China's Exchange Rate Policy and Bilateral Trade Surplus with the US

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ABSTRACT: China's exchange rate policy has been involved in a hot debate in recent years. Most economists believe that Chinese currency, Renminbi (RMB), has been significantly undervalued. Since the bilateral trade between China and the US has been increasing dramatically over years, US officials blame that China is unfairly benefiting from the trade surplus partly by fixing the exchange rate. This paper reviews the exchange rate policy debate and examines the impacts of the real exchange rate between the RMB and the US dollar on the bilateral trade between the two countries.
KEYWORD: Exchange rate policy; Trade imbalance; RMB

1 INTRODUCTION

As is well known, China maintained a fixed exchange rate of the Chinese currency (RMB) against the US dollar from 1994 to 2005, during which it experienced a long and steady economic growth, and gained a dramatically increasing international trade surplus. In recent years, the US and other countries expressed, with considerable concern, the view that RMB is seriously undervalued and China is unfairly gaining the trade advantage of it. Most economists believed that RMB is undervalued by 15 to 25 percent [1-3]. It is also commonly believed that an appreciation of the RMB would help reduce the imbalance of the bilateral trade proportionally, and a more flexible exchange rate regime would be consistent with China's self-interest and, in turn, the best interest of the global market [4]. Under such circumstances, Chinese government decided to appreciate the value of the RMB by 2.1 percent on July 21, 2005, and promised to let it float to a basket of currencies in the future [5]. However, the 2.1 percent appreciation is much smaller than the expectation and the tension of revaluing the RMB remains high.

2 DEBATE ON THE EXCHANGE RATE POLICY

The debate on China's exchange rate policy has two key issues: whether the RMB has been significantly undervalued, and whether China would benefit from having a more flexible exchange rate regime.

Claims that the RMB is undervalued are based on a number of factors including international price comparison, US trade deficits with China, and the China's increasing foreign exchange reserves [6]. For instance, in Chang 2004 paper, the authors built a model based on the principle of purchasing power parity (PPP) to conduct a quantitative estimation, which shows that the RMB was undervalued by 20.1%, 23.2%, and 22.5% in 2001, 2002, and 2003, respectively. However, PPP standards tend to overestimate the value of the currencies of low per-capita-income countries like China. For example, the Big Mac index, a popular example of the principles of PPP, is probably not an appropriate guide for currency valuation. According to the *Economist* survey, the average price of a Big Mac in four US cities was $2.71 in April 2003, while the average price was $1.20 in China at the same time. Then the exchange rate between the RMB and the US dollar should have been 3.65 RMB to one dollar, based on the Big Mac index, which implies that the RMB was undervalued by more than 50 percent in 2003, given that the actual exchange rate was 8.28 RMB to one dollar. In Yang 2004 paper, the authors pointed out: "It is interesting to note that the reference for the Big Mac index varies significantly even within the United States. The 1989 Economist survey found that the price of a Big Mac in Manhattan ($2.48) was 23 percent higher than the average price for other US cities ($2.02). Put another way, using the Big Mac standard, the average dollar for the four US cities was undervalued by about 18.5 percent against the 'Manhattan' dollar." While it is not an appropriate guide for currency valuation, policy makers and

business executives have used them to support their claim that China's currency is undervalued. The US government officials have responded to such claim by exerting pressure on China to revalue its currency.

On the other hand, claims that China would benefit from having a more flexible exchange rate regime are based on two assumptions: first, what is beneficial for China is a relatively stable exchange rate in effective terms, but not necessarily in terms of its exchange rate against any particular currency; second, had the RMB exchange rate fluctuated more against the US dollar, its effective exchange rate would have been more stable than it actually was [7]. Although the result from the comparative static macroeconomic model in Robert 2003 paper favors this claim, some economists strongly disagree with it, because international data do not suggest that flexible exchange rate regimes outperform fixed regimes in term of macroeconomic stability. If fact, the data speak convincingly the opposite [8]. In the study of this issue, Ghosh [9] pointed out that pegged exchange rates are associated with significantly better inflation performance (lower inflation and less variability). If China was looking for policy inspiration from its neighbors, the Japanese experience would be the one that stands out. Today's American mercantile pressure on China to float the RMB exchange rate is quite similar to the American pressure on Japan 30 year ago. The Japanese currency exchange rate went from 360 yen to one dollar in 1971 to 80 yen to one dollar in 1995. A more flexible yen in 1980s did nothing to promote macroeconomic stability or steel the Japanese economy against speculative activities. The bubble economy of the late 1980s in Japan was followed by a deflationary slump and zero-interest liquidity trap in the 1990s [10]. Another example may be helpful to show that the exchange rate stability can help anchor the domestic price level. During the Asian financial crisis that started in Thailand in 1997, major currencies throughout the region depreciated sharply against the US dollar. The RMB was under huge pressure to devalue to maintain price competitiveness in the world market. Yet the RMB remained unchanged and proved to be a pillar for stability in the international monetary system, a stance that won appreciation by China's neighbors and the policy makers in the US and international financial institutions [6]. This reminds us credibility is the key issue. As Nobel Prize laureate Mundell once pointed out, we do not see any speculative capital movements within countries where the exchange rate domestically is entirely credible. If a peg is credible, speculations will in fact be discouraged [11]. Besides, W. L. Chou, a professor in economics at the Chinese University of Hong Kong, analyzed the quarterly data for the time period from the first quarter of 1981 to the fourth quarter of 1996 [12]. In his paper, he employed the conditional variance of the real effective exchange rate index from autoregressive conditional heteroscedastic (ARCH) models to proxy the exchange rate variability, and showed that exchange rate variability has a long-run negative impact on the China's exports.

3 EXCHANGE RATE REGIME AND TRADE IMBALANCE

The US is the most important trading partner of China, and China is one of the major trading partners of the US. In 2004, the share of the US market in the Chinese exports was 22.8 percent, and the share of the Chinese market in the US exports was 4.31 percent, which was fifth biggest among all trading partners of the US. China has gained a steadily growing bilateral trade surplus with the US over a decade, and the surplus reached $164 billion in 2004 [13].

US government officials assert that the high rate unemployment in the US manufacturing sector and huge trade deficit with China are partly due to the artificially devalued RMB exchange rate. Therefore, they keep exerting pressure on China to revalue or float the currency. They further suggest imposing a special tariff to raise the price of Chinese exporting goods in US markets [14]. They believe it would help balance the bilateral trade with China.

SaangJoon Baak, a professor from Waseda University, analyzed the quarterly data covering the time period from the first quarter of 1986 to the fourth quarter of 2003, showed significant long-run impact of the real exchange rate between the RMB and the US dollar on the bilateral trade between the two countries [15]. The empirical test results showed that one percent depreciation of the RMB against the US dollar raises the China's exports to the US by 1.07 percent, and one percent depreciation of the US dollar against the RMB raises the US exports to China by 0.39 percent. This means if other factors such as the values of other currencies, the domestic economic activities, and exchange rate volatility remained unchanged, one percent appreciation of the RMB would reduce China's trade surplus with the US by 1.46 percent.

However, since China only accounts for about 10 percent of US total trade, a revaluation of the RMB would do little to reduce the US trade deficit overall, i.e., even if China appreciated the RMB for 20 percent, it would only reduce the US trade deficit by about 3 percent. In fact, as McKinnon pointed out, "the relatively high-saving East Asia countries are virtually forced to run export surplus in order to lend their 'surplus' saving to the US, no matter what the exchange rate regime is."[16] The US saving rate is relatively low compared to that of China and other

East Asia countries, yet its need for capital and its opportunities for the productive use of capital are greater than those countries. Therefore, the US must borrow from abroad in order to finance its preferred level of consumption, investment, and federal budget deficit. It is a core principle of economic analysis of international trade that a country which is a net importer of capital from abroad must also be a net importer of foreign goods. Consequently, so long as the US borrows from abroad, it will continue to have a balance of trade deficit and an overvalued currency. If the RMB appreciated substantially, imports from China and the flow of loan from China would decline. However, unless the US reduced correspondingly its level of international borrowing, other countries would eventually replace China as major source of goods, services, and borrowed funds [17].

4 CONCLUSION

Many people are concerned that China's currency is undervalued and that this injuries the US economy, especially the manufacturing sector. The Chinese authorities claim they have not fixed the exchange rate of the RMB against the US dollar for gaining trade advantage. They announced a new exchange rate regime in July 2005, yet no significant changes appeared on the value of the RMB. Some economists believe that exchange rate stability has a positive effect on China's economy in the long-run, which in turn is beneficial to the global economy. And the essential way to reduce the US trade deficit is to increase the domestic saving rate.

REFERENCES

[1] Goldstein, M. and N. Lardy (2003). A modest proposal for China's renminbi. Financial Time, August 26, 2003.

[2] Chang, G. H. and Q. Shao (2004). How much is the Chinese currency undervalued? Aquantitative estimation. China Economic Review 15: 366-371.

[3] Zhang, F. and Z. Pan (2004). Determination of China's long-run nominal exchange rate and official intervention. *China Economic Review* 15: 360-365.

[4] Roberts, I. and R. Tyers (2003). China's exchange rate policy: the case for greater flexibility. Asian Economic Journal 17(2): 155-184.

[5] People's Bank of China (2005). Public announcement of the People's Bank of China on reforming the RMB exchange rate regime. July 21, 2005

[6] Yang, J., H. Yin, and H. He (2004). The Chinese currency: background and current debate. Working Paper. School of Business, George Washington University.

[7] Otani, I. (2005). On China's exchange rate flexibility and stability: The more flexible against the U.S. dollar, the more stable in effective terms. China & World Economy, 17(6): 3-9.

[8] Laurenceson, J. and F. Qin (2005). China's exchange rate debate. Working Paper. School of Economics, University of Queensland.

[9] Ghosh, A. R., A. Gulde, J. D. Ostry, and H. Wolf (1996). Does the exchange rate regime matter for inflation and growth? Economic Issues 2, International Monetary Fund.

[10] McKinnon, R. (2006). China's exchange rate appreciation in the light of the earlier Japanese experience. Working Paper No. 272. Stanford University.

[11] Mundell, R. (2003). Prospects for an Asian currency area. Journal of Asian Economics, 14(1): 1-10.

[12] Chou, W. L. (2000). Exchange rate variability and China's exports. Journal of Comparative Economics, 28(1): 61-79.

[13] Lum, T. and D. Nanto (2005). China's trade with the United States and the world. CRS Report for Congress, Order Code RL31403.

[14] Holtz-Eakin, D. (2003). The Chinese exchange rate and U.S. manufacturing employment. CBO Testimony before the Committee on Ways and Means U.S. House of Representatives.

[15] Baak, S. (2005). The bilateral real exchange rate and trade between China and the US. Working Paper. Waseda University.

[16] McKinnon, R. and G. Schnabl (2004). The East Asian dollar standard, fear of floating, and original sin. Review of Development Economics, 8(3): 331-360.

[17] Sanford, J. (2005). China's currency: brief overview of U.S. options. CRS Report for Congress, Order Code RS22338.