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Revaluation of the Chinese Currency and Its Impacts on China: A Political Economy Approach

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This paper reviews and assesses the policy debates on the Renminbi (RMB) revaluation issue and the reform of China's foreign exchange rate regime that have taken place both inside and outside China. It focuses on two key issues: the extent of revaluation and its impact on China. The policy debates and the consequent decisions on revaluation indicate that despite continued international pressure, it is unlikely that the Chinese leadership will make any radical changes to the RMB in the near future. It is reasonable to expect that the Chinese government will continue its gradualist approach, with the long-term objective of achieving a flexible regime.

KEYWORDS: **Renminbi (RMB) exchange rate; equilibrium exchange rate; foreign exchange reserve; exchange rate regime; foreign exchange reform.**

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論 China's currency, the Renminbi (人民幣, RMB), was pegged to the U.S. dollar at a rate of around 8.28 RMB to 1 U.S. dollar for eleven years from 1994, after which the official rate of the RMB was devalued to the prevailing market rate and China began to shift to a unified exchange rate. For many years, the issues surrounding China's fixed exchange rate have been some of the hottest topics in international economics. Since 2001, much of the interest has been provoked by waves of speculation that China would let the RMB appreciate against the U.S. dollar because of its surprising strength and astonishing external achievements, and because of a decline in the U.S. dollar. In recent years, the RMB exchange rate has attracted considerable global attention due to China's consistently large trade surpluses and its rapid accumulation of foreign exchange reserves. The United States, Japan, and other G-7 nations have put increasing pressure on China to revalue the RMB. Since China is one of the United States' largest trading partners, and among the top trading partners of Japan and many Asian and European countries, any adjustment to the currency's trading value is likely to have significant implications for global trade flows, as well as for China's own economic growth and social stability. For these reasons, there has been a vigorous global debate over whether the RMB is undervalued.

Economists worldwide held diverse opinions on the revaluation of the RMB. Morris Goldstein and Jeffrey Frankel reported a large degree of undervaluation and pressed for revaluation,[1] whereas Lawrence Lau and Joseph Stiglitz, Michael Funke and Jorg Rahn, and Yin-Wong Cheung, Menzie D. Chinn, and Eiji Fujii argued that there was no credible evidence that the RMB was significantly undervalued.[2] Ronald McKinnon and

[1] Morris Goldstein, "Adjusting China's Exchange Rate Policies" and Jeffrey Frankel, "On the Renminbi: The Choice between Adjustment under a Fixed Exchange Rate and Adjustment under a Flexible Rate" (Both papers presented at the IMF's seminar on China's Exchange Rate System, Dalian, China, May 26-27, 2004).

[2] Lawrence Lau and Joseph Stiglitz, "China's Alternative to Revaluation," *Financial Times* (London), April 27, 2005; Michael Funke and Jorg Rahn, "Just How Undervalued Is the

Gunther Schnabl were of the opinion that the RMB should not appreciate, given its stabilizing role in East Asia.[3]

In response to increasing external pressure, government officials in China, including Chinese Premier Wen Jiabao (溫家寶), declared that China would not carry out radical reform of the RMB as this would only slow down China's reform process.[4] Wen also emphasized that the Chinese government would only advance exchange rate reform as long as certain criteria were met, and only thereafter would China follow market rules in proceeding with the reform.

Nevertheless, on July 21, 2005, the RMB was revalued by 2.1 percent to trade at a rate of 8.11 RMB to 1 U.S. dollar. The People's Bank of China (PBC), China's central bank, announced that the currency's value would be linked to an undisclosed basket of currencies. This new regime was seen by Chinese officials as a more flexible, managed floating exchange rate system based on market supply and demand. Subsequently, on August 10, 2005, the PBC published the composition of the currency basket, which included the U.S. dollar, the Euro, the Japanese Yen, the Korean Won, as well as the currencies of Singapore, the United Kingdom, Malaysia, Russia, Australia, Thailand, and Canada.[5] So far, the most the RMB has appreciated by, from the time of the initial revaluation to March 2008, was 15.2 percent.

The RMB revaluation was seen as a calculated political move in response to mounting external pressure. While external pressure played a

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Chinese Renminbi?" *The World Economy* 28, no. 4 (April 2005): 465-89; and Yin-Wong Cheung, Menzie D. Chinn, and Eiji Fujii, "The Overvaluation of the Renminbi Undervaluation," *Journal of International Money and Finance* 26, no. 5 (September 2007): 762-85.

[3]Ronald McKinnon and Gunther Schnabl, "China: A Stabilizing or Deflationary Influence in East Asia? The Problem of Conflicted Virtue," *Stanford Economics Working Paper*, no. 03007 (Stanford University, 2003), http://www-econ.stanford.edu/faculty/workp/swp03007.pdf (accessed September 26, 2007).

[4]"China Never Yields to Outside Pressure on RMB Exchange Rate: Premier Wen," *Renmin ribao* (People's Daily) (Beijing), May 17, 2005, http://english.people.com.cn/200505/16/eng20050516_185298.html (accessed September 26, 2007).

[5]Xinhua, "China Disclosed the Composition of the Currency Basket, to Which the RMB Exchange Rate References, for the First Time," August 10, 2005, http://news.xinhuanet.com/fortune/2005-08/10/content_3334597.htm (accessed September 26, 2007).

role in pushing the Chinese government to revalue its currency in 2005, China's domestic factors were also of high importance. While economic rationality is an important factor in determining the leadership's policy preferences, the revaluation of the RMB was ultimately a political decision made in complicated internal and external circumstances. The Chinese leadership had to go beyond economic concerns and take key political and social interests into account when making the decision.

With China's strong export momentum and the continuous increase in its trade surpluses, especially in the case of its trade dispute with the United States, the RMB has faced intensive external pressure for further revaluation. The future of the RMB is of major concern to China as well as other Asian and developed countries.

This paper reviews and assesses the policy debates surrounding the reform of China's exchange rate regime in the light of the RMB revaluation. There were two key issues in these debates. The first was whether the RMB was significantly undervalued as a result of China's large trade surplus and foreign exchange reserves. The second concerned the impact of the RMB revaluation on China. This was important in guiding China's decision-making, especially for further reform in the RMB exchange rate system. An initial assessment of the RMB revaluation and its impact enables us to see the major factors involved in China's decision-making process, and helps us understand what might happen to the RMB in the future.

The RMB Revaluation and Equilibrium Exchange Rates

China has faced intense pressure to revalue the RMB in recent years and the situation did not improve even after the new managed floating regime was launched in 2005. The general sentiment that the RMB was undervalued implied that there was an underlying equilibrium level for the RMB exchange rate and that the currency was in a state of disequilibrium.

In the literature, equilibrium exchange rates have been defined in a variety of ways, based on different models.[6] The macroeconomic balance (MB) approach is one of the main established approaches to equilibrium exchange rates. The MB approach defines the equilibrium exchange rate as one that achieves both internal and external balance. The internal balance ensures full employment and maintains domestic economic stability while the external balance provides a sustainable current account and clears the balance of payments. This study of the RMB revaluation employs the MB approach. There are three basic tests that can be used to assess whether a currency's exchange rate is in equilibrium and whether further implied revaluation or devaluation is needed.[7]

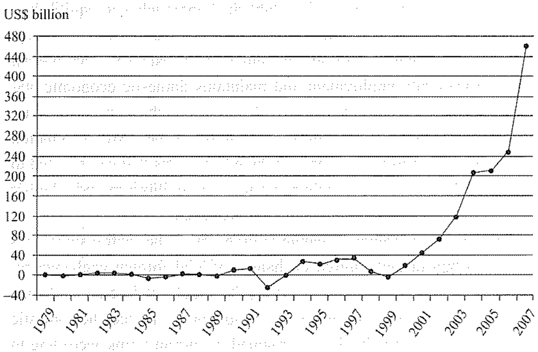
The first is the foreign exchange reserve test. If the central authorities intervene to buy or sell foreign exchange, official foreign exchange reserves will increase or decrease, causing the supply of foreign exchange to be above or below demand at the current spot price. Hence, the domestic currency will be undervalued or overvalued in current terms according to the benchmark implied by the foreign exchange market. The change in foreign exchange reserves signals that the currency's exchange rate is no longer in equilibrium. Despite the fact that the supply of and the demand for foreign exchange could be influenced by temporary factors that have no ultimate effect on the equilibrium, a sustained rise in official foreign exchange reserves can be interpreted as indicative of an appreciation of the currency. Since this test is constrained by capital controls, it is not as relevant to China as it is to those countries with free capital flows.

China's total foreign exchange reserves accumulated very slowly in the early years of reform after 1979, but have increased dramatically since 2001 (see figure 1). This can be read as an indicator of the appreciation of the RMB in recent years. However, this interpretation is constrained by

[6]Rebecca L. Driver and Peter F. Westaway, "Concepts of Equilibrium Exchange Rates," *Bank of England Working Paper*, no. 248 (January 2005).

[7]Jonathan Anderson, "The RMB Peg—Which Way Out," *Asian Economic Perspectives*, UBS Investment Research, June 19, 2003; and Lau and Stiglitz, "China's Alternative to Revaluation."

Figure 1
China's Foreign Exchange Reserve Accumulation 1979-2007



Source: China State Administration of Foreign Exchange, 2008.

capital controls. Since the early years of China's reform and opening-up policy, the regime of capital inflows has gradually been reformed, but China still has strict controls on capital outflows. With further controls on foreign exchange transactions, domestic exporters can retain only a very small part of their foreign exchange earnings; the remainder is held by the PBC in the form of official foreign exchange reserves. China's accumulation of foreign exchange reserves was not only due to the country's trade surpluses but also to the contribution of foreign direct investment (FDI) and speculative capital inflows in expectation of a RMB revaluation. In fact, during the four years from 2001 to 2004, current account surpluses only accounted for 37.3 percent, 47.7 percent, 39.2 percent, and 33.3 percent, respectively, of the total reserve accumulation, with the remainder accounted for by FDI and other capital inflows. The dominant source of the accumulation in 2003 and 2004 was clearly non-FDI capital inflows in response to market expectations concerning the future of the RMB/U.S. dollar exchange rate, rather than changes in underlying fundamentals, as

Table 1
China's Foreign Exchange Reserves – Sources of Accumulation

(U.S. $ billion)	2000	2001	2002	2003	2004	2005	2006
Total reserves, excl. gold	165.6	212.2	286.4	403.3	609.9	818.9	1066.3
Total reserve accumulation, excl. gold	10.9	46.6	74.2	116.9	206.6	209	247.4
Current account balance	20.5	17.4	35.4	45.9	68.7	160.8	253.3
Net FDI flows	37.5	37.4	46.8	47.2	53.1	67.8	56.9
Current account balance (% GDP)	2.9	1.3	2.4	2.8	3.6	7.2	9.5
Total reserve accumulation (% GDP)	1.6	3.8	5.1	7.1	10.7	9.4	9.4

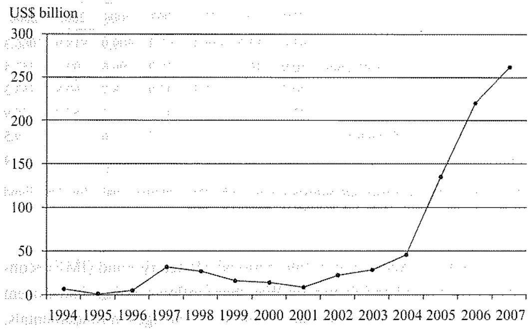
Sources: *International Financial Statistics Yearbook 2007*, International Monetary Fund Publications; and China's National Bureau of Statistics, 2008.

shown in table 1. According to International Monetary Fund (IMF) economists Eswar Prasad and Shang-Jin Wei, these inflows, rather than current account surpluses or FDI flows that would imply changes in fundamentals, were largely responsible for the dramatic surge in foreign exchange reserves after 2001.[8] If this is the case, the recent rapid rise in China's international reserves is less likely to be indicative of fundamental changes that would require a RMB appreciation. However, China's current account surpluses contributed to the majority of the total reserve accumulation in 2005-06 while the share of FDI flows was constant compared to the previous periods (see table 1). Careful interpretation of the implications of these surpluses for RMB revaluation is necessary. The next test will deal with the trade surpluses in detail.

The second test is the trade balance test. The trade balance is defined as the visible balance in the current account balance. The invisible balance, which includes net property income flows, has no direct relationship with the exchange rate, whereas a visible balance that includes exports and imports will be affected by exchange rate movements as they cause expenditure-switching between domestically-produced goods and foreign

[8]Eswar Prasad and Shang-Jin Wei, "The Chinese Approach to Capital Inflows: Patterns and Possible Explanations," *International Monetary Fund Working Paper*, WP/05/79, 2005, http://www.imf.org/external/pubs/ft/wp/2005/wp0579.pdf (accessed September 26, 2007).

Figure 2
China's Trade Balance 1994-2007



Source: China's National Bureau of Statistics, 2008.

imports by altering relative prices between countries. A currency's appreciation reduces the price of imports in terms of domestic currency and increases the price of exports in terms of foreign currency. This tends to increase imports and reduce exports. The equilibrium exchange rate is seen as one that clears the trade balance, which implies that a zero balance maintains an equilibrium level for the exchange rate. If the trade balance is consistently positive, the currency is considered to be undervalued, and if the balance is negative, the currency is overvalued.

The overall trade balance was consistently positive from 1994 to 2007 (see figure 2). This implies an undervaluation of the RMB during that period, with the extent of undervaluation being especially severe in 2005-07. However, the trade balance test is constrained in the case of rapid and large capital flows across countries. The exchange rate can be maintained if the trade deficit is financed by net property income inflows or if the current account deficit is maintained by net capital inflows (as implied by the criterion of external balance). In this case, the exchange rate is also believed to achieve equilibrium. China's trade surpluses could promote strong capital outflows because of its saving surplus over investment unless it keeps to a capital control regime. This would still maintain the stability of the RMB with no implications for its revaluation. However, China's rigid capital control regime has exerted strong pressure in favor of RMB revaluation owing to limited capital outflows. Outward FDI flows that would imply changes in economic fundamentals were limited in this context although short-term capital outflows were mainly sensitive to market expectations of currency movements. Therefore, it is very difficult to assess whether the RMB was undervalued from this perspective because the capital control regime restricted outward FDI flows which could reflect changes in economic fundamentals. If these flows were permitted, it would become very hard for us to see any pressure for the RMB revaluation. Friedrich Wu and Leslie Tang found that there was strong capital flight (illegal capital outflow) from China from 1990 to 1999 even under its capital control regime, which could undermine the argument for a RMB revaluation.[9]

Here, a confusing argument is that U.S. officials attribute their growing trade deficit to an allegedly undervalued RMB. The U.S. trade deficit with China was $162 billion in 2004, or 24 percent of the total U.S. trade deficit, an increase of $38 billion over 2003, when it was already 23 percent of the total U.S. trade deficit. These figures were higher than the United States' direct country-to-country trade deficit with any other country. However, the bilateral trade flows alone cannot determine an equilibrium exchange rate for a country, and hence do not show whether the RMB was undervalued or not. In principle, China could have a trade surplus with one country but a trade deficit with another. The China-U.S. bilateral trade deficits did not mean much for RMB revaluation if overall trade flows to China were taken into account. Chinese economist Liu Zunyi (劉遵義) argued that although China ran a trade surplus with the United States, it had a trade deficit with many East and Southeast Asian economies, in-

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[9]Friedrich Wu and Leslie Tang, "China's Capital Flight, 1990-1999: Estimates and Implications," *Review of Pacific Basin Financial Markets and Policies* 3, no. 1 (March 2000): 59-76.

cluding Japan and the four newly industrialized economies (NIEs), i.e., South Korea, Hong Kong, Singapore, and Taiwan, which were also trading partners of the United States.[10] In addition, China's large trade surplus with the United States was mainly due to the former's comparative advantage in cheap labor, which attracted U.S. and other Asian firms to shift their labor-intensive manufacturing production bases to China in order to maintain cost competitiveness. China's exports to the United States and the European Union stemmed from the re-exporting of large volumes of materials, parts, and substances imported from China's other Asian trading partners such as Japan, South Korea, and many Southeast Asian economies. As one of the world's major manufacturing centers, China has turned "Made in Asia" into "Made in China." It should come as no surprise that China's rapidly increased share of world merchandise exports has been matched closely by a decline in the share of Japan, and to a lesser extent, the Asian NIEs. The World Trade Organization (WTO) statistics show that China's share of world exports rose from 2.8 percent to 5.8 percent between 1993 and 2003, while the shares of Japan and the Asian NIEs fell from 9.6 percent to 6.3 percent and 10 percent to 9.5 percent, respectively.[11] Finally, according to Albert Keidel, given the existence of global trading linkages, a country's world trade surplus—rather than its share of the U.S. trade deficit—is the true measurement of its contribution to global imbalance.[12] In this context, China's global trade surpluses in 2003 and 2004 were only 7 percent and 8 percent, respectively, of the U.S. trade deficits, whereas the surpluses attributable to Japan, the oil exporters, and the European Union combined accounted for more than 60 percent of the U.S.

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[10]"Expert Said the RMB Should Not Be Appreciated, the Exchange Rate Retaliation from the U.S. is Unreasonable," *Ershiyi shiji jingji baodao* (Twenty-First Century Business Herald) (Guangzhou), April 20, 2005, http://www.e-economic.com/info/1984-1.htm (accessed September 26, 2007).

[11]James Lanrenceson and Fengming Qin, "China's Exchange Rate Debate," *East Asia Economic Research Group Discussion Paper*, no. 1 (2005), http://www.uq.edu.au/economics/eaerg/dp/A0105.pdf (accessed September 26, 2007).

[12]Albert Keidel, "China's Currency: Not the Problem," *Carnegie Endowment Policy Brief*, no. 39 (June 2005), http://www.carnegieendowment.org/files/PB39.Keidel.FINAL.pdf (accessed September 26, 2007).

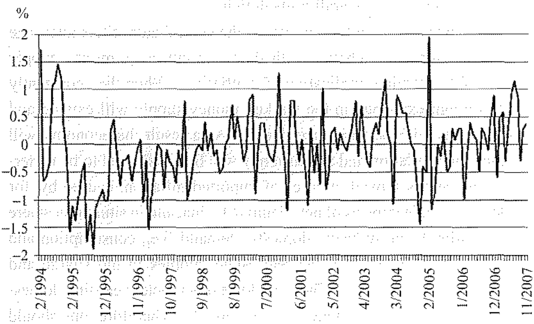
trade deficits. Therefore, regardless of the source of the U.S. trade deficits with China, a revaluation of the RMB, even a big one, would be of little help in reducing the U.S. overall trade deficit.

The third test is the inflation test. If the central authorities intervene to buy or sell foreign exchange with domestic currency, money supply will rise or fall, carrying implications for inflation. When they constantly purchase foreign exchange in the market, money supply will expand and domestic prices will increase accordingly. As a result the economy will experience high inflation and the currency will be considered to be undervalued. This test is flawed in cases of imported inflation, caused by, for example, large-scale imports of petroleum to China, and in situations where inflation is stimulated by heavy domestic demand (i.e., consumption and investment), as is apparent in the real estate bubbles in most large and medium-sized cities in China. There could be other factors causing domestic inflation apart from exchange rate movements. Therefore, one should be cautious in interpreting inflation as a sign of the disequilibrium of the exchange rate.

Inflation is modest in China, as indicated by the movement of percentage changes in China's consumer price index (CPI) within a band of -2 percent to +2 percent from 1994 to 2007 (see figure 3). This could be the combined effect of continuous, mixed macroeconomic policies aimed at smoothing economic fluctuations induced by external factors (i.e., issues related to the RMB exchange rate) as well as internal factors, which do not help us assess whether the RMB was undervalued. Morris Goldstein and Nicholas Lardy argued that industrial goods prices—an appropriate measure of inflation for China as they are free of the price controls that moderate reported CPI inflation—rose by more than 6 percent in 2004 compared with 2 percent in 2003, and there was slight deflation before that.[13] On the inflation front, the evidence was far from benign in the 2005-07 period and there was clearly a trend toward growth in inflation over the two years (see figure 3). However, this interpretation is still con-

[13]Morris Goldstein and Nicholas Lardy, "China Thwarts External Adjustment by Keeping Nominal Exchange Rate of the Renminbi Fixed," *Financial Times*, April 27, 2005.

Figure 3
China's CPI-Based Inflation 1994-2007



Source: China's National Bureau of Statistics, 2008.

strained in the case of inflation that is induced by other factors rather than exchange rate fluctuations.

Recent research estimating the equilibrium RMB exchange rate indicates that the RMB was undervalued in most cases, but estimates of the extent of undervaluation range from 10 percent to 50 percent before July 2005, when the new regime was launched. Morris Goldstein suggested a revaluation of 15 percent to 30 percent for the RMB against the U.S. dollar based on the data of China's balance of payments and from the viewpoint of global payment imbalances.[14] Michael Funke and Jorg Rahn estimated a peak undervaluation of the RMB of around 15 percent against the U.S. dollar in 2001, but they also argued that there was no evidence of the RMB being substantially undervalued between January 1985 and April 2002.[15] Jeffrey Frankel used the Purchasing Power Parity (PPP) model and es-

[14]Goldstein, "Adjusting China's Exchange Rate Policies."

[15]Funke and Rahn, "Just How Undervalued?" 465-89.

timated a 36 percent undervaluation of the RMB against the U.S. dollar in 2000, based on a cross-country regression of 118 countries.[16] Virginie Coudert and Cécile Couharde applied the models of Behavioral Equilibrium Exchange Rate (BEER) and Fundamental Equilibrium Exchange Rate (FEER) in their study and found that the RMB was undervalued against the U.S. dollar by 18 percent in 2002 (BEER case) and by 44 percent in 2003 (FEER case).[17] However, Cheung, Chinn, and Fujii employed a framework around the relationship between relative price and relative output levels, based upon conventional statistical methods of inference, and argued that the RMB appeared to be substantially undervalued, but not by a statistically significant margin.[18] According to their study, once sampling uncertainty and serial correlation were accounted for, there was little strong evidence for RMB undervaluation over the 1975-2004 period. In this literature, the significance and magnitude of the misalignment of the RMB from the equilibrium depends on the assumptions that researchers made in their models and their approaches to estimation. Although there was no consensus on this issue, the debate continued to create a strong push for the RMB's further revaluation.

Impacts of the RMB Revaluation on China

In 2004, in response to the international debate, Chinese Premier Wen Jiabao announced that China would further advance its reform and forge a more flexible mechanism which would adapt to changes in market supply and demand. He recognized that this reform would be a systematic project involving many aspects.[19] During the course of this reform, the Chinese

[16]Frankel, "On the Renminbi."

[17]Virginie Coudert and Cécile Couharde, "Real Equilibrium Exchange Rate in China," *CEPII Working Paper* 2005-01 (January 2005).

[18]Cheung, Chinn, and Fujii, "The Overvaluation of Renminbi Undervaluation," 762-85.

[19]Xinhua, "China to Improve RMB Exchange Rate System," September 29, 2004, http://www.chinadaily.com.cn/english/doc/2004-09/29/content_378700.htm (accessed September 26, 2007).

authorities would have to take into account numerous factors, including China's macroeconomic performance, social development, international income and expenditure, the progress of banking reform, economic growth, employment, the level of financial regulation, resilience of enterprises and the effect on foreign trade, as well as the global economic and financial situations. Later, Wen also added that China would have to uphold the principles of independent initiative, controllability, and gradual progress while carrying out reforms of the RMB exchange rate and moving toward a more market-oriented and flexible regime.[20]

The decisions of China's policymakers are not influenced solely by external constraints, as the Chinese government follows the principle of independence, taking into account domestic interests. The 2.1 percent initial appreciation on July 21, 2005, may be seen as the result of a comprehensive weighing of the pros and cons of an appreciation, and its impact on China's economic, social, and political interests. The fear of negative consequences resulting from any rapid changes in China's exchange rate regime has led the Chinese leaders to favor a gradualist approach.

Exports

The Chinese authorities were concerned about the possibility that the RMB's revaluation would have an adverse impact on China's exports and hence on economic growth, based on observations of Japan's experiences in the mid-1980s. In 1985, in order to suppress Japanese exports, the United States and some other major industrialized countries forced Japan to sign the Plaza Accord through which the Yen was revalued by 30 percent. This accord was considered to be one reason for Japan's subsequent economic recession in the 1990s. After the initial revaluation of the Yen, Japan's export industry lost almost all of its price competitive advantage and it had to move its manufacturing bases to other East Asian countries. The Japanese economy, which was at its peak, lost its international com-

[20]"Premier Wen on Principles for RMB Exchange Rate Reform," *Renmin ribao*, June 27, 2005, http://english.people.com.cn/200506/27/eng20050627_192511.html (accessed September 26, 2007).

petitiveness and entered the "lost decade."

It was possible that the revaluation of the RMB would have a negative impact on China's exports, increasing prices in terms of foreign currency and thereby reducing foreign demand. Because of Chinese exporters' narrow profit margins, it would put more pressure on them to adjust their production to ensure their survival in the more competitive international market. Yu Yongding (余永定) argued that since China's export industries are, for the most part, engaged in processing trade, and such manufacturers are very adaptable, China's trade situation would not be fundamentally affected if the value of the RMB rose by a small margin.[21] However, the continued appreciation of the RMB since July 2005, when China abandoned its currency peg to the U.S. dollar, could seriously challenge this adaptability. Although the slow pace of the gradual RMB appreciation provided some scope for exporters to adjust to the changes, the large extent of the RMB appreciation to date has reduced their possibility for survival.

The RMB revaluation could also have a positive impact on the quality of China's exports because the competitive pressure may increase incentives for manufacturers to upgrade their production and enhance their efficiency. Yu Yongding believes that the RMB appreciation could force some inefficient exporters to exit from the industry and ease the vicious competition in international markets. The reconstruction of the trade sector would allow efficient exporters to survive and the quality of their future exports would therefore improve. As a result, combined with the improvement in the terms of trade, China's trade surplus would increase. In addition, Chinese companies would be motivated to develop their competitiveness by advancing operational efficiency and not relying solely on cheap labor.

In brief, the revaluation would have a short-term negative impact on China's exports. However, this is likely to optimize China's trading

[21] "What If the RMB Chooses Appreciation," *Ershiyi shiji jingji baodao*, December 29, 2004, http://www.nanfangdaily.com.cn/southnews/zt/2004nztk/jj/jr/200412290065.htm (accessed September 26, 2007). Yu Yongding is an economist at the Institute of World Economics and Politics, Chinese Academy of Social Sciences.

structure, reduce its processing trade, improve technology, and relocate resources to the non-trade sectors in the long run. This could further advance the development of the service sector and promote domestic demand in support of China's economic growth, diminishing the heavy reliance on external demand.

Foreign Investment

Foreign investment remains important for China's economic development, as it has made a large contribution to the success of China's reform and opening-up policy by promoting economic growth. The impact of the RMB revaluation on foreign investment is also of concern to the Chinese authorities. It appears paradoxical: on the one hand revaluation increases investment costs for foreign firms and so discourages foreign investment, while on the other it enhances their profits by increasing revenue. The impact is likely to be neutral, given other factors.

However, the two factors most appealing to foreign investors are China's potentially huge market and cheap labor. Labor costs in China continue to remain low compared with other countries, and this contributes to China's strong international competitiveness. For this reason, in combination with lower prices for imported raw materials, the RMB revaluation is hardly likely to change the price competitive advantage of foreign-funded firms in the international market. The average profit margin of multinational companies in China is around 13 percent, thus the modest degree of the RMB's annual appreciation against the U.S. dollar (3.2 percent in 2006 and 6.5 percent in 2007) is hardly likely to affect foreign investment decisions to a large extent. One main type of foreign capital inflow is FDI, and its driving force is China's potentially huge market. A revaluation of the RMB would have a minuscule effect on this type of inflow.

Another main type of foreign capital inflow is speculative money. The RMB revaluation directly rewarded the speculators behind that inflow dating from before July 21, 2005, and will motivate further speculative inflows, which could satisfy the self-fulfilled cyclical expectations of the RMB revaluation. In addition, most of the hot money was believed to have entered the real estate sector or other domestic investment sectors, which caused domestic prices to rise rapidly and led the economy to overheat. The economist Liu Manping (劉滿平) estimated that over US$70 billion of speculative money was channeled into the real estate market in 2004 and this figure was set to be much higher in 2005.[22] Foreign direct investment in China's real estate market was permitted in 2002. From then on, foreign investors focused on the prosperous real estate market in China's big cities and reaped enormous profits, as seen from the extremely high-priced property deals struck by Macquarie Bank, Goldman Sachs, and Morgan Stanley in Shanghai in 2005. Consequently, in the short term, the RMB revaluation would mainly influence the high-quality real estate markets in big cities and, to a much lesser extent, affect the transaction decisions in the medium- and low-quality markets.

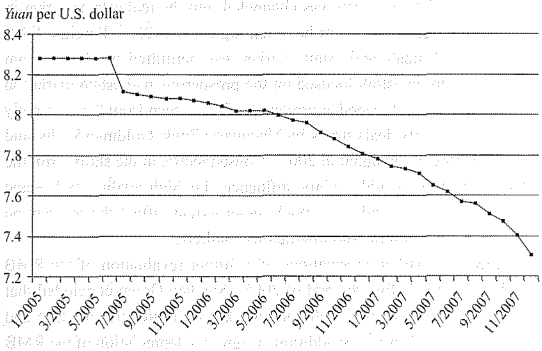
However, market expectations of a further revaluation of the RMB tended to weaken before the end of 2005. Stephen Green concluded that higher U.S. interest rates in 2005 and weaker local property markets had reduced capital inflows.[23] In addition, a sign of a depreciation of the RMB in the medium term, in response to changes in economic fundamentals, was implied in an official report by Xia Bin (夏斌) and Chen Daofu (陳道富), published on December 15, 2005.[24] The report indicated that China had a gap of over RMB 2,000 billion in social security funds, over RMB 1,000 billion of non-performing loans (NPLs) in state-owned banks, and enormous local government debts. The RMB's transaction data also showed that the appreciation had been slowing down in the market, as illustrated by figure 4. Just after the initial move in July 2005, there was a strong market force pushing up the RMB. Beginning from September 2005, the RMB's upward trend softened and by the end of the year it had stabilized. Never-

[22]Liu Manping, "After the RMB Appreciation What Will Be the Impacts of Foreign Capital on the Chinese Real Estate Markets?" *Zhongguo jingji ribao* (Chinese Economic Times) (Beijing), August 22, 2005.

[23]"China's Foreign Exchange Reserves Soar to $819bn," *Financial Times*, January 16, 2006, http://news.ft.com/cms/s/f9d7a456-85fe-11da-bee0-0000779e2340.html (accessed September 26, 2007). Stephen Green is an economist at Standard Chartered in Shanghai.

[24]Xia Bin and Chen Daofu, "Zhongguo huilu zhidu baogao 2005" (Report on China's exchange rate system 2005), *Diyi caijing ribao* (China Business News) (Shanghai), December 15, 2005.

Figure 4
The RMB Transaction Middle Rates 2005-2007



Source: China State Administration of Foreign Exchange, 2008.

theless, these data in 2006-07 indicated market expectations of the RMB's continued appreciation although the possibility of another one-off revaluation was very low. The RMB then began to appreciate against the U.S. dollar much faster than before.

Employment

The Chinese government also feared that shrinkage in the export sector would worsen the employment situation, as seen in Zhejiang Province (浙江省), where most of the textile export companies were located, during the period when the United States and the European Union cut their import quotas for textile products from China. However, if the RMB revaluation induces a reconstruction of the export sector, that could improve the efficiency of the sector and the quality of its future exports. External demand for exports would then increase in the future. A period of high unemployment could be a short-term economic phenomenon in China's transitional process. Improved efficiencies and demand in the export sector would boost future employment and income. Yu Yongding also suggested that the improvement of investment efficiency based on or gained from a fall in the trade surplus would boost economic development and improve employment in the future. The example of economic prosperity in the United States in the late 1990s seems to support that argument.

To ease possible unemployment problems, the Chinese government may have to maintain continuous economic growth at a high rate, which could have implications for the RMB's gradual appreciation. Liu Wei (劉偉) estimated that every 1 percent growth in GDP could provide 1.7 million employment opportunities in China.[25] He suggested that in this context, China should continue the gradualist policy of sustaining a stable RMB exchange rate in order to promote economic growth and employment.

Agricultural Sector

Chinese leaders have prioritized rural issues in their policies and closely scrutinized the impact of the RMB's revaluation on the agricultural sector, seeking to avoid unexpected shocks that would risk China's economic growth and social stability. China's agricultural sector has not yet been industrialized, and its products have no competitive advantage in international markets. The majority of these products are consumed domestically and most are not highly commercialized. If the RMB substantially gains in value, the prices of agricultural products on the international market in terms of RMB will be dragged down and domestic demand for imports of agricultural products will increase. Hence, the demand for domestic agricultural products will decrease and their prices will decline. The agricultural sector, that supports 60 percent of the Chinese population, would thus be further weakened. One Chinese economist, Tao Dong (陶冬), advised in 2005 that China should stick to its current strategy of

[25]Liu Wei, "The Exchange Rate Adjustment Should be Based on the Judgment of Major Domestic Contradiction," China Center for National Accounting and Economic Growth, Peking University, 2003, http://www.nepku.com/read.asp? id=461 (accessed September 26, 2007). Liu Wei is an economist at the China Center for National Accounting and Economic Growth, Peking University.

gradual RMB appreciation in order to maintain rural incomes, social stability, and security.[26]

The Prospects for Further RMB Revaluation

In Premier Wen Jiabao's view, exchange rate reform should be directed at gradually establishing a market-based and well-managed floating exchange rate system and keeping the RMB exchange rate basically stable at a reasonable and balanced level.[27] Without doubt, China must continue to advance the exchange rate reform following the principles of independent initiative, controllability, and gradual process. However, any change will be targeted at maintaining the development and stability of China's economy and financial system. Wen has recognized that China needs to intensify exchange rate reform and improve services in relevant fields, including improving the foreign exchange market and providing more financial services to enterprises to allow risk management, improving the adjustment mechanism of the RMB exchange rate, and intensifying supervision of cross-country capital flows to ensure the smooth operation of the new exchange rate mechanism. Li Deshui (李德水), a member of the Monetary Policy Committee of the PBC, has indicated that China will not allow the free float of the RMB within the next five years due to its fragile financial markets.

Given its likely negative impact on the Chinese economy, a large-scale revaluation of the RMB would not be in the interests of China, whereas a gradual adjustment of the currency could be beneficial. Tao Dong has pointed out that large-scale and rapid appreciation of the RMB would hurt not only Chinese exporters but also foreign consumers.[28] In

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[26]Tao Dong, "There Will Be Further RMB Appreciation in the Coming Two Years, USD/RMB Could Be 1:5 in Ten Years," *Xin caifu* (New Fortune), August 15, 2005.

[27]Xinhua, "Wen: RMB Exchange Rate Reform Gradual Process," October 14, 2005, http://news.xinhuanet.com/english/2005-10/14/content_3617557.htm (accessed September 26, 2007).

[28]"The U.S. Trade Deficit with China Continues to Enlarge, Urging on Appreciation In-

his opinion, enlarging the floating range of the RMB and further appreciating the RMB are two different concepts. The former depends on short-term trading volume whereas the latter reflects changes in the long-term macroeconomic fundamentals. Tao believes that adjustment in the value of the RMB should follow a gradual and cautious process, in view of its impact on the national economy and people's livelihoods, especially employment.

Since its appreciation in July 2005, the RMB has continued to face pressure to revalue due to China's large current account surpluses and rapid accumulation of foreign exchange reserves. In 2007, China's trade surplus increased to US$262.2 billion and foreign exchange reserves reached US$1,528.2 billion. In particular, due to the abrupt and rapid rise in the value of the reserves, the issue of managing excessive reserves has become a focus of China's exchange rate policy in recent years.

Since 2004, the fastest-growing source of foreign exchange reserves for China has been "credit transactions"—U.S. dollar offshore borrowings by Chinese companies and foreign banks that are converted to RMB in China.[29] Such borrowings are driven as much by speculation in view of a possible revaluation of the RMB as by opportunities to invest in China's surging economy. In 2005, the Chinese government tightened controls on offshore borrowing, especially by foreign banks.

Strong inflows will maintain the pressure on China to make the RMB more flexible and responsive to market forces while also focusing attention on how China invests its stockpile of foreign exchange reserves. In the light of this, the Chinese authorities focused their exchange rate policy on the following three areas in 2006: first, keeping the exchange rate level of the RMB stable and smooth, while allowing for a notable increase in flexibility; second, promoting the balance of international payments; and third, managing China's large foreign exchange reserves to maintain the effec-

creases Again," *Jingji zoushi genzong* (The Pursuit of Economic Trends) (Beijing), no. 87 (November 15, 2005).

[29]See note 21 above.

tive functioning of monetary policy.[30]

Excess foreign exchange reserves may cause difficulties with foreign asset management and foreign wealth shrink for China, owing to the RMB's continuous appreciation. Zhang Bin (張斌) has suggested that reversing the trend of rapid growth in international reserves should be the priority of China's reserve management.[31] Useful methods of doing this include boosting domestic demand, modernizing the financial system, reducing the need for saving, and allowing the RMB to appreciate. In the long run, optimizing the economic structure would be the key to addressing the issue.

China's foreign exchange regulator—the State Administration for Foreign Exchange (SAFE)—indicated on January 6, 2006, that it would begin to diversify its rapidly growing foreign exchange reserves away from the U.S. dollar and government bonds. A shift of this kind would have significant implications for global financial and commodity markets.[32] SAFE announced that it intended to optimize the currency and asset structure of China's foreign exchange reserves to actively boost investment returns. This new move was consistent with the Chinese government's objective of managing its international reserves to effectively support the national strategy of creating an open economy and carrying out macroeconomic adjustment.

According to Xia Bin and Chen Daofu, the process of advancing China's exchange rate policy in the following two years could be described as "observable and adaptable."[33] The central bank was able to maintain

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[30]Xinhua, "Statistical Data Shows That up to the End of Last Year Official Foreign Reserve Balance Reached $818.9bn," January 15, 2006, http://news.xinhuanet.com/fortune/2006-01/15/content_4053666.htm (accessed September 26, 2007).

[31]Xinhua, "The Accumulation of Foreign Reserves Increased Again at the Year, Expert: $7.4bn is Suspected to Be Hot Money," January 16, 2006, http://news.xinhuanet.com/fortune/2006-01/16/content_4057667.htm (accessed September 26, 2007). Zhang Bin is an economist at the Institute of World Economics and Politics, Chinese Academy of Social Sciences.

[32]"Questions Grow over China's Foreign Exchange Strategy," *Financial Times*, January 6, 2006, http://news.ft.com/cms/s/5413c5d6-7ee7-11da-a6a2-0000779e2340.html (accessed September 26, 2007).

[33]See note 24 above.

the stability of the RMB exchange rate within a small band of fluctuation, even though the RMB appreciated to a small degree. This showed that in the medium and long term, it was still possible that the RMB might depreciate, depending on China's economic reform process and international financial circumstances. With a minor 2.1 percent revaluation of the RMB against the U.S. dollar and a further modest appreciation since then, the PBC demonstrated that it was able to stick to its own policy while managing internal and external pressures.

In recent decades, China has benefited enormously by adopting a gradualist approach to reform, be it in the economic or political realm. China is likely to continue to reform its exchange rate in a gradual manner. While external pressure for reform is frequently high, China's capacity to resist such pressure is also strengthened by its growing economy. It is in China's own interests to reform the exchange rate, and China is likely to do this according to its own plan. External factors will certainly be important when formulating this plan, due to the fact that China is now an important part of the global economy. Nevertheless, what matters more is the Chinese leadership's perception of domestic priorities and its ability to cope with urgent domestic problems. This is what Wen Jiabao meant when he repeatedly emphasized that exchange rate reform is a part of China's "sovereignty."

Radical reforms are unlikely, but it is reasonable to expect that the transparency of operations under the new exchange rate regime will increase and the band within which the RMB fluctuates will widen over time. A flexible exchange rate regime is China's long-term objective and such a regime will serve China's future economic development. However, it will take a long time for the Chinese government to achieve this target if, as expected, it continues its gradualist approach.

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