain unfair trade advantage.

## Issues and Events

### Yuan-Dollar Exchange Rate Issue

**The Controversy.** In 1994, the People's Bank of China (PBC) lowered the value of its currency from 5.8 to about 8.3 yuan to the dollar. During the next decade, despite the rapid growth and modernization of the Chinese economy and the enormous expansion of its exports, the pegged value of the yuan remained essentially unchanged. The PBC bought dollars in the market in order to keep the value of the yuan virtually unchanged. Many argue that this constitutes manipulation.

**Arguments Pro and Con.** Many argue that China is manipulating the value of its currency in order to gain unfair trade advantage.<sup>3</sup> They believe this has seriously injured the manufacturing sector in the United States and contributed significantly to the U.S. trade deficit.

The act of currency manipulation is often hard to see. However, the effects of manipulation on currency prices is more apparent. Critics of China's exchange rate policies argue that China's currency is perhaps 25% to 50% undervalued compared to the U.S. dollar. They cite various studies which support their view. They say the undervalued yuan adds to the U.S. trade deficit and hurts U.S. output and employment. Many have urged the Administration to put pressure on China in order to make it stop manipulating the yuan. They say China should either raise the value of the yuan by official action ("revalue") or let it trade freely in foreign exchange markets ("float") so that the free market can determine its real international value.

The issue of manipulation is controversial. The IMF says, in its Articles of Agreement (Article IV), that countries shall "Avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members."<sup>4</sup> Member countries are supposed to comply with this requirement. In addition, the U.S. Omnibus Trade and Competitiveness of 1988 requires that the Secretary of the Treasury determine whether other countries "manipulate the rate of exchange between their currency and the United States dollar for the purpose of preventing effective balance of payments adjustments or gaining unfair competitive advantage in international trade."<sup>5</sup>

Chinese officials argue that the fixed exchange rate between the yuan and the U.S. dollar is not intended to promote exports but rather to promote economic stability. They worry that, if the value of the yuan increased sharply against the

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<sup>3</sup> See, for example, a report and data published by the China Currency Coalition. *Chinese Currency Manipulation Fact Sheet, April 2005*. The Coalition is a group of U.S. industrial, service, agricultural, and labor organizations seeking change in the yuan exchange rate. In addition to labor unions, most of its members appear to represent import-sensitive products. Available at [<http://www.chinacurrencycoalition.com/factsheet.html>].

<sup>4</sup> Articles of Agreement of the International Monetary Fund. 60 Stat. 1401, TAIS 1501.

<sup>5</sup> The Omnibus Trade and Competitiveness Act of 1988, P.L. 100-418, sec. 3004.

dollar or if its value fluctuated widely in world currency markets, China could suffer a major economic crisis that would seriously injure its prospects for growth, employment, and economic reform. Chinese officials have not entered into the debate concerning the “real” value of China’s currency, though some say there is no convincing evidence that the yuan is undervalued. They could cite econometric studies (see below) which support the view that China’s currency is slightly overvalued or perhaps only a little undervalued compared to the dollar.

Many economists doubt that China’s actions have had any appreciable impact on the long-term value of the dollar. The dollar plays a broad role in international finance and the amount of dollars in circulation globally is very large. A recent survey by the world’s leading central banks indicated that the daily trading of foreign currencies totals more than \$1.9 trillion, 90% of which is in dollars.<sup>6</sup>

**China Announces a Change.** On July 21, 2005, China’s central bank announced a new exchange rate system for China’s currency. First, it increased the value of the yuan, which rose from 8.28 to 8.11 to the dollar.<sup>7</sup> Second, the yuan would be referenced, not just to the dollar but to a basket of currencies, and it would be allowed to vary by 0.3% each day above or below a central parity. Third, the central bank said that “the closing price of...the US dollar traded against the RMB [yuan]...after the closing...of the market each working day” would become “the central parity for the...following working day.”<sup>8</sup> This seemed to be an exchange system which economists call a “crawling peg.”

If the new procedure had been allowed to function as announced, the yuan could have increased in value by 30% in five months. On July 27, 2005, however, the central bank announced that no further changes in the value of the yuan should be expected. Rather, it said, China’s new system would be a “managed float.” The central bank would compare the value of the yuan to a “basket” of currencies issued by its major trading partners. However, the Chinese authorities made it clear that they would decide what the value of the yuan would be and they would determine when and how liberalization might occur. The yuan might fluctuate compared to other currencies, but they said its dollar value would be fixed.

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<sup>6</sup> *Triennial Central Bank Survey: Foreign Exchange and Derivatives Market Activity in 2004*. Bank for International Settlements, March 2005, pp. 1-2. A copy of this report is available at [<http://www.bis.org/publ/rpfx05t.pdf>]. The 2001 survey is : *Central Bank Survey of Foreign Exchange and Derivatives Market Activity in April 2001: Preliminary Global Data*. Bank for International Settlements, October 2001.

<sup>7</sup> A currency is said to “rise” in value compared to the U.S. dollar when one dollar buys a smaller amount of that currency than before. By convention, it is said that the yuan or renminbi rose in value by a little over 2% (even though the number gets smaller) when it went from Rmb 8.28 to Rmb 8.11 to the dollar on July 21, 2005.

<sup>8</sup> The new procedure was widely discussed in the press. See, for example, “2% Solution: China lets Yuan Rise vs. Dollar, Easing Trade Tensions Slightly.” *Wall Street Journal*, July 22, 2005, p. 1; Richard McGregor *et al.* “China revalues the renminbi.” *Financial Times*, July 22, 2005, p. 1; and Peter Goodman. “China Ends Fixed-Rate Currency.” *Washington Post*, July 22, 2005, p. 1.

**Too Small?** To many observers, the 2% increase in the value of the yuan announced in July 2005 was too small and the process for possible future increases was too obscure and uncertain. Some might argue that the changes in the new system reflect the current debate about economic policy within the Chinese leadership. Some Chinese officials may believe that reform, including liberalization of the yuan, is in China's best interest. Others may believe that China must continue the policy of export-led growth and the advantages of the old system should not be disposed of lightly.

From this perspective, some might say the new system was adopted in order to buy time, to delay reform, and to forestall outside pressure. China was scheduled to discuss its exchange rate policies with the IMF executive board in August 2005 and the advent of a new system gave the Chinese something new to present. The IMF board was critical of China's exchange rate policies in 2004 and IMF staff had strongly urged China in mid-2005 to introduce market forces into China's exchange rate regime. The change was also announced just before Congress was scheduled to consider several bills which sought to put pressure on China if it did not revalue its currency. Arguably, a series of ambiguous steps which seemed to herald change might buy China time to consider its options and lay its plans. It might give the IMF board a reason not to press for faster action and it might persuade Congress to postpone action on the pending bills.<sup>9</sup>

Alternatively, instead of seeing the new system as the product of internal debate, one might say that it is obscure because it seeks to confuse and frustrate speculators. The inflow of "hot money," is serious. An official with China's State Administration of Foreign Exchange reportedly observed that "Whether we [can] effectively refrain speculation on yuan is the key to the success or failure of the reform."<sup>10</sup> If China wants to avoid instability and sharp changes in currency prices, its actions must not invite speculators to bring in more foreign currency and buy more yuan. In effect, China must do what the speculators expect — increase the value of the yuan — without encouraging them to capitalize on their expectations.

The old system offered speculators a one-way no-risk bet, since there was little chance the yuan would fall in value whereas there seemed a real possibility that the value would eventually rise, perhaps substantially. This offered potentially large rewards to those who owned yuan or yuan-denominated assets.<sup>11</sup> The inflow of speculative money puts pressure on China to revalue the yuan to reduce the flow.<sup>12</sup>

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<sup>9</sup> See, for example: "Richard McGregor. "Aim is to allow greater flexibility while still keeping firm control." and "Making sense of China's choice." *Financial Times*, July 22, 2005, pp. 2 and 4.

<sup>10</sup> "Chinese bank reaffirms revaluation policy." *BBC Monitoring Asia Pacific*. September 21, 2005.

<sup>11</sup> See, for example: Morris Goldstein and Nicholas Lardy. "China's revaluation shows size really matters." *Financial Times*, July 22, 2005, p. 13.

<sup>12</sup> This argument is the author's synthesis of conversations he and other members of his group had with Chinese and U.S. officials and other persons in early January 2006 during  
(continued...)

However, if the increase were not sudden and massive, speculators might be encouraged to buy more yuan in hopes of profiting as it goes up in value. As long as there is a general expectation that the yuan is underpriced and as long as these speculative flows continue, Chinese officials are reluctant to allow the market to determine the yuan's value. They worry that it might increase too much in value ("overshoot") if it were opened suddenly to market forces and this could also have negative consequences for the Chinese and world economies.

**New Initiatives Since July 2005.** More recently, the Chinese authorities have taken other steps that could allow market forces to eventually play a role in the valuation of the yuan. In mid- 2005, they created a system of non-deliverable forward contracts which let individuals take positions and make predictions as to the future value of the yuan.<sup>13</sup>

In January 2006, China's State Administration of Foreign Exchange (SAFE) authorized 13 local and foreign banks<sup>14</sup> to buy and sell yuan for dollars in the yuan spot market. An experiment allowing some banks to trade yuan for euros and Hong Kong dollars had begun in 2005. The new arrangement is supposed to improve liquidity and allow market forces a role in the valuation of the yuan. Under the new rule, the opening price for the yuan would be determined by the average closing price of the 13 banks (with the two most extreme eliminated.) In principle, this would allow yuan to move up or down in value in response to market forces. However, observers note that the central bank remains the biggest trader in the yuan-dollar market and any bank which quotes too high a rate will be vulnerable if it floods the market with yuan in order to keep the rate at its preferred price.

In December 2005, the Chinese authorities took two additional steps that would either reduce the demand for yuan or increase the demand in China for dollars. The central bank announced that it was raising the interest rate for deposits held in U.S. or Hong Kong dollars, widening the gap between those rates and those paid for accounts denominated in yuan.<sup>15</sup> This was aimed at discouraging speculators from

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<sup>12</sup> (...continued)

a congressional staff visit to China and Hong Kong.

<sup>13</sup> Patrick Higgins and Owen F. Humpage. "Nondeliverable forwards: can we tell where the renminbi is headed?" *Economic Commentary*. September 1, 2005. Federal Reserve Bank of Cleveland. Settlement on these contracts is in dollars, not in yuan. Keith Bradsher. "China Loosens Limits on Trading Against Other Currencies but Keeps Rein on Dollar." *New York Times*, September 24, 2005, p. C6.

<sup>14</sup> These included five foreign banks (ABN Amro Holding NV, Bank of Montreal, Standard Chartered PLC, Citigroup Inc. and HSBC Holdings PLC) and eight Chinese banks (Bank of China, China Construction Bank, Industrial & Commercial Bank of China, Agricultural Bank of China, Bank of Communications Co., China Merchant's Bank Co., Citic Bank Co. and Industrial Bank Co.) Jane Lanhee Lee. "International Investor: China approves banks as renminbi market makers; Move is set to bring more-active trading of domestic currency." *The Wall Street Journal Asia* (Hong Kong), January 3, 2006, p. 32.

<sup>15</sup> Prashant Rao. "Rates ease pressure on yuan to strengthen." *International Herald Tribune* (Paris), December 29, 2005, p. 17.

buying yuan in hopes they can turn a profit by converting them back into dollars if, in the near future, the yuan should increase substantially in value.

The central bank also announced that it would soon scrap the existing limits on the amounts that Chinese firms could take out of the country.<sup>16</sup> This could marginally push down the value of the yuan when Chinese firms sold their national currency in order to purchase the dollars needed to expand their overseas operations.

**Market Expectations.** The dollar exchange rate for the yuan has changed by only a little more than one-half of 1% since the new system was introduced, going from Rmb 8.11 to the dollar on July 21, 2005 to Rmb 8.0424 to the dollar on February 26, 2006. The People's Bank of China retains firm control of the exchange rate through its transactions in foreign exchange markets. In January 2006, futures contracts suggested that traders believed the value of the yuan would rise 2.1% (to Rmb 7.86 to the dollar) in six months and 4.3% by the end of 2006. A global markets analyst for Goldman Sachs predicted, by contrast, that the value of the yuan would increase by 9% (to Rmb 7.34) by the end of the year.<sup>17</sup> The Economist Intelligence Unit said the yuan would rise 4.4% in 2006 (to Rmb 7.9) and 3.7% in 2006 (to Rmb 7.6).<sup>18</sup>

These predictions assume that the People's Bank of China will bring these results about through its exchange market transactions or (to say the same thing) that it will not act to prevent market forces from generating these rates of exchange.

## International Views

**Efforts by the IMF.** The IMF staff proposed, in its June 2005 report on its recent Article IV consultations, that China should revise its foreign exchange policies and allow the market to play a larger role in the valuation of the yuan.<sup>19</sup> The IMF executive board had the report prior to its formal review of China's policies, though the actual document was not published until September.

The IMF executive board discussed China's new exchange rate policies during its August 2005 annual Article IV consultation review. Many people believe that China announced its new policies two weeks before that meeting in order to show they were addressing the issue. The previous year, during its August 2004 review of China's policies, the board had said that greater exchange rate flexibility was in

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<sup>16</sup> Shai Oster. "Beijing hints at a shift in its foreign holdings; Desire to diversify may hurt the dollar; Controls to be eased." *The Wall Street Journal Asia* (Hong Kong), January 6, 2006, p. 1.

<sup>17</sup> Both cited in Steve Johnson, "Traders price in surging renminbi." *Financial Times* (London), January 6, 2006, p. 38.

<sup>18</sup> *EIU ViewsWire*. New York, December 8, 2005.

<sup>19</sup> Article IV of the IMF Articles of Agreement require it to meet annually with member countries to discuss their economic and foreign exchange policies.

China's best interests.<sup>20</sup> It also welcomed China's statement that it would "introduce, in a phased manner, greater exchange rate flexibility." Some observers suggest that it might have been awkward for China to go to the 2005 meeting and report that it had done nothing.

In its August 2005 review, the IMF executive board "welcomed the change in the exchange rate regime — an important move toward greater exchange rate flexibility — and encouraged the authorities to utilize the flexibility afforded by the new arrangement." It reiterated its earlier point that greater exchange rate flexibility was both necessary and in China's best interests.<sup>21</sup> It also said that "a more flexible exchange rate, not simply a revaluation, is the key to providing scope for monetary policy independence and enhancing the economy's resilience to external shocks." According to the summary of the board discussion, most directors supported a gradual and cautious approach but many others recommended that China move quickly to a foreign exchange level which reflects underlying market forces.

**Other Countries' Views.** No other country has taken as strong a public position on the Chinese exchange rate issue as has the United States, even though the low cost of Chinese exports has been a source of concern to interests in their countries as well. Nevertheless, some other countries reportedly have been vigorous in their private discussions with Chinese officials, urging them to give market forces a larger role in determining the value of the yuan. Their public statements have tended to show patience with China's concerns. Some observers suggested that they preferred to let the United States do the "heavy lifting."

Some countries have spoken out. In early June 2005, for example, David Dodge, Governor of the Bank of Canada, called on China to free its currency from the fixed rate against the U.S. dollar or to risk sparking U.S. and European trade protectionism.<sup>22</sup> At the same time, Japan's finance minister urged China to reform its tight currency peg on grounds that the current yuan-dollar exchange rate was hurting the Chinese economy and causing it to overheat.<sup>23</sup>

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<sup>20</sup> International Monetary Fund. *IMF Concludes 2004 Article IV Consultation with the People's Republic of China*, August 25, 2004. Public Information Notice 04/99. It appears from context that "greater flexibility" meant an upward valuation of the yuan. The statement by China is taken from the IMF's summary of the board discussion.

<sup>21</sup> International Monetary Fund. *IMF Concludes 2005 Article IV Consultation with the People's Republic of China*. September 12, 2005. Public Information Notice 05/122. Available from the China page of the IMF website as well as in an annex (pp. 69-72) to the 2005 Article IV staff report. See IMF. *People's Republic of China: Staff Report for the 2005 Article IV Consultation*. July 8, 2005, p. 14. Available from the China page on the IMF website.

<sup>22</sup> Paul Brent. "Dodge's call to free the Chinese yuan has strong backing." *National Post* (Don Mills, Ontario), June 6, 2005, p. FP2.

<sup>23</sup> "Tanigaki says quick action on yuan needed." *Economic Times of India*, *The Electronic Times Online*, July 9, 2005. See the *Economic Times of India's* website at [<http://economictimes.indiatimes.com/articleshow/1165902.cms>]. By contrast, Japan previously had called for China to take immediate action. The Japanese Finance Minister

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European ministers reportedly have been more accommodating in their remarks. For example, Chinese Premier Wen Jiabao told an Asia-Europe ministerial meeting in June 2005 that China would adopt a more flexible currency policy only when it believed itself ready. European ministers replied, in their public statements, that they hoped it would not take too long<sup>24</sup> but they agreed that China should not be pressured and it had the right to determine when and how it would reform its currency.<sup>25</sup>

Since July 2005, observers have been waiting for an announcement by China that it would further liberalize its exchange rate policy. The IMF executive board urged this at its discussion of China's policies in August 2005. The governing boards of the IMF and World Bank urged it at their joint annual meetings in late September 2005. Treasury Secretary Snow urged it during his October 2005 trip to China. President Bush reiterated the point during a state visit to China in November 2005.

In September 2005, the finance ministers of the G-7 countries said, in the communique following a meeting in Washington, D.C., that "we welcome the recent decision by the Chinese authorities to pursue greater flexibility in their exchange rate regime."<sup>26</sup> This was the first time a G-7 communique had called on China by name to take action. "We expect the development of this more market-oriented system to improve the functioning and stability of the global economy and the international monetary system," they added. China's President told the G-8 leaders that China wanted to base the yuan's value on market forces but it would do this on its own time and not as a result of foreign pressure.<sup>27</sup>

The G-7 finance ministers were even more specific in their communique following their meeting in London on December 3, 2005. They said that "further implementation of China's currency system would improve the functioning and stability of the global economy and the international monetary system." They said, in language not directly mentioning China, that such disparities, along with high oil

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<sup>23</sup> (...continued)

told the G7 finance ministers in February 2003 meeting, that change was urgently needed and "Too much importation of China's cheap goods" was "the root-cause of the global economic depression." Yang Jian and Melinda Moore. "Renminbi" Eurobiz Magazine, July 2003, found at [<http://www.sinomedia.net/eurobiz/v200307/rmb.html>].

<sup>24</sup> Kervin Yao and Yoko Nishikawa. "Yuan Dominates Asia-Europe meeting." *Reuters*, June 26, 2005, reported at [[http://news.yahoo.com/s/nm/economy\\_china\\_dc&printer](http://news.yahoo.com/s/nm/economy_china_dc&printer)].

<sup>25</sup> Cindi Sui. "Europe backs off on yuan value." *The Australian*, June 27, 2005, at [[http://theaustralian.news.com.au/common/story\\_page/0,5744,15741709%255E31037,00.htm](http://theaustralian.news.com.au/common/story_page/0,5744,15741709%255E31037,00.htm)]. Cary Huang. "World clamours for Beijing to revalue yuan; But there is agreement that China should dictate timing of any currency reforms." *South China Post* (Hong Kong), June 27, 2005, p. 5.

<sup>26</sup> "G-7 Ministers Urge China to Make More Progress on Exchange Rate." *Bloomberg News*, September 26, 2005, available from Bloomberg News at [<http://www.bloomberg.com/apps/news?pid=10000080&sid=a86iuRuMx.4g&refer=asia>]. "G7 demands more flexible yuan regime." *The Daily Yomiuri*, Sept. 25, 2005, p. 1.

<sup>27</sup> Scott Hills. "China's Hu sidesteps yuan debate in G8 address." *Reuters*, July 1, 2005, at [<http://today.reuters/PrinterFriendlyPopup.aspx?type=live8News&StoryID-uri:2005-o.html>].

prices, were a threat to a “solid” world economy.<sup>28</sup> They also said that “exchange rates should reflect economic fundamentals” and that they would monitor exchange markets closely. This was much stronger language than the “welcome” the ministers had expressed three months earlier.

Individual leaders were even more specific in their remarks. European Central Bank president Jean-Claude Trichet said at the time that the G-7’s public comments were “in continuity with the message that we have been giving.” He also said, referring to Asia, that “this part of the world has to contribute to the solution of global imbalances.”<sup>29</sup> Japan’s finance minister, Sadakazu Tanigaki, said, at the same time, that “we believe China needs some time to get accustomed to their new currency regime, but a considerable time has already passed. I expect China to make its currency a bit more flexible.”<sup>30</sup> Treasury Secretary Snow said, on this occasion, that “this rigidity constrains exchange rate flexibility in the region and thus poses risks to China’s economy and the global economy.” Jin Renqing, China’s finance minister, did not comment directly but did say that China would over time allow market forces to play a greater role in determining the value of the renminbi.

**U.S. Views.** In the United States, both the Administration and Congress have spoken to the issue of China’s currency.

**Action by the Executive Branch.** In January 2004, President George W. Bush told a crowd in Toledo, Ohio that “we expect countries like China to understand that trade imbalances mean that trade is not balanced and fair. They have got to deal with their currency.”<sup>31</sup> On July 21, 2005, responding to China’s announcement that it was adopting a new exchange rate system, Treasury Secretary John Snow said that he welcomed the announcement but “we will monitor China’s managed float as their exchange rate moves to alignment with underlying market conditions.”<sup>32</sup> He agreed that the initial 2% change was small, but he said the important thing was China’s willingness to change. “This is the start of a process,” he said, “and the Chinese have indicated they want to get their currency based on markets rather than a peg.”<sup>33</sup>

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<sup>28</sup> Simon Kennedy and Gonzalo Vina. “G-7 prods China to let yuan rise; Beijing is accused of “rigidity” as currency appreciates little.” *International Herald Tribune* (Paris), December 6, 2005, p. 20.

<sup>29</sup> Jane Wardell. “Economic officials chide China.” (Associated Press) *Deseret News*, December 4, 2005, p. A12; “G-7 prods...” *ibid*.

<sup>30</sup> Gonzalo Vena and Simon Kennedy. “G7 pushes China on the yuan; Rates ‘should reflect’ fundamentals, it says.” *International Herald Tribune*, December 5, 2005, p. 15.

<sup>31</sup> White House. “President Discusses Job Training and the Economy in Ohio.” January 21, 2004. See [<http://www.whitehouse.gov/news/releases/2004/01/200401221-2.html>].

<sup>32</sup> Snow Welcomes China’s Currency Reforms, at [<http://www.treas.gov/news/index1.html>].

<sup>33</sup> Susie Gharib. “Secretary of State John Snow Sounds-off On China’s Money Move.” *Nightly Business Review*, July 21, 2005. Interview, available at [<http://www.nightlybusiness.org/transcript.html>].

The United States has urged the IMF to press China to introduce market forces in its foreign exchange process more quickly. (This is discussed further in Part IV below.) In January 2006, at the World Economic Forum in Davos, Switzerland, Under Secretary Tim Adams told Bloomberg Television that China was not doing enough. “China needs to undertake serious reforms. They’re on the road to reform but they need to move faster.”<sup>34</sup> He also told a panel at the Forum that the United States had never asked China to float its currency as it does not think the Chinese financial system could withstand it. Rather, he said, the United States had urged China to allow more flexibility in their exchange rate. “All we’ve asked them to do is what they’ve agreed to do and what they know is in their best interest to do,” he said.<sup>35</sup>

The Omnibus Trade and Competitiveness Act of 1988 (sec. 3004) requires the Secretary of the Treasury to determine, in consultation with the International Monetary Fund, whether countries are manipulating their currency in order to gain unfair trade advantage. In May 2005, Treasury reported that China was not manipulating its currency.<sup>36</sup> Some observers said the Treasury Department was more critical of China in this report than earlier in part due to congressional pressure. “If current trends continue without substantial alteration [i.e., revaluation],” the report said, “China’s policies will likely meet the statute’s technical requirements” for designating China as a country which unfairly manipulates its currency value. Nevertheless, the report said that Chinese authorities had assured Treasury Secretary Snow that they were laying the groundwork for a future revaluation of the yuan. It was on this basis that the Department found that China was not manipulating its currency. Snow reportedly gave China six months to rectify the situation and he called for an immediate 10% revaluation.<sup>37</sup> No such change occurred.

In November 2005, Treasury reported that China’s actions “are not sufficient and do not represent fulfillment of the Chinese authorities’ [earlier] commitment.”<sup>38</sup> It said, though, that Chinese authorities had pledged in October 2005 “that they would enhance the flexibility and strengthen the role of market forces in their

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<sup>34</sup> Bloomberg News. “Dickering at Davos: Which way yuan; Pace of China yuan reform takes center stage at World Economic Forum.” January 25, 2006: 2:17 PM EST. Available at [<http://207.25.71.61/2006/01/25/news/international/bc.davos.china.reut/index.htm>].

<sup>35</sup> World Economic Forum Annual Meeting 2006, *Fixing Up Fixed Exchange Rates*, summary of discussion, January 1, 2006. Available by searching Google by title or at [[http://www.weforum.org/site/knowledgenavigator.nsf/Content/\\_S15322?open&event\\_id=](http://www.weforum.org/site/knowledgenavigator.nsf/Content/_S15322?open&event_id=)].

<sup>36</sup> [U.S. Department of the Treasury.] *Report to Congress on International Economic and Exchange Rate Policies, May 2005*. Obtained from [<http://www.treas.gov>], the Treasury Department website. See especially pp. 11-14.

<sup>37</sup> See, for example Andrew Balls, “US sets out revaluation deadline for China,” *Financial Times*, USA edition, May 18, 2005, p. 1. See also Edmund L. Andrews, “Bush’s Choice: Anger China or Congress over Currency,” *The New York Times*, May 17, 2005, p. 1, and Andrew Balls, “FT.com site: China told to revalue by 10% by US,” *Financial Times*, May 24, 2005, p. 1.

<sup>38</sup> [U.S. Department of the Treasury.] *Report to Congress on International Economic and Exchange Rate Policies, November 2005*. Available from [<http://www.treas.gov>], the Treasury Department website. See especially pp. 17-21.

managed floating exchange rate regime.” It also said that “President Hu told President Bush that China would unswervingly press ahead with reform in its exchange rate mechanism.” Therefore, by implication, they were not manipulating the yuan. The Chinese authorities should act, the report concluded, “by the time this report is next issued” (i.e., in six months.)

The Treasury Department’s report did not discuss what impact China’s new multi-currency exchange rate system might have on U.S. credit markets. Under the new system, China will not need to hold or acquire as many dollars as before in order to stabilize the price of its currency. To stabilize the value of the yuan compared to the currency basket, it may need to buy euros or yen or some other currency instead. If China is accumulating fewer dollars than before, it will have less need to purchase dollar-denominated assets. Many analysts believe that if China’s future purchases of U.S. securities go down, the sellers of dollar-denominated notes and bonds may find that they need to offer higher interest rates than before in order to attract new buyers for the securities previously bought by China. This might lead to an increase in market interest rates in the United States.

**Action by Congress.** In late 2005, Congress passed legislation which urged the President to create a comprehensive plan to address diplomatic, military and economic issues relating to China.<sup>39</sup> In particular, it said the Administration should encourage China to revalue its currency further against the U.S. dollar by allowing the yuan to float against a trade-weighted basket of currencies. Congress is currently considering several bills which would require the United States to limit trade with China if it does not revalue the yuan or direct the President to take the yuan-dollar exchange rate issue to the IMF or WTO for action.

Three bills are prominent among this legislation. In July 2005, the House of Representatives passed legislation (H.R. 3283) introduced by Representative Phil English which would make imports from non-market economies (such as China) subject to U.S. countervailing duty.<sup>40</sup> Exports from China which were found to be subsidized on account of exchange rate manipulation might be subject to these trade rules and monetary penalties could be assessed which would raise the price of those goods in U.S. markets. The bill also required the Treasury Department to define the term “currency manipulation” for the purpose of U.S. law and to report periodically on China’s implementation of its new exchange rate regime.<sup>41</sup>

The House is also considering another bill (H.R. 1498), introduced by Representatives Tim Ryan and Duncan Hunter, that would make it clear under U.S. law that exchange rate manipulation by China would make goods imported from that

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<sup>39</sup> The fiscal 2006 defense appropriations act, H.R. 1815, approved by Congress in December 2005 and signed into law (Public Law 109-163) on January 6, 2006. The relevant language is found in Section 1234 of that act.

<sup>40</sup> H.R. 3283, passed by the House (255 to 168) on July 27, 2005. Senator Susan Collins introduced a similar bill (S. 1421) in the Senate in July 2005 but no action has been taken.

<sup>41</sup> For more on the issue of countervailing duties and nonmarket economies, see CRS Issue Brief IB10148, *Trade Remedy Legislation: Applying Countervailing Action to Nonmarket Economy Countries*.

country actionable to U.S. countervailing duties.<sup>42</sup> No action has been taken on the bill, though it currently has 158 co-sponsors.

The Senate is also considering legislation that would limit China's access to the U.S. market if it does not stop manipulating the value of its currency. Senators Charles Schumer and Lindsey Graham proposed on April 6, 2005, for example, that Congress enact a 27.5% tariff on all Chinese products entering the United States if China does not raise the value of its currency.<sup>43</sup> This is deemed to be the average degree of undervaluation identified by several studies. The Senate voted 67-33 for this proposal, as a rider on another bill, but it was later introduced as a separate bill (S. 295). Originally scheduled for consideration in mid-2005, action was postponed. The bill is expected to come up again for consideration by the Senate in sometime in 2006.

## Five Key Questions

### Is the Yuan Undervalued? By How Much?

The IMF said in its 2004 evaluation of the Chinese economy that it was "difficult to find persuasive evidence that the renminbi [yuan] is substantially undervalued."<sup>44</sup> Since then, many economic studies have been published seeking to determine the yuan's "equilibrium" exchange rate. (This is the exchange rate that would prevail if the value of the yuan was not controlled and if the U.S. and Chinese economies were both at macroeconomic equilibrium.) The results of these studies differ widely. Consequently, there is sufficient research available to support any position about the value of the yuan that one might wish to take.

The IMF's China experts found in their 2005 evaluation that the yuan is undervalued and the rate of undervaluation is increasing. More flexibility is needed, they said, to avoid disruption of the domestic economy.<sup>45</sup> The difficulty, however, one expert told the author, is the lack of any reliable way of knowing how large the distortion may be or how its effects can be separated from the other factors (such as labor costs and productivity) which affect the international price of Chinese goods.

In a market economy, the exchange rate of a currency (vis-a-vis another currency) can be affected by many things. These including interest rates, trade relationships, institutional arrangements the international flow of money between currency markets, and interventions (purchases or sales of currency) by the central bank. Market forces will balance these factors and establish an exchange rate which is supposed to reflect the actual value of goods and services in one country compared

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<sup>42</sup> H.R. 1498, the Chinese Currency Act of 2005, introduced April 9, 2005.

<sup>43</sup> Greg Hitt. "Senate Slams China's Currency Policy." *Wall Street Journal*. April 7, 2005, p. 1.

<sup>44</sup> International Monetary Fund. *People's Republic of China: Staff Report for the 2004 Article IV Consultation*. July 6, 2004, p. 12. This report is available from the China page in the country section of the IMF website at [<http://www.imf.org>].

<sup>45</sup> IMF, 2005 Article IV Staff Report, note 21.

to those in another country but sometimes — depending on other considerations affecting the economy of either country — it does not.

The task of assessing exchange rates is more difficult when market forces are constrained and currency values are set by official action. A simple method would have one look at the price of a single product in world markets, on the theory that properly functioning currency markets should adjust to equalize product costs. One example is the *Economist*'s well known “Big Mac Index,” a light-hearted procedure which compares the cost of McDonald's hamburgers around the world.<sup>46</sup> By its calculation, based on the price of hamburgers sold in both markets, the yuan is 59% undervalued compared to the U.S. dollar. Most economists agree that this index provides only a general suggestion of the relative valuation of currencies.<sup>47</sup> The disparity in hamburger prices around the world can also be read as a comment on the valuation of the U.S. dollar. The *Economist* says that the index shows that the U.S. dollar is more overvalued now, compared to most other currencies, than at any time since measure was introduced 16 years ago.

A more substantive effort to calculate the equilibrium value requires construction of an econometric model for the countries whose currencies are being compared. Much statistical information is required as well as a clear concept of the way the institutions and sectors relate to each other. Often, information is not available and analysts have to substitute data based on their understanding as to how each economy works and what the correct number would be if it were available.<sup>48</sup>

In 2005, the Chinese Currency Coalition published a report citing eight reports or statements (in addition to the Big Mac Index) which said that, to varying degrees, the yuan was substantially undervalued.<sup>49</sup> Two of the sources dated from 1998 or 2000. The others dated from 2002 or 2003. These included (in addition to the hamburger index) a reference saying that the World Bank thought the yuan was 75% undervalued and other studies, statements or testimony to Congress saying the yuan was priced 10% to 40% below its “real” value.<sup>50</sup>

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<sup>46</sup> See [[http://www.economist.com/markets/bigmac/displayStory.cfm?story\\_id=5389856](http://www.economist.com/markets/bigmac/displayStory.cfm?story_id=5389856)]. See also [<http://www.stanford.edu/class/msande247s/bigmac02.htm>] for a reference to the “light hearted” nature of the measure.

<sup>47</sup> For one thing, consumption patterns for this product varies from country to country. Also, while the hamburgers are the same worldwide, most of their inputs are supplied locally. Few hamburgers are exported from China to the United States. Labor, rent and paper products are cheaper in China, for instance, than in the United States. Other factors besides currency valuation can influence the cost of these local components.

<sup>48</sup> For a simple guide to the process of calculating equilibrium exchange rates, see Sergio Da Silva. *Classroom Guide to the Equilibrium Exchange Rate Model*. It is available at [<http://ideas.repec.org/p/wpa/wuwpif/0405019.html>].

<sup>49</sup> See *Chinese Currency Manipulation Fact Sheet*, cited in note 3.

<sup>50</sup> The full names and citations to sources were not provided. Many economists would argue that the World Bank data were misconstrued, as the Bank's figures are not measures of the extent to which currencies are over- or undervalued compared to the dollar but rather two ways that per capita income levels in poor countries may be compared internationally. The

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The IMF published a paper in late 2005 which compared eight major studies released in 2004 and 2005 that sought to calculate China's "real" exchange rate on the basis of macroeconomic and econometric analysis.<sup>51</sup> One scholar found, in two studies using 2003 data, that the yuan was either slightly undervalued or slightly overvalued that year. He found in a later study (using the next year's data) that the yuan was 5% overvalued in 2004. Another analyst found, using the same data, that the yuan was only slightly undervalued in 2004. By contrast, others scholars have found, using essentially the same statistics, that the yuan has been substantially undervalued in recent years. One team concluded, for example, that the yuan was pegged (in a study using 2002 data) at a rate that 18-to-49% and (in another study using 2003 data) 23% below its "real" value. Another researcher found, in a study using 2000 data, that the yuan was undervalued by 35% that year. Yet another scholar concluded, on the basis of 2004 data, that the official rate that year was 15-to-30% below its "real" market equilibrium value.

Meanwhile, Funke and Rahn, two scholars from Hamburg University in Germany, found "compelling evidence that the renminbi is not substantially undervalued."<sup>52</sup> They seem to have employed the same econometric equilibrium modeling techniques used by scholars cited in the recent IMF paper. The claims by some that China's currency is grossly undervalued are incorrect, they argue. Rather, they say, it seems in some circles to be "politically expedient to scapegoat the Chinese currency for economic difficulties elsewhere." Higgins and Humpage, two economists with the Federal Reserve Bank of Cleveland, report that it "is next to impossible" to determine the equilibrium exchange rate for developing countries through econometric modeling.<sup>53</sup> China is particularly difficult, they say, because institutions and patterns of economic activity are changing very rapidly.

Data on the Chinese economy are incomplete, uncertain or unreliable. In late December 2005, China announced that — when services previously omitted from official statistics were taken into account — its gross domestic product (GDP) was 17% larger than expected. This was like discovering a province the size of Turkey or Indonesia that was previously not counted in national statistics. The new data make the Chinese economy the sixth largest in the world in dollar terms. If it grows by 10% in 2006 and its currency appreciates by a like amount, China could surpass

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<sup>50</sup> (...continued)

question whether the World Bank's purchasing power parity index can be used to measure deviations in exchange rates is also discussed in CRS Report RL32165, *China's Exchange Rate Peg*, pp. 12-13, note 1.

<sup>51</sup> Steven Dunaway and Xiangming Li. *Estimating China's "Equilibrium" Real Exchange Rate*. IMF Working Paper WP/05/202, October 2005. Available from the China page in the country section of the IMF website: [<http://www.imf.org>]. The eight studies referenced in the IMF report were by Virginie Coudert and Cécile Couharde (2 studies), Tao Wang (3), Morris Goldstein, Jeffrey Frankel, and J. Lee. Full citations may be found in the report.

<sup>52</sup> Michael Funke and Jörg Rahn. "Just How Undervalued is the Chinese Renminbi?" *The World Economy* 28:4 (April 2005), pp. 465-489.

<sup>53</sup> Patrick Higgins and Owen Humpage. "The Chinese Renminbi: What's Real, What's Not." August 1, 2005, at [<http://www.clevelandfed.org/Research/Com2005/0815.pdf>].

Germany, Britain and France to become the world's third largest economy.<sup>54</sup> All the previous macroeconomic ratios — investment to GDP, exports as a share of GDP, rate of growth, etc. — changed with the advent of the new data. None of the studies cited above used the new data. Thus, even if they are correct in their use of the old data, their calculations do not reflect this more recent data on the Chinese economy.

The variations in the conclusions of the 17 studies mentioned above may be due in large part to the way scholars define the relationships among the different segments of the Chinese economy and the different assumptions they use to fill in gaps when they lack adequate information. Without careful analysis of the methodology and assumptions used in each study, there is no way of knowing whether the results of any of these studies are more accurate than others.<sup>55</sup>

It appears that few of the participants in the debate about the value of China's currency have studied the methodologies or the assumptions of the various studies. Rather, it seems that advocates select the studies they quote more because they like their conclusions than because they believe they are the best research available. Few of the participants in the debate cite findings which support conclusions other than those they support or provide reasons why their preferred studies are superior on substantive grounds to others which disagree.

## Is China Manipulating Its Currency?

**The IMF and Exchange Rate Policy.** In the past thirty years, the role of the IMF in the international financial system has changed. Until the early 1970s, the IMF had a central role in determining world exchange rates. All currencies had a fixed value (“par value”) compared to the U.S. dollar and the U.S. dollar was worth a specified amount of gold. If countries wanted to change their par value compared to the U.S. dollar, the IMF had to first approve. Since 1976, however, with passage of the Second Amendment to the IMF Articles of Agreement, each country is free to determine the exchange rate system it will use. Some countries have floated the value of their currency in world money markets, others have fixed the value of their currency to that of another major country, and others have pursued a mixed strategy.

**IMF Surveillance.** The IMF is no longer the arbiter of world exchange rates. Rather, in the modern world, it exercises surveillance over exchange rates in order to encourage and to help countries comply with the basic rules. Article IV of the IMF charter prohibits countries from manipulating their exchange rates in order to gain unfair trade advantage. It also says that “the Fund shall exercise firm surveillance over the exchange rate policies of members, and shall adopt specific principles for

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<sup>54</sup> See, for example: Clifford Coonan. “Services sector plays major role in surging Chinese economy.” *Irish Times* (Dublin), December 27, 2005, p. 16. The calculation that China could move from sixth to third place was made by the Congressional Research Service using data in this and other newspaper reports.

<sup>55</sup> Some prominent studies which argue that the yuan is substantially undervalued seem to have been based on back-of-the-envelope calculations rather than on systematic econometric analysis. Others use questionable assumptions or weak economic logic. For a discussion, see CRS Report RL32165, *China's Exchange Rate Peg*, pp. 8-13, note 1.

the guidance of all members with respect to those policies.” Its current principles for surveillance were adopted by the IMF executive board in 1979 and have been revised periodically since.<sup>56</sup> The principles say that countries may peg the value of their currency to another currency but they cannot do this in ways which violate the requirements of Article IV. Basically, the pegged rate needs to reflect a country’s underlying economic realities. These include, for example, changes in the volume and composition of its domestic output, in the size, composition and direction of its foreign trade, in its domestic rates of growth and national income, in the size of its reserves and in shifts in its domestic fiscal and monetary policies, relative rates of productivity and of change and technological advance.

Countries are allowed, under the guidelines, to use their exchange rates to promote growth and development. The IMF rules for surveillance say the Fund’s appraisal of country policies “shall take into account the extent to which the policies of a member, including its exchange rate policies, serve the objectives of the continuing development of orderly underlying conditions that are necessary for financial stability, the promotion of sustainable economic growth, and reasonable levels of employment.” However, countries are also required to “take into account in their intervention policies the interests of other members, including those of the countries in whose currencies they intervene.” In other words, countries can use exchange rate policy to help sustain growth and employment in their domestic economy but they cannot use an unrealistic exchange rate to prevent balance of payments (BOP) adjustment or to gain unfair trade advantages. Adjustment includes such things as increased imports, capital inflows to fund BOP deficits or outflows to offset BOP surpluses, increased domestic interest rates or price levels, and the accumulation of excess reserves. If one country does not adjust its BOP imbalance, the burden of adjustment will be thrown upon its trading partners through monetary contraction, unemployment and the like.

**China and Manipulation.** The IMF has six criteria which might be used to identify situations where countries are manipulating their currencies in order to gain unfair trade advantage. Any one of the criteria would be sufficient to note the likely presence of manipulation. It appears that China’s foreign exchange practices are congruent with at least four of the IMF criteria.<sup>57</sup>

**Persistent Intervention.** The IMF says (its criterion number 1) that “protracted large-scale intervention in one direction in the exchange market” is one indication that a country may be manipulating the value of its currency. Countries may intervene in foreign exchange markets to counter short-term disorderly

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<sup>56</sup> These are published in the IMF’s *Selected Decisions and Selected Documents of the International Monetary Fund*, 24<sup>th</sup> issue. Washington, D.C. June 30, 1999, pp.10-29. Reference here is to the General Principles, Principles for the Guidance of Members’ Exchange Rate Policies, and Principles of Fund Surveillance over Exchange Rate Policies specified in the IMF board decision *Surveillance over Exchange Rate Policies: Review*, Decision No. 6026-(9/13), January 22, 1979, as amended, pp. 10-16.

<sup>57</sup> In addition to the four cited here, the other IMF criteria include numbers three (a prolonged reductions or incentives for BOP purposes affecting current transactions or the inflow or outflow of capital) and six (unsustainable flows of private capital.)

conditions that cause disruptive short-term movements in the exchange value of their currencies. However, the IMF guidelines say that persistent one-way intervention” might indicate the need for discussion with a member.”<sup>58</sup>

If China’s currency were properly priced and the goal were exchange rate stability, the central bank would intervene in the market in both directions, buying and selling yuan in order to dampen the effect of temporary shocks and to spread the effects of change over a longer period of time. Instead, China routinely sells yuan in order to keep the market price from rising. It rarely buys yuan to keep the market price from sinking too low. This would seem to be the kind of “protracted large-scale intervention in one direction” which the IMF specified in its first operational definition of manipulation.

**An Unchanging Peg.** The IMF’s second criterion which indicates that a country might be manipulating its currency is “behavior of the exchange rate that appears to be unrelated to underlying economic and financial conditions including factors affecting competitiveness and long-term capital movements.” Countries may peg the value of their currency to another currency but the pegged rate needs to reflect the country’s economic realities. These include, for example, changes in the volume and composition of its domestic output, in the size, composition and direction of its foreign trade, in its domestic rates of growth and national income, in the size of its reserves and in shifts in its domestic fiscal and monetary policies, relative rates of productivity and of change and technological advance.

The yuan-dollar exchange rate was largely unchanged from 1994 to 2005. Since reforms were announced in mid-2005 it has changed very little. Some might argue that the fact that China held its exchange rate constant during this period is evidence that China was not manipulating the yuan through fine-tuning of its valuation. However, manipulation can be as much a *lack* of change as an *act* of change.<sup>59</sup>

Whether an unchanging exchange rate is a violation of Article IV depends on the way the country holds the rate constant. China did not have to micro-manage the daily rate for its currency in order to maximize its export opportunities. They merely sold yuan whenever the yuan-dollar exchange rate increased beyond the level the central bank desired. Chinese authorities used domestic monetary policy and other domestic economic practices to offset the effects of the fixed yuan-dollar rate.

Economic conditions have changed markedly in China since 1994. Production and consumption patterns changed. Import and export patterns changed. The relative value of goods and services and the relative value of labor, capital and other factors of production changed. The international value of China’s currency should have changed as well to reflect these changes. Among other things, this would have

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<sup>58</sup> IMF. *Selected Decisions*, note 55. See “Principles of Fund Surveillance over Exchange Rate Policies,” pp. 12-15, section 2(i), (iv) and (v).

<sup>59</sup> See, for example, Morris Goldstein’s argument to that effect. “China and the Renminbi Exchange Rate” in C. Fred Bergsten and John Williamson, eds. *Dollar Adjustment: How Far? Against Whom?* Washington, D.C.: Institute for International Economics, November 2004. Special Report 17.

produced price signals that could have changed consumption and production patterns, promoted efficient and effective utilization of resources, and improved the Chinese people's standard of living and level of real income. The behavior of the yuan-dollar exchange rate after 1994 "appears to be unrelated to underlying economic and financial conditions" and is therefore consistent with the IMF's second criterion for identifying currency manipulation.

***Prolonged Foreign Lending.*** The IMF's fourth criterion says that "excessive and prolonged short-term official or quasi-official lending for balance of payments purposes" can be evidence that currency manipulation is taking place. Prolonged borrowing for the same purpose is also evidence of manipulation.

Since 1994, China's foreign exchange reserves have grown sixteen-fold, from \$53 billion to \$819 billion. Some of the funds in China's foreign exchange reserves are equity investments. Most, however, are loans to foreign governments or private borrowers. For example, China's investment in U.S. Government debt has more than tripled in the past five years, from \$71 billion in 2000 to \$242 billion in 2005. By definition, these are loans to the U.S. Government and they are short-term, in the sense that they can be liquidated at any time through sales in security markets. They help the United States cover its balance of payments (current account) deficit and they help China adjust its balance of payments in a way which does not require it to spend its international income on purchases of goods and services from abroad. At least on the part of China, this appears to be the kind of behavior "to prevent effective balance of payments adjustment" (in the words of Article IV) that meets the IMF's fourth test for currency manipulation.

***Influence on Capital Movements.*** The IMF's fifth criterion says that a conversation with a country might be in order if it evidences "the pursuit, for balance of payments purposes, of monetary and other domestic policies that provide abnormal encouragement or discouragement to capital flows." Many observers say that the growing size of China's reserves shows that its government is promoting an abnormal outflow of capital for BOP purposes.

The Chinese government purchases large amounts of foreign exchange in order to maintain the price of its currency. Thus, foreign money is less available to Chinese citizens and firms than it might be otherwise. Consequently, instead of being cleared on the current account through imports and other current activity, China's balance of payments is cleared through the capital account by large additions to China's foreign exchange reserves.

Many analysts agree that China's reserves are larger than its normal trade or financial needs would require. They are larger, for example, than any need China is likely to face if its international income suddenly declined — as a result, for instance, of an economic shock originating elsewhere in the world economy — and it needed money for a while to pay for imports or to service debt. In this light, many would argue with reference to the IMF criterion noted above, that continued expansion of China's foreign exchange reserves is not just an encouragement for the outward flow of capital but an encouragement for "abnormal" flows as well.

Some would argue in addition that the continued growth of China's reserves is inconsistent with provisions of the IMF charter. Article IV also stipulates that all members shall seek to promote stability by fostering orderly underlying economic and financial conditions and a monetary system that does not tend to produce erratic disruptions." Every dollar that China adds to its reserves is a dollar that some other country adds to its foreign debt. Arguably, the accumulation of large reserves and large debts does not enhance the stability of the world financial and trading system. Countries with large foreign exchange reserves do not import as much as they could and debtor countries have difficulty retiring their foreign obligations by trade. In that sense, high reserves are not a formal trade barrier but they have the same effect. They hamper "the expansion and balanced growth of international trade" (one of the purposes, stated in its Articles of Agreement, for which the IMF was created.) China is not the only country accumulating large reserves but many would argue that its practices are a source of concern.

**China's View.** Chinese officials say they are not seeking unfair trade advantage. They only want exchange rate stability to protect their economy from destabilizing change. The result, however, is the same. Chinese officials say that, whatever the technicalities might be, the economic benefits of stability are important and are shared by many countries. Moreover, they could argue, their efforts to influence exchange rates through intervention in currency markets differ little in their effect from similar action which countries with floating exchange rates take to influence their currencies' exchange rates — changes in interest rates and other policies, for example. Furthermore, they might say, Japan and other Asian countries also buy dollars in order to keep down the value of their currencies and to stimulate their exports. Arguably, they would argue, it is unfair to single out China in this regard when others do the same thing and their trade impact on the U.S. economy is at least as great as that of China.<sup>60</sup>

## How Fast Should China Revalue?

If China can continue to contain the inflationary pressures caused by rapid growth in its economy and its foreign exchange reserves, it can probably delay for some time any need for a major change in the dollar value of its currency. Unlike countries with overvalued currencies, it will not run out of foreign exchange if it postpones the decision. Rather, its foreign exchange reserves will grow.

China could increase the value of the yuan overnight to a much higher level if it wished to do so. However, Chinese officials are concerned that too-fast and too-steep an increase could hurt the growth rate, employment rate, and reform prospects of the Chinese economy. Chinese officials say they want to shift away from export led growth towards an economic program focused more on growth in the internal economy. However, they do not want to slow down the export sector until their

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<sup>60</sup> For discussion of Japan's efforts at currency manipulation, see CRS Report RL33178, *Japan's Currency Intervention: Current Issues*, updated January 12, 2006. See also J.T. Young. "Japan's subtle subsidy." *The Washington Times*, December 5, 2005, p. A19. Japan's foreign exchange reserves are larger than those of China and its exports have had a greater impact arguably on the U.S. manufacturing sector than have those of China.

internal economy is able to provide the growth they need to continue the transformation process now underway. These considerations seem to suggest that revaluation should take place gradually. However, if speculative capital flows are a problem, as discussed below, they may want to delay the process considerably.

Most experts agree that China's current situation is not sustainable and they cannot postpone revaluation of the yuan indefinitely. If nothing is done to slow the growth of China's foreign exchange reserves, for instance, inflation may eventually push up domestic prices in China and raise its export prices. Experts differ, though, as to how quickly China should move towards a market-based exchange system. The IMF says a gradual approach is needed. In July 2005, the IMF staff proposed that China adopt a phased approach in moving towards full exchange rate flexibility.<sup>61</sup> More recently, the director of the IMF's research department urged a deliberate pace.<sup>62</sup> Experience has shown, he said, that emerging markets do not handle large, rapid exchange rate movements well. In China, he suggested, rapid change might disrupt or bankrupt major segments of the economy — particularly the banking system — and make reform a long, drawn-out and painful process.

Other experts believe that policy reform must occur more quickly. Some say that China's undervalued currency is hurting other countries and fairness requires rapid action to remedy the situation. Some suggest that China risks a financial crisis if it does not revalue soon.<sup>63</sup> One says that rapid revaluation is needed because China's emphasis on export-led growth makes it vulnerable to any slowdown in global demand.<sup>64</sup> Otherwise, they say, China risks being another "Asian miracle" country, like those that went bust during the Asian financial crisis in the 1990s.

Many also believe quick action is needed because the current economic relationship between the United States and China is unstable and harbors serious risk. Roubini and Setser argue, for instance, that change is inevitable and the only question is how it will take place.<sup>65</sup> A smooth landing is possible, they say, if Chinese officials lessen China's emphasis on exports and the accumulation of reserves and U.S. policy makers reduce their country's dependence on foreign loans and capital. Otherwise, they believe, some unforeseen event may trigger a crisis which could have serious negative consequences for both countries.

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<sup>61</sup> Ibid., p. 14.

<sup>62</sup> Raghuram Rajan. *Remarks on Global Current Account Imbalances and Financial Sector — Reform with Examples from China*. Address to the Cato Institute, November 3, 2005. Available from the China page on the IMF website.

<sup>63</sup> See, for example, the argument to this effect in *Chinese Currency Manipulation*, note 3.

<sup>64</sup> Brad Setser. *The Chinese Conundrum: External financial strength, Domestic financial weakness*. October 31, 2005. Available (with registration) from the RGEmonitor website at [<http://www.rgemonitor.com/redir.php?sid=1&tgid=10000&cid=108028>].

<sup>65</sup> Nouriel Roubini and Brad Setser. *The sustainability of US external deficits and Chinese external surpluses*. November 22, 2005. PowerPoint Slides. Available from the RGEmonitor website at [<http://www.rgemonitor.com/redir.php?sid=1&tgid=10000&cid=108683>].

## Is China Hiding its Real Trade Surplus?

Some people argue that China's trade surplus is many times larger than the amount which China publishes in its official statistics. The China Currency Coalition says, for instance, that China's trade balance was nearly six times larger in 2003 than its official statistics suggest.<sup>66</sup> IMF data show that in 2004 the 156 countries it categorized as "world" had a combined trade deficit with China of \$267 billion, roughly six and one-half times more than trade surplus of \$41 billion that China reported that year.<sup>67</sup> If China's trade income were the larger of these figures, this would be strong evidence the yuan is undervalued.

In theory, the net trade figures reported by exporter and importer countries should match. In practice, the data are often inconsistent. There is strong reason to believe that methodological reasons account for much of the discrepancy in data. Perhaps countries keep better count of their imports than their exports. Perhaps the figures are confused and intermingled when products are imported and re-exported or when inputs from several sources are channeled through a final exporter countries.

The IMF's *Direction of Trade Statistics* (DOTS) shows, in any case, that — when the exports of all countries to every country are subtracted from the imports every country receives from all countries, the world had a \$269 billion trade deficit with itself in 2004.<sup>68</sup> Other countries show similar disparities between the trade balances they report and those reported by their trade partners.<sup>69</sup> In 2005, the IMF executive board noted weaknesses in China's BOP statistics in its annual Article IV review in 2005 and it urged the Chinese authorities to take advantage of Fund's technical assistance to help improve them.<sup>70</sup>

The China Currency Coalition says, however, that China is "hiding the ball" by deliberately reporting incorrect trade statistics. It believes the figure reported by importer countries more accurately reflects China's net income from trade. This is further evidence, the Coalition says, that the yuan is seriously overvalued.

<sup>66</sup> See the Chinese Currency Coalition factsheet cited in note 3.

<sup>67</sup> For a discussion of China trade data, see CRS Report RL31403, *China's Trade with the United States and the World*. Updated January 23, 2006. IMF figure cited on p. 9.

<sup>68</sup> IMF. *Direction of Trade Statistics*, 2005 yearbook, p. 2. The DOTS data are computed on a somewhat different basis than are those for individual countries. On this table, industrial countries are net exporters and developing countries are net importers. For purposes of this table, China has a net trade deficit of over \$300 billion.

<sup>69</sup> China reported net exports of \$80.29 billion to the United States for 2004 while the United States reported net imports of \$176.8 billion from China. India reported a net trade surplus of \$6.86 billion with the United States while the United States reported a net deficit of \$10.56 billion with India. France reported a surplus of \$6.28 billion while the U.S. figures show a \$11.06 billion deficit. Malaysia reported a surplus of \$8.49 billion while the United States reported a \$18.15 billion deficit with Malaysia. . Senegal reported a deficit of \$89 million while the United States reported a surplus of \$86 million. *Direction of Trade*, 2005, pp. 133, 203, 252, 322, and 431.

<sup>70</sup> See IMF Article IV 2005 staff report, p. 73. See note 21 above.

If this is correct, China must be receiving over \$200 billion more each year from trade income than it reports. In that case, the money must be somewhere. China could not have spent this money on imports, as it would have then shown up in the trade statistics of the exporter countries. It seems unlikely that Chinese exporters would have brought this additional foreign currency back into China. If they had, the People's Bank of China would have had to spend three times more yuan than the amount officially announced to keep the yuan at the pegged rate. The inflationary impact of these additional yuan would be substantial and would have manifested itself through rapidly increasing domestic price levels.

Alternatively, the presumed \$200 billion in extra annual revenue might have been held abroad. This would require the cooperation of Chinese officials, since it would mean that roughly 80% of China's trade income each year does not come back to China. It seems unlikely that China has been giving the money away, since this would make it the world's largest foreign aid donor (ten times the size of the United States) and international effects of its generosity would be evident. Possibly, if the money exists and is not the product of a methodological flaw, the government of China might have accumulated it annually into secret foreign exchange reserves. This would mean, again if the money exists, that China has perhaps \$1 trillion in clandestine funds invested in other countries (over and above its announced official reserves.) Even if China were only using this money to acquire revenue, not influence, it would be difficult to hide. If the assets were registered as Chinese at the time of purchase, for instance, they would likely show up in host country statistics.

As another possibility, if the government of China does not control the money, then it might be held by Chinese citizens and companies. In any other country, the fact that people prefer to hold foreign currencies rather than their own currency might be taken as evidence of capital flight. It might suggest that people "in the know" believe the yuan is overpriced and likely to crash. Keeping their assets in foreign currencies would be a way of protecting themselves against that eventuality. For China, however, the general view is one suggesting that the yuan will be going *up* in value and foreign currencies will go *down* in value compared to it. It seems unlikely that Chinese insiders would see the situation so differently from the common view or that they would have been able to hold a secret this big for so long.

The above scenarios are not be impossible, but they seem unlikely. It seems more likely that the \$200 billion difference in the trade data reported by China and its trade partners is not real money. Rather, it is probably the result of methodological and procedural error. China's real export figures may be higher or its trading partners' import figures may be lower than the reported amounts. We do not know. Caution in the use of published data would seem appropriate. It is probably not a good idea, though, to ignore or discard the existing body of world trade and finance statistics just because some of the data do not match. The IMF and its member countries might scrutinize their procedures to see whether errors and inaccuracies of this sort can be reduced or eliminated over time.

## **Would Revaluation Help the U.S. Economy?**

**A Symbiotic Relationship.** The dollar-yuan exchange rate is not determined in a vacuum. Rather, the relationship between the two currencies reflects the broader

relationship between the countries which issue them. Even if they are chosen by official action, exchange rates are the consequence of each country's economic priorities and the way those priorities interact. The United States needs to import capital from abroad to finance its present level of economic activity without incurring higher interest rates. Consequently, the international value of the dollar must be relatively high in order to encourage the inflow of capital. China needs to encourage exports in order to stimulate economic growth and facilitate economic reform. Therefore, the value of the yuan must be low enough to encourage export growth. So long as these are the main issues on each country's economic agenda, major changes in yuan-dollar exchange rate or the U.S. trade deficit are unlikely.

**The U.S. Imports Capital.** The United States does not save enough domestically to finance simultaneously its preferred levels of consumption and investment and to cover the Federal budget deficit. By contrast, other countries (including several in Asia) save more than their economies can effectively absorb. The United States needs more capital than it can generate on its own to sustain the U.S. economy and foreigners need safe and profitable ways to invest their surplus funds. This generates a continual inflow of foreign funds into the United States. The inflow of funds, in turn, helps generate more demand for imported goods. The U.S. current account deficit equals about 6% of GDP and requires the United States to import more than \$2 billion daily from abroad.<sup>71</sup>

This capital inflow pushes up the exchange value of the dollar, which lowers the relative price of imports and generates a corresponding inflow of foreign goods. It is a basic principle of economics that countries which are net borrowers of money from the world must be net importers of goods and services as well.<sup>72</sup> If the value of the yuan increased, the volume of Chinese exports and Chinese capital flows to the United States would likely decrease.<sup>73</sup> In the short run, U.S. producers would probably take over a share of the market previously supplied by Chinese goods, though consumers would likely have to pay more for those goods than they did for Chinese imports. Profits and employments in those firms would likely increase. If China's trade balance declined, under this scenario, its rate of investment in the United States would also likely decline. In that case, many economists believe, U.S. interest rates would probably increase. This would likely have a negative impact, they expect, on the housing market and (with interest taking a larger share of household income) on consumer purchases.

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<sup>71</sup> See, for example: Geoff Dyer and Andrew Balls. "Questions grow over China's forex strategy." *FT.com*. (London) January 6, 2006, p. 1.

<sup>72</sup> For a further discussion of the causes of the U.S. trade deficit, see CRS Report RL31032, *The U.S. Trade Deficit: Causes, Consequences, and Cures*, updated September 15, 2005.

<sup>73</sup> Not all would agree with this view. One manufacturer notes, for example, that labor and other Chinese content account for no more than 30% of total operating costs for Chinese exporters and — with most materials costs denominated in dollars — content priced in yuan accounts for only about 20% of total costs. If China's currency were to increase in value, the cost of the imported components would be unchanged and the price of China's exports would need to be increased only marginally to recover the higher local costs. See, for example, Kathrin Hille, "China's currency shift frays nerves." *Financial Times* August 7, 2005, p. 1, available from its website at [<http://www.FT.com>].

Over the longer run, foreign production is likely to shift from China to other low-cost countries. As their exports to the United States increase, producers in these other countries would likely recover much of the market previously supplied by the Chinese. On the other hand, higher interest rates in the United States might stimulate an inflow of capital from other foreign sources. One can only speculate whether interest rates would eventually decline to their former level and what the impact these changes would have on the U.S. economy.

**China Wants Growth.** China, for its part, also has priorities other than an accurate valuation of the yuan. Chinese officials believe they need to pursue a policy of export-led growth. They believe their domestic economy is otherwise too inefficient to generate the levels of employment and resources needed for economic reform and conversion of the economy to a market-based system rather than one based on state-ownership and control. They worry that the domestic economy cannot otherwise absorb the unemployment being generated by reform in the rural sector and state-owned enterprises. They also worry that their banking system would be unable to allocate capital effectively or to cope with the speculative pressure that might follow the introduction of a more flexible exchange rate system and more open capital markets.

China's economy has been growing at a rate of about 9% annually for the past decade. Most experts believe this rate cannot be sustained indefinitely, given both the present levels of productivity and the strain and inflationary pressure such growth places on the economy. China needs to slow down its growth rate in order to consolidate recent gains and to correct imbalances. They say that raising the value of the yuan would help. It would slow the growth in reserves, lower inflationary pressures, reduce the cost of imports, raise per capita income, reduce distortions and encourage the flow of resources from the export sectors to the domestic economy. However, Chinese officials are reluctant to shift from a policy of export-led growth to one based more on internal growth until they believe their domestic economy is more efficient and productive and economic reform has further progressed.

According to the IMF, most Chinese officials believe they eventually need to liberalize the yuan and shift more to a policy of domestic led growth.<sup>74</sup> Senior Chinese officials told the press in December 2005 that the value of the yuan would be increasingly influenced by the market and the trend is for China's currency to appreciate over time.<sup>75</sup> Yu Yongding, a member of the central bank's policy committee, said at the time that there is a risk that inflation could be ignited if the exchange rate is not allowed to appreciate. He also said that China's foreign exchange reserves had been growing too fast.

Many in the Chinese leadership believe their country is not yet ready for substantial changes in the value of the yuan. In any case, they say, efforts to resolve

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<sup>74</sup> Cited in the IMF's staff report on the 2005 Article IV consultation, note 21 above.

<sup>75</sup> "Beijing officials signal support for higher yuan." *The Wall Street Journal Asia* (Hong Kong), December 13, 2005, p. 9.

the imbalances in the world economy will require concerted action by many nations and China should not be expected to solve them alone.<sup>76</sup>

## Three Dilemmas For China

### Intervention and Reserves

The People's Bank of China intervenes in the market to buy foreign exchange and sell yuan in order to hold the value of its currency at a relatively constant level. As a result, China has accumulated foreign exchange reserves which now total more than \$819 billion. At the present rate of growth, its reserves will surpass those of Japan and total \$1 trillion by the end of 2006.<sup>77</sup> If the bank did not sell yuan, the value of China's currency would rise and its volume of exports would fall. Many of China's export industries reportedly operate on very slim profit margins and many might go bankrupt if the yuan rose substantially in price.<sup>78</sup>

Much attention has been paid to the size of China foreign exchange reserves. Many see them as a potential financial threat to other countries. Many believe the growth in China's reserves proves that its currency is undervalued and manipulated.

However, the growth in China's reserves causes problems as well. For one thing, it puts great pressure on China's monetary system. China cannot have an independent monetary policy, since its domestic money supply grows at the size of its foreign reserves expands. For every dollar bought by the central bank to maintain the peg, the People's Bank of China creates new 8 yuan which it gives to the seller. The PBC has reportedly intervened in the currency market at a rate equal to about 12% of China's GDP.<sup>79</sup> The IMF says that only about half the liquidity caused by the increase in reserves has been sterilized (that is, removed from circulation through sales of government bonds.)<sup>80</sup> Thus, the central bank has had to hold down the growth of credit and lending by state banks in order to keep this excess liquidity from causing inflation. The June 2005 IMF Article IV staff report urged China to wring more excess liquidity from the system and to tighten monetary policy still further.

The growth in China's reserves also creates another problem. Roughly 70% of its reserves are held in dollars or dollar-denominated securities. If the yuan should go up in value compared to the dollar, the value of China's reserves will go down and China would lose a great deal of money.<sup>81</sup> The State Agency for Foreign Exchange

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<sup>76</sup> Ibid., pp. 14-16.

<sup>77</sup> "China's currency reserves hit \$819bn." *The Times* (London), January 16, 2006, p. 39.

<sup>78</sup> "Revised growth figures send mixed signals." *South China Morning Post* (Hong Kong), December 27, 2005, p. 1.

<sup>79</sup> Brad Setser. *The Chinese Conundrum*, note 64

<sup>80</sup> IMF. *Staff Report for the 2004 Article IV Consultation*, note 44, p. 9.

<sup>81</sup> China keeps its books in yuan. The dollar value of the Chinese assets would not change (continued...)

announced in mid-January 2006 that it would be “actively exploring more efficient use of our FX [foreign exchange] reserve assets” and “widening the foreign exchange reserves scope.” It said it wanted to “optimize the currency and asset structure” of China’s reserves and to “actively boost investment returns.”<sup>82</sup> Some market analysts thought this meant that China intended to sell some of its dollar-denominated assets.<sup>83</sup> Their alarm abated, however, when it became clear that China simply planned to invest a smaller portion of its new reserves in dollars and more in the currencies of other trading partners.

## Where’s the Money Coming From?

**Hot Money or Trade?** China’s foreign exchange reserves are growing because the country’s central bank is buying dollars and other foreign currencies in order to stabilize the market price of the yuan. The question is where the foreign currency is coming from. Many argue that the growth in China’s reserves is the result of its trade policies as well as the inflow of foreign investment. Recent research suggests, however, that speculative inflows (“hot money”) may be responsible for over three-quarters of the net increase in China’s foreign exchange reserves since 1998.

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<sup>81</sup> (...continued)

but their value from the Chinese perspective would decline. Likewise the international value of assets denominated in yuan would increase.

<sup>82</sup> The Associated Press. “China might diversify investments: U.S. mortgage industry worried; Drop in Treasury purchases could hurt home buyers.” *Columbian* (Vancouver, Washington), January 11, 2006. “Forex reserves could be used to set up national investment trust firms.” *South China Post* (Hong Kong), January 16, 2006, p. 5.

<sup>83</sup> To dampen concern, the governor of the People’s Bank of China personally met with press to affirm that China had no plans to reduce its dollar holdings or to use them to buy other assets, such as oil. See “Forex reserves could be used....” (note 82.) Many analyst predict that, if China reduces its rate of investment in the United States, U.S. interest rates will increase. A large sale of China’s dollar assets could also drive down U.S. security prices.

**Table 1. Composition of China's Buildup  
in Foreign Exchange Reserves**  
(billions of U.S. dollars)

	(1) Average 1998-2000	(2) Average 2001-2004	(3) Amount of Change
Foreign reserve increase <sup>a</sup>	8.5	122.8	114.3
Current Account balance	23.7	42.2	18.5
Capital Account Balance	0.3	69.3	69.0
<i>Of which FDI <sup>b</sup> net</i>	<i>38.5</i>	<i>46.6</i>	<i>8.1</i>
<i>Of which other</i>	<i>-38.2</i>	<i>22.7</i>	<i>60.9</i>
Errors and Omissions	-15.4	11.4	26.8
<i>Non-FDI* capital account balance <sup>c</sup></i>	<i>-53.6</i>	<i>34.1</i>	<i>87.7</i>

**Source:** Prasad and Wei.

- a. Foreign reserve increase is the sum of the current account and capital account balances plus errors and omissions.
- b. FDI is Foreign Direct Investment.
- c. Includes errors and omissions.

**Accounting the BOP.** Table 1 shows (based on IMF data) the size and amount of change which took place in China's foreign exchange reserves and balance of payments (BOP) during the period 1998 to 2004. Foreign exchange reserves and alternative BOP figures have been discussed above. The balance of payments is a comprehensive picture of a country's international financial and commercial transactions. It has three parts: the current account balance, the capital account balance and the total for errors and omissions. The current account balance is the net sum of a country's exports and imports of goods and services plus its net income from foreign investment. The capital account balance is the net sum of all the monetary flows to or from a country — net foreign investments, loans made or received, transfers by individuals (remittances from migrant workers, for example) and other transactions needed to finance activity in the current account.

Conceptually, the current account and capital account balances should cancel each other out, one being positive and the other negative. Imports which are not paid for with current revenue, for example, would have to be financed directly or indirectly by capital from abroad. In fact, however, some financial and commercial transactions are not recorded and the current account or capital account is often larger than the other. To make the two parts of the BOP match, economists add a third figure, called "errors and omissions" (E&O), which acknowledges that for unexplained reasons more money is in one account or the other. This may reflect income from illegal trade, mis-measurement, or undisclosed movement of money by individuals ("capital flight") seeking to protect their assets from an expected change in the exchange rates or by speculators hoping to profit from that change.

## Analyzing China's BOP

**Table 1** breaks China's balance of payments figures into these three components. It also provides separate figures, in the capital account, for foreign direct investment. Prasad and Wei, the authors of the table, identified the annual changes in China's foreign exchange reserves and the amounts recorded for each element of China's balance of payments and they present the average annual amounts for each item for the first three and the last four years of the 1998 to 2004 period.<sup>84</sup> From that data, they derive the amount of change which occurred in each instance between the first and the last halves of that seven-year period.

On first inspection, looking only at the middle column, it seems that most of the growth in China's reserves was due to trade and investment. Between 2001 and 2004, Prasad and Wei note, China's net annual current account balance was \$42.2 billion while the net inflow from FDI was \$46.6 billion.<sup>85</sup> It appears, therefore, that the \$88.8 billion from these two sources accounted for most of the \$128 billion average annual increase in China's foreign exchange reserves during that period.

Prasad and Wei find, however, that other factors — particularly the inflow of “hot money” were more important. As **Table 1** also shows, comparing the first and second columns, that the average annual level of China's foreign exchange reserves grew by \$8.5 billion from 1998 to 2000 and by \$122.8 billion from 2001 to 2004. In column 3, Prasad and Wei found that the annual change in China's trade receipts (\$18.5 billion) and FDI (\$8.1 billion), shown in column three, were not sufficient to account for the average \$114.3 billion in China's reserves. On the other hand, the swing in flows from non-FDI investment and E&O were substantial.

Between 1998 and 2000, they observe, capital flowed out of China openly (non-FDI) or covertly (E&O.) They speculate that initially Chinese firms and families moved money abroad to take advantage of favorable investment and exchange rate opportunities. After 2001, however, they suggest, Chinese firms and families and foreign speculators began moving money back into China in hopes of profiting from the expected increase in the value of the yuan. They observe that, as **Table 1** indicates, the net flow of funds from non-FDI investment and E&O between the two periods amounted to an average \$87.7 billion a year, nearly 77% of total change in China's foreign exchange reserves during the 1998-2004 period.

**Policy Implications.** The policy prescriptions are different, depending on the source, if one wants to reduce the inflow of foreign currencies and to lessen the central bank's incentive to sell yuan in foreign exchange markets. If trade-related

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<sup>84</sup> Eswar Prasad and Shang-Jin Wei. *The Chinese Approach to Capital Inflows: Patterns and Possible Explanations*. National Bureau of Economic Research. NBER Working Paper Series, Working Paper 11306, April 2005.

<sup>85</sup> The sources of FDI coming to China have changed over the years. In 2004, the major sources were Hong Kong (32%), Virgin Islands (12%), Korea (11%), Japan (9%), European Union (7%), United States (7%), Taiwan (5%), Western Samoa (2%) and Singapore (2%). The sources for the Virgin Islands and Western Samoa money are unknown. The five Asian countries accounted for 60% of the total. See Prasad and Wei, p.79.

factors are the major reason why foreign exchange is flowing to China, then changes in the country's trade policies and exchange rate would help diminish the flow. China's government would need to take steps, in this scenario, to shift resources and employment from the export sector to the domestic economy.

On the other hand, if "hot money" is responsible for the buildup in reserves, then a gradual appreciation in the value of the yuan might encourage further inflows of speculative funds. In that case, the central bank might cool the inflow of "hot money" by holding the value of the yuan constant for a sustained period of time.

The *Economist* reported in late January 2006 that the delay and uncertainty of the new Chinese exchange rate system may have had this effect.<sup>86</sup> The flow of portfolio capital investment, one form of "hot money," declined to about \$1 billion a month in late 2005, it reported, from the average level of \$8 billion a month seen from late 2003 through mid-2005. It appears, the *Economist* suggests, that "the speculators who have been furiously pumping money into China for the past three years have at last given up and gone home." The magazine predicts that China's trade surplus may also start to fall and import growth may revive.

If the data for the last part of 2005 are correct and if the *Economist's* predictions are right — and it is much too soon to know whether these are so — then the People's Bank of China may have an easier time managing monetary policy in the future. There would be less need, for example, for it to print yuan in order to keep down the value of the yuan by buying up the inflow of dollars. This would make it easier, if the PBC wishes to do so, for the central bank to relax its control and to allow market forces more influence on the yuan-dollar exchange rate.

## Would Revaluation Hurt China's Banks?

Many believe China needs to reform its financial system before the yuan can rise appreciably in value. If revaluation occurs first, they say, the banking system may not be able to cope and this might have negative effects on economic growth. Others believe, however, that — while more reform is needed — China's banking system should be able to accommodate more flexibility in the value of the yuan. Nevertheless, there is serious worry on the part of many that a floating exchange rate system could lead to destabilizing capital outflows.<sup>87</sup>

The IMF says that major steps have been taken to restructure the banking system (even though further action is required) and the condition of the banking system is no longer an obstacle to exchange rate reform. As a result of recapitalization, sales of nonperforming loans, and other reform efforts, the IMF staff reported, the capital strength, asset quality and operating results for China's banks have significantly improved. In the old days, state banks made loans to state industry with little

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<sup>86</sup> "Portfolio Investment in China: Cooling Down." *The Economist*, January 28, 2006, p. 73.

<sup>87</sup> As noted earlier, though (text and note 16 above), China has announced that it will soon relax its controls over capital outflows. It is unclear if this is a precursor for greater future exchange flexibility or merely a means to limit growth in China's forex reserves.

expectation those loans would be repaid. Thus the savings of Chinese individuals were sunk into subsidizing these money-losing firms.

Most of these “legacy” loans have been transferred to four government-owned asset management corporations (AMCs), so the government budget rather than the banking system will bear the cost of those bad loans. Consequently, the IMF reports, bad loan ratios for the major commercial banks (the four largest state banks and 14 joint stock commercial banks) have fallen from about 24% of loans in 2002 to about 13% in September 2005.<sup>88</sup> These institutions account for about three-quarters of total bank assets. They say that efforts to tighten the banks’ balance sheets and to strengthen their internal controls and risk management procedures are still needed.

The IMF does not report figures for the ratio of bad loans (non-performing loans) in the banking system as a whole because the procedures for reporting bad loans by small banks are different from those for large banks. Two IMF economists, Prasad and Wei, reported in their 2005 article that non-performing loans in the banking system amounted to 30% of GDP in 2003.<sup>89</sup> IMF staff indicates that this larger figure calculates the bad loan ratio for smaller banks in the same way that bad loans are calculated for the larger banks. Prasad and Wei suggest that a major share of China’s foreign exchange reserves may need to clear up the accumulated bad debt.

Setser asserts that conditions in the Chinese banking system are grim and the costs of reform will be great.<sup>90</sup> He says the banking system is not ready yet for a more flexible currency. Bad debt in the banking system is equivalent to 20% or 30% of GDP, he says. Officials estimates reported that 40% of all loans in 2002 were non-performing, he indicates, and “legacy” bad loans (debt owed by state firms) totaled \$400 billion. Other estimates put the figure at \$650 billion, he says, or about 50% of China’s 2002 GDP. The recent boom in bank lending may have reduced the level to 25% or so, he says. However, he suggests, the total volume of bad debt may be higher once the bad loans made since 2002 are included in the total.

Setser says that many analysts believe that the government will need to buy out the bad “legacy” debt if it wants to improve the soundness of the banking system. The IMF’s statement (see above) that some bad loans were transferred out of the banking system seems to confirm this view. Setser says the government will also need to provide large amounts of money to stabilize its undercapitalized state banks. Some estimates report, he says, that the cost of cleaning up the financial system could equal 20% of national GDP (about \$340 billion of China’s 2004 GDP) and nearly all of it will be borne by the national government. This could push the national debt-to-GDP ratio, he says, from 33% in 2004 to perhaps 50% overall.

IMF experts say that China does not need to resolve the problem of bad debt in its banking system before its currency can be liberalized. They argue that — so long as capital controls continue — the yuan-dollar exchange rate could be more flexible

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<sup>88</sup> Author’s interview with IMF staff, December 2005.

<sup>89</sup> Prasad and Wei, note 84, p. 13.

<sup>90</sup> See note 64.

without harming the Chinese banks. The Chinese banks know how to trade currencies and manage their foreign exchange exposure, the IMF staff reports. They already do this in their worldwide operations. Some economists believe that China cannot have a flexible currency until it ends capital controls.<sup>91</sup> IMF experts argue, however, that China's banks cannot handle full liberalization of the capital account at this juncture. If capital controls were removed, they assert, a substantial outflow of capital from the banks would likely occur and this would be very destabilizing.<sup>92</sup>

## Options for the United States

There are several ways the United States might encourage China to move more quickly towards increasing the value of the yuan. These options or policy tools are not mutually exclusive, but it might be difficult or awkward for the United States to pursue some of them simultaneously.<sup>93</sup>

First, the U.S. Government might continue pressing China publicly for additional changes in its foreign exchange system in order to make the international value of the yuan better reflect market conditions and economic realities. This assumes either that China is reluctant to change or that reformers in China will be helped by external stimulus. Second, the U.S. Government might stop pressing China publicly for change. This option is predicated on the expectation that reformers will be able to move China more rapidly towards currency liberalization if China is not pressured from abroad.

Third, the United States could enact legislation restricting Chinese exports to the United States if the value of the yuan is not increased. This assumes that China will change its exchange rate policies only if forced to do so. Fourth, the U.S. Government might refer the question to the IMF, asking the international agency to determine whether China has been manipulating its currency in violation of IMF rules. This assumes that technical findings and persuasion by the IMF and its major member countries may have effect. Fifth, the U.S. Government might refer the issue to the World Trade Organization (WTO), alleging that the United States has been injured by unfair trade practices linked to the undervaluation of China's currency. If the WTO found that the U.S. petition had merit, it could authorize trade remedies to correct the alleged abuse. This assumes that exchange rate issues and questions of general system-wide subsidy will fall within the purview of the WTO rules.

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<sup>91</sup> See, for example, comments by Gail Foster, chief economist for the Conference Board, in Peter Bartram, "Insight — Yuan weak link." *Financial Director*, September 30, 2005, p. 14.

<sup>92</sup> See, for example: Edward Prasad, Thomas Rumbaugh, and Qing Wang. *Putting the Cart Before the Horse? Capital Account Liberalization and Exchange Rate Flexibility in China*. IMF Policy Discussion Paper PDP/05/01, January 2005. Available from the IMF website.

<sup>93</sup> Some of these options are also discussed, with similar conclusions, in CRS Report RL32165, *China's Exchange Rate Peg*, pp. 28-30, note 1.

## **Continue Public Pressure**

Continued public pressure is one method the United States might use to encourage China to adopt further reforms in its foreign exchange procedures. This might include official findings by the Treasury Department that China is a manipulator or strong exhortations by high-level U.S. officials. Among other things, U.S. officials might press Chinese officials to provide them more information as to the ways they intend to link reform of their domestic economy to reform in their exchange rate regime and the criteria they might use for discerning progress.

In evaluating this option, it would be helpful to know whether Chinese officials really intend to move towards a market-based valuation of the yuan or whether they intend to drag the process out as long as possible. If China adopted the reforms announced to date mainly in response to foreign pressure, then it is possible that further pressure might persuade them to go faster. However, if Chinese officials adopted these reforms because they believe that market-based reform is in China's best interests, foreign pressure may complicate this process. China has a long tradition of not giving in to foreign pressure. Foreign pressure might strengthen the hand of the reformers, but it might also stiffen resistance by the opponents of reform and make it harder for the reformers to achieve their ends.

It also might be helpful if U.S. officials and legislators had more information about China's internal decision making process. How strong are the reformers? What key choices do Chinese officials believe they face as regards the economy and value of the yuan? How do they think China and other countries can best determine what the true international value of the yuan might be? What criteria do they believe are relevant for determining currency value and their timetable for change?

Given their most recent statements, other G-7 countries will likely support the United States if it continues to press China for more rapid action. However, they may also back away and leave the United States on its own if they believe U.S. efforts are potentially counterproductive.

## **Pursue a Policy of Restraint**

Instead of pressing China publicly for reform, the United States might decide on a policy of restraint. This is not an option in favor of the status quo. Rather, it accepts the premise that Chinese officials want to proceed with their reform program as rapidly as economic conditions and the policy consensus in China permits. This option assumes that overt foreign pressure may be counterproductive if it slows the process and strengthens the hand of those in China who oppose reform. Arguably, the Treasury Department has shown restraint of this sort when it said, in its recent reports, that China was not manipulating the value of its currency.

Some might argue that the United States should view the trade and currency dispute within the context of its overall relationship with China. While economic issues are important, this view would suggest, it is also important not to raise tensions to the point where China becomes reluctant to cooperate with the United States on other issues, such as North Korea's policies on nuclear weapons. Pressing

the yuan-dollar exchange rate issue to the exclusion of other important U.S. interests might be seen, from this perspective, as counterproductive. Others might respond, however, that China will cooperate with the United States in other areas when it believes that this serves its interests.

China may have strong reasons for wanting change in its foreign exchange system. As noted before, China faces the prospect of serious inflation if it does not slow or stop the growth in its foreign exchange reserves. An increase in the value of its currency would be a key way of accomplishing that goal.

Ironically, some kind of external encouragement may still be needed to help China accomplish its plans. Even if Chinese authorities want to move forward with their reform program, they may need some external pressure — if only in the form of agreed deadlines and benchmarks — to help them overcome inertia when they encounter difficult choices as they put their currency reform policies into effect.

## **Restrict Exports to the United States**

Instead of exerting public and mostly verbal pressure, the United States could adopt legislation restricting China's access to the U.S. market until it raises the value of its currency. There are several ways this could be done. The English bill (H.R. 3282), Ryan-Hunter bill (H.R. 1498) and Schumer/Graham bill (S. 295), all both mentioned above, would have this effect. By raising the U.S. price of Chinese imports, they would presumably reduce the flow of Chinese exports to the United States, raise the prices paid by U.S. consumers (perhaps helping some U.S. producers) and stimulate the growth of export industries in other countries that would take China's place.

Similar effects would likely occur if the U.S. Government invoked the provisions of Section 301, authorizing the U.S. Trade Representative to respond to unreasonable or discriminatory practices that burden or restrict U.S. commerce.<sup>94</sup> Likewise, if the Treasury Department found in its semi-annual report that China was manipulating the value of its currency to the detriment of the United States, consultations with China and trade actions would also be required. Under the Section 301 mechanism, the United States could impose trade sanctions against Chinese goods if China does not change its trade or foreign exchange policies. The United States could also use other U.S. trade laws to impose special "safeguard" restrictions on Chinese goods if the growth in Chinese imports is found to have caused (or threatens to cause) market disruption to U.S. domestic produce.<sup>95</sup> Measures of this sort are allowable under WTO rules on a temporary or limited basis but it is less clear that they may be used across the board or for longer periods.

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<sup>94</sup> Section 301 to 309 of the Trade Act of 1974, as amended. See also CRS Report 98-454, *Section 301 of the Trade Act of 1974, as Amended: Its Operations and Issues Involving its Use by the United States*. See, for example, China Currency Coalition factsheet, note 3.

<sup>95</sup> See CRS Report RS20570, *Trade Remedies and the U.S.-China Bilateral WTO Accession Agreement*, updated August 4, 2003.

It is not clear how much the price of Chinese goods would need to increase, or the volume of Chinese exports to the United States would decrease, though, if the value of the yuan increased. Components purchased from other countries account for a major share of the value of exports bearing the label “Made in China.” The cost of Malaysian or Thai inputs would not change for the producer in China if the value of the yuan increased. The price of the final product would only need to increase by an amount sufficient to recover the higher cost of the producer’s that were denominated in yuan. Depending on the products and methods of production, it is possible that the overall increase in product costs would be modest and the volume of Chinese exports to the United States would be large even after the value of the yuan increased.

It is uncertain what the Chinese authorities and Chinese firms would do if faced with restrictive import legislation of this sort. They might cut prices and trim profits in order to keep unchanged their share of U.S. markets. They might retaliate against U.S. exports, setting off a trade war between the United States and China. They might also ask the WTO for authority to levy trade sanctions, on grounds that the United States was not complying with the WTO rules on international trade. Alternatively, they might raise the value of the yuan in hopes that this will eliminate the new U.S. tariffs on their goods.

The WTO trade rules allow countries to levy countervailing duties to offset any subsidies foreign exporters might receive from their home governments. WTO rules do not allow countries to impose tariffs or restrictions merely for the purpose of excluding foreign goods. If the United States hopes to persuade other countries that its special levies on Chinese imports are fair and compensatory, it will likely need to show that the size of the levies match the degree of subsidy which Chinese producers receive through the undervalued yuan. It might be helpful in this regard if there were more agreement among scholars and the affected countries as to whether and by how much China’s currency is undervalued.

If the United States put special levies on Chinese goods, China might ask the WTO to rule that the United States acted in a manner inconsistent with its obligations.<sup>96</sup> The countervailing duties and anti-dumping penalties allowed under WTO rules are usually applied to specific goods rather than to all exports coming from a particular country. Exchange rate manipulation might be seen as a type of general across-the-board subsidy for a country’s exports. Nevertheless, there is little precedent (but see below) at the WTO for considering exchange rates from this perspective. The WTO may be concerned that the rules governing world trade would be harder to enforce if countries were free to impose countervailing duties whenever they decided unilaterally that the currencies of other countries were undervalued.

If the WTO agreed with China’s petition, it could authorize China to retaliate by withdrawing tariff concessions on U.S. goods. The WTO dispute settlement process is adjudicated with reference to the WTO rules and there seems little room for political pressure by the United States and other countries. Other countries could,

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<sup>96</sup> For a discussion of the WTO dispute resolution mechanism, see CRS Report RS20088, *Dispute Settlement in the World Trade Organization.*, updated December 28, 2005.

however, submit briefs in support of the U.S. or the Chinese position. Countries likely will give some thought to the potential impact that a trade dispute between the United States and China might have more broadly on world trade negotiations.

If the volume of Chinese exports to the United States declines because of new trade legislation, the profits of foreign firms located in China which produce those goods will likely go down as well. Exporters could shift their production facilities further to the west in China, where labor costs are lower than on the coast. This might reduce costs enough for Chinese exporters to pay the new tariff and leave their prices unchanged. Alternatively, Chinese companies and international firms might shift production to other countries where the costs of production have become lower than those in China because of yuan revaluation. In that case, these countries might replace China as major suppliers of manufactured products to the United States.

If the United States wants to keep out foreign products (not just Chinese products) which undersell U.S. manufactures, then new legislation would be needed to penalize other countries as they ramp up to take China's place. This would violate WTO rules and the terms of international trade agreements to which the United States is a party. Because the U.S. economy needs to import foreign goods of similar value to the foreign capital it imports each year, it may be hard for the U.S. government to stop countries from expanding their exports to the United States. If the volume of imports declines, however, prices for manufactured products in the United States may increase, giving U.S. producers some relief. U.S. consumers would likely need to spend a larger portion of their income in this case to purchase the goods which were previously produced abroad.

## **Take It to the IMF**

The United States could also pursue the issue of China's exchange rate policy at the International Monetary Fund. The key issue is whether China is complying with the requirements of Article IV of the IMF Articles of Agreement and, if not, what steps it should take to comply. Though other countries seem to have preferred that the United States take the lead and break the ice for them, they are also affected by China's trade policies. Arguably, international meetings where representatives of the major countries may speak with Chinese officials at the same time will be more persuasive than scattered bilateral talks where the only strong public statements come from the United States.

There continues to be debate as to what, if anything, the outside world can do to accelerate the reform process in China. In late September 2005, Treasury Under Secretary Adams demanded that the IMF crack down on countries that violate the prohibition in Article IV against currency manipulation, though it is not clear what tools he thought the IMF should use.<sup>97</sup> The IMF was, he said, "asleep at the wheel" and it should confront China concerning the deficiencies in its exchange rate policies.

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<sup>97</sup> Paul Blustein. "IMF Chief Pressured on Trade Imbalances." *The Washington Post*, September 29, 2005, p. D1.

IMF Managing Director Rodrigo de Rato rejected that charge.<sup>98</sup> The IMF was addressing all aspects of the issue, he replied. The IMF had already investigated and rejected suggestions that China's currency policies warrant the use of "special consultations." Rather, he suggested, the United States should act more vigorously to straighten out its own budget and economic policies rather than blaming other countries for its problems.

According to IMF sources, special consultations between IMF management and a country have occurred twice previously in response to formal complaints by another country that it was manipulating its currency. In the 1990s, the United States made a complaint about Korea and Germany filed a complaint about Sweden. The two countries eventually adjusted their currency values, though they may have done this for their own reasons rather than in response to IMF consultations.

In January 2006, Adams maintained that the IMF should play a stronger role enforcing exchange rates and preventing currency manipulation.<sup>99</sup> The IMF should demonstrate strong leadership on multilateral exchange rate surveillance, he said. "A strong IMF role in exchange rate issues is central to the stability and health of the international economy," he remarked. The IMF's leaders "should endorse such an enhanced role for the IMF, restoring its central role on exchange rates." While Adams did not mention China by name, he said the IMF should identify countries "whose exchange rate policies might not be in accord with Fund principles" and it should "seek to identify problematic or inappropriate exchange rate behavior."

However, IMF Managing Director Rato told a session at the World Economic Forum in Davos, Switzerland that he does not consider China to be a currency manipulator. He rejected proposals that the Fund should put greater pressure on China. He said "there is a trade-off between our role as confidential adviser in our surveillance work and our role as a transparent judge."<sup>100</sup> He noted that the IMF had been the first international body to urge China to move from its fixed peg to a more flexible exchange rate process. Rato also said the IMF should not take a proactive role on exchange rates, in response to Adam's question what the IMF should do about countries "that are attempting to thwart balance of payments adjustments."

On February 9, 2006, Rato outlined his future plans for the IMF. He said the IMF should put more emphasis on surveillance but he raised several reservations about the Fund's taking the central policing role Adams had proposed.<sup>101</sup>

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<sup>98</sup> *Ibid.*

<sup>99</sup> U.S. Department of the Treasury. "Remarks by Under Secretary for International Affairs Tim Adams at AEI Seminar Working with the IMF to Strengthen Exchange Rate Surveillance." February 2, 2006, JS-4002. Available from the Treasury Department website at [<http://www.treas.gov/pres/releases/js4002.htm>].

<sup>100</sup> Chris Giles and Krishna Guha. "Interview with Rodrigo de Rato." *Financial Times* (London), January 28, 2006, p. 8

<sup>101</sup> Rodrigo de Rato. *The IMF's Mid-Term Strategy: New Priorities, New Directions*. Remarks at the Aspen Institute, Rome Italy, February 9, 2006. Available from the IMF

The IMF is a place where the views of affected countries can be presented to China and efforts can be made to press China to revalue its currency. The IMF cannot force countries to have exchange rate policies which mirror underlying economic conditions, even if they might be non-compliant with IMF rules. However, continuing discussion at the IMF and at other international meetings serves to focus attention on the issue. At the least, it puts Chinese officials in a situation where they need to explain or justify their policies and to respond in some way to international pressure. Arguably, it has caused them to take steps towards liberalization that they otherwise might be reluctant to take — or they might have taken more slowly — if these conversations had not taken place.

If the IMF were given the broader authority contemplated by Adams and others, the fundamental structure of the world exchange rate system would change and many countries, in addition to China, would have to seriously revise their domestic and international economic policies. China might not be willing to make fundamental changes in its foreign exchange and economic policies unless other major countries make fundamental changes in their policies as well.

## **Refer It to the WTO**

The United States could petition the World Trade Organization (WTO) that it believed China was subsidizing its exports by undervaluing its currency. It could argue that China gains unfair trade advantages because of the artificially low value of its currency and it could ask the WTO to settle this dispute. Normally, arguments about subsidy reference individual products. In this case, however, the U.S. could argue that the subsidy applies to all Chinese goods. By undervaluing its currency, the United States could argue, China is artificially reducing living standards and prices in its domestic economy in order to stimulate and facilitate growth in its export sector. Arguably, subsidies do not have to be paid by governments directly to exporters for them to affect output. In China's case, the United States could argue, the lower production costs caused by the reduction in the standard of living would be the means by which the subsidy were delivered to Chinese export firms.

WTO rules do not permit individuals or private groups to appeal trade controversies to it. Under Section 301 of the Trade Act of 1974, however, groups and individuals may petition the U.S. Trade Representative for action concerning harmful foreign trade practices. In 2004, the Bush Administration rejected two petitions — one by the China Currency Coalition and one by 30 members of Congress — which proposed that the United States should refer the yuan-dollar trade issue to the WTO. The Administration expressed doubt, at the time, that the United States could win a case of this sort in the WTO. It also said, in rejecting the

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<sup>101</sup> (...continued)

website at [<http://www.imf.org/external/np/speeches/2006/020906.htm>]. Some analysts speculate that, if the IMF was given the power to police exchange rates and BOP policies, it would probably start with the industrial countries whose policies have the greatest impact on the world economy rather than middle-income countries such as China.

petitions, that action of this sort might be “more damaging than helpful at this time.”<sup>102</sup>

The WTO’s dispute settlement process is a quasi-judicial process that is intended to resolve trade disputes between countries which cannot be resolved through conciliation or negotiation. A three member panel of experts is appointed by the WTO secretariat reviews the facts and arguments in the case and to render judgment based on principles embodied in WTO rules and international trade agreements. An appellate panel may review the initial panel’s findings and, unless its findings are set aside by the WTO membership by consensus, the disputing parties are expected to implement the decision. If a country does not comply within a reasonable period of time, the WTO may authorize the complaining country to impose retaliatory duties on the non-compliant country’s goods. Those duties or barriers remain in force until the country complies or until the disputing parties otherwise resolve the issue.<sup>103</sup>

The WTO has no authority to address exchange rate issues. However, the IMF and WTO have an agreement which requires the WTO to refer exchange rate disputes of this sort to the international monetary body and to accept the IMF’s findings as conclusive.<sup>104</sup> By itself, a finding by the IMF that China is manipulating its currency would have no “teeth” that would require Chinese officials to change their procedures. However, in conjunction with a positive finding by the WTO, an IMF finding of this sort might have considerable affect. If a WTO dispute settlement panel found that China was gaining unfair trade advantage through a low valuation of its currency, it might authorize the United States to put special tariffs on Chinese products into effect until China raised the value of its currency.

It might be awkward for the United States to take a complaint of this sort to the WTO if it unilaterally imposed tariff restrictions on Chinese goods. Moreover, it would be risky for the United States to apply to the WTO for relief if it does not know how the IMF would rule on this. Support from the other major IMF member countries in the IMF would be critical. Unlike the dispute settlement in the WTO, decisions of this sort in the IMF are made by individuals representing member country governments. The G-7 countries and other members of the European Union comprise a majority of the voting power in the IMF. It might be helpful if the United States consulted with the other countries about their potential vote, if the issue were come to the IMF, before it approached the WTO with a complaint.

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<sup>102</sup> U.S. Trade Representative. *Statement from USTR Spokesperson Neena Moorjani Regarding a Section 301 Petition on China’s Currency Regime*. November 12, 2004 Available from the USTR website. Put quoted words in search box to locate text.

<sup>103</sup> For further information on the WTO’s dispute settlement procedures, see CRS Report RS20088, *Dispute Settlement in the World Trade Organization: An Overview*, updated December 28, 2005.

<sup>104</sup> See *Arrangement for Consultation and Cooperation with the Contracting Parties of GATT*, September 9, 1948, and *Guidelines/Framework for Fund Staff Collaboration with the World Trade Organization*, April 21, 1995. Both are included in the IMF’s *Selected Decisions*, note 56, pp. 546-9 and 552-9.