

Revisiting the Renminbi's Manipulation

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Abstract

This study seeks to evaluate the economic and political landscape surrounding China's contentious international currency valuation and its release from its peg to the USD in 2005. Additionally, we provide an opinion on what we believe would have been the best solution to this issue. We examine both domestic and global repercussions of China's exchange rate policies using economic theory and market data to shed light upon questions such as: how are exchange rates determined, how are countries able to manipulate rates for domestic benefit, and most importantly whether a free market approach should be adopted to revalue the Chinese renminbi. We find that, once the current domestic economic environment is accounted for alongside brewing future trade trends, there was a strong case for China to adopt a basket pegged currency valuation from a position of mutual domestic and international benefit.

Introduction

Throughout the last decade, China's currency, the renminbi, has been at the heart of political controversy between China and its international trade partners. In particular, this feud has primarily stemmed from the U.S., whereby, China's government has been continually accused of manipulating its exchange rate in order to maintain artificially cheaper exports.

As such, the international stage has begun to question whether command economy exchange rate controls are primarily an unfair tool within international competition. It is perhaps no surprise that since the U.S have ultimately suffered thousands of jobs losses through the shifting tides of ever changing industry demands towards China's cheap products, that the political landscape in the U.S has cemented itself to a fierce free-market stance. However, Chinese officials continually responded indicating that these attacks were unjustified. They, in turn, claimed that the renminbi was not undervalued, at least not significantly from China's view, and its monetary control measures were instead aimed to stabilize the economic environment.

With no clear agreement in sight, this debate deeply intensified between the years 2005-2007 and notably evidenced by the US-China trade deficit exceeding \$200 billion in the USA. This paper seeks to assess the socioeconomic and political problems surrounding this issue by answering different questions, not exclusive to, what were the main argument on both sides, what was the position of less involved countries or corporations, what was the impact of the balance of payment in determining the exchange rate, what would have been the potential implications of a big revaluation of the currency in China, and what, if any, were the possible alternative situations at the time.

Exchange Rates: Background

Exchange rates play an essential role in both global and domestic economies through their direct influence on international trade. The common belief that a strong domestic currency is optimal is a common fallacy. Fundamental economic supply and demand theory explains how a weak domestic currency contrastingly exhibits a high demand on the international market due to its comparatively high foreign purchasing power. An influx of demand for a weak currency is inductive of increased demand for weak currency denominated goods and therefore an increase in a domestic countries exports, which in turn drives a stronger domestic economy. On the other hand, strong exchange rates hold the opposite effects and weaken its international demand which decreases export demand and therefore weakens the economy.

Since countries are primarily self-interested through their policies in an effort to principally benefit their domestic constituents, it perhaps comes as no surprise that some countries would seek the means to consistently capitalize on the effects of a domestically beneficial currency exchange rate. As such, some countries attempt to 'peg' rates such that they are not allowed to float and be exchanged at the free market demand and supply equilibrium, but instead are fixed at specific foreign currency levels. By controlling their exchange rate and establishing capital controls, a country is able to artificially lower rates and stimulate its economy through increased foreign demand. In addition, when a country has a very volatile domestic currency, as in the case of many African countries, it may decide to 'peg' a local currency to a more stable one (such as the USD), thus alleviating the currency risk and ultimately stabilizing both the local currency and economy.

Following from the above reasoning, we start to unveil some China's potential desire to artificially devalue its currency. Such devaluation could theoretically propagate tremendous economic growth and bolster both long-term infrastructure and welfare for the country.

International Tension

During the late 1990s and early 2000s, the USA, alongside several other western economies, consistently insisted that the renminbi was undervalued and called for immediate revaluation. Their claims were predominantly grounded amongst two dominant arguments:

Firstly, they pointed out concern over the notable trade deficit. Despite different calculation discrepancies, which were clearly an issue, U.S. companies which were unable to compete with cheap Chinese goods were forced to either lower their costs or go out of business. As such, many businesses reduced their costs by outsourcing jobs to foreign countries such as India, Bangladesh, China, and other countries with cheap labor costs. Outsourcing adds to U.S. unemployment by not only removing specific employment, but additionally entrapping individuals with non-transferable labor skill sets in pervasive unemployable cycles. Under free market economic theory, one might expect a balancing motion to stabilize such effects. In this regard, since China had been experiencing a constant grow on their exports, meaning the renminbi's demand increases, in a free-floating currency, market forces should have adjusted and appreciated the renminbi. This, however, was not happening.

Secondly, under an effort to pressure revaluation, western economies highlighted that the inflow of Foreign Direct Investment (FDI) to China was always higher than outward FDI. It is known that fresh capital inflow from abroad will first be converted to local currency, in this case, there should have ultimately been increased demand for the currency and therefore appreciation. This would lead to the establishment of new industries, increase in production and GDP, employment and income increases, additional expenditures, and increased imports as a result of a stronger renminbi. However, as with the prior concern, market trade data clearly showed these changes were not occurring in China, therefore indicating a systemically adverse economic climate from the expected economic theory.

In retaliation, China profoundly refuted claims of its trade bias. The Chinese government principally claimed that its currency is not truly undervalued and moreover China's economic growth has nothing to do with manipulation of the currency. Its defense heavily rested on the fact that imports had meanwhile increased at a high pace, reaching almost \$800 billion in 2006 with 20% annual growth. Additionally, it was claimed that the accusative US-China trade deficit was inaccurate because, despite its large trade surplus with the U.S. and Europe, it also has large deficits with others, especially Asian countries.

Additionally, Chinese officials expressed their opposition against the proposed revaluation of the renminbi citing several key economic arguments. Firstly, they claimed that as a country highly reliant on trade, efforts to increase exports are intrinsically vital. Additionally, a big portion of rural China's population (millions of farmers) moved to look for higher paying jobs in urban centers thus requiring rapid economic growth in order to absorb these workers into the economy.

On a separate note, officials further claimed that since the U.S. was running a large trade and budget deficit, perhaps partially attributable to capital inflows from China, it should instead look to the weakness in their economy before pointing fingers elsewhere. Finally, China expressed their sentiment of being a sovereign country with a right to choose its own exchange rate policy.

However, it is important to note that not all countries shared the adverse western sentiment. Unlike the USA and Europe, the position of the newly industrialized economies (NIEs) which included Japan, Taiwan, and South Korea, mainly saw China as a positive trade ally. This friendship fostered as China's imports grew and its source was predominantly such NIEs. For instance, in 2004, one fifth of China's imported goods were Japanese, highlighting its dependence on neighboring trade. Meanwhile, NIEs and their major corporations took advantage from low operating costs when moving manufacturing hubs to China and from the positive effects of "processing trade" whereby most of the benefits of value added processing were captured by NIEs, bringing revenues and R&D to its economy.

Was the Renminbi Undervalued?

As with any product traded in a market, the price of a currency is theoretically determined by the demand for this currency in relation with its supply. Thus, changes in the demand and supply of a currency are translated through changes in the equilibrium exchange rate of the foreign currency market. These changes are influenced by the differential of the following factors:

- Domestic vs. foreign inflation rate

- Domestic vs. foreign interest rate
- Domestic vs. foreign income levels
- Government controls
- Monetary policy
- Expectations of future exchange rates

From January 1997 to December 2006, the difference between Chinese and US inflation remained predominantly negative, whilst Chinese inflation was lower than the US. At the same time, it is possible to observe that the spot exchange rate of the renminbi against the USD remains constant until July 2005, when the Chinese government decided to revalue its currency higher against the USD. After which, as will be later observed, the Chinese renminbi will be no longer tied to the USD, but rather change through time in accordance to constantly changing monetary and currency policy of the Chinese Central Bank. The concept that describes the connection of inflation and country's exchange rate is Purchasing Power Parity (PPP), according to which "two currencies are in equilibrium or at par when a basket of goods (taking into account the exchange rate) is priced the same in both countries". The USD/CNY exchange spot rate remained constant until the new currency policy was adopted in 2005. Therefore, we conclude that renminbi violates the PPP concept and should have appreciated to the USD, given the US higher inflation in the period until 2005.

The exchange rate can also be explained by the International Fisher Effect (IFE) theory, which states that the difference in interest rates between countries explains the exchange rates shift over time. A graphical representation of this theory is a positively sloped line that shows a linear relationship between percentage change in the foreign spot rate and the difference between home and foreign interest rates.

In the period between 1998 and 2006, the spread between Chinese and US interest rates changed from negative (from 1998 to mid-2001) to positive (from mid-2001 to 2005), and once again to negative (from 2005 to 2008). Theoretically, this would have implied a corresponding negative (1998 to 2001), positive (2001 to 2005), and finally negative (2005 to 2008) percentage change in the USD spot rate. However, in practice, things looked a little different. On the IFE graph with historical US and China interest rates, we can observe USD percentage change on a yearly basis from the year 2000 to 2006. Regardless of the difference between US and China interest rates from 2000 till mid-2005, the percentage change of USD equaled to zero. From mid-2005, with the introduction of liberated renminbi exchange rate policy, the percentage change of USD spot rate became negative (bouncing from approximately -1.8% to -3.5%) and started to drift towards the theoretical IFE line. In other words, USD depreciated towards the Chinese renminbi. Therefore, on the period from 2000 to mid-2005, the renminbi exchange rate did not comply with the IFE theory, whereas it started to drift towards the theoretical IFE line from mid-2005 onwards. According to IFE theory, the renminbi exchange rate was supposed to appreciate on the period from 2000 to 2005.

Additionally, it is important to address one notable further observation. By examining the Chinese balance of payments, we notice the current account surplus becomes significantly higher after 2004. This observation which may be explained by the trade deficit whereby exports exceed imports, leading to trade surplus to China as displayed by the current account surplus. We see that despite the vast demand for Chinese renminbi, its exchange rate remained constant until mid-2005. Therefore, we may infer that the renminbi was kept artificially low, whereas it was supposed to appreciate towards the USD.

Therefore, it is fair to conclude that despite Purchasing Power Parity, International Fisher Effect theory, and supply and demand law, the Chinese renminbi was undervalued on the examined period from 2000 to mid-2005. Later, we will delve into the intricacies of China's mechanisms and regulations.

China's Turn to Move

Facing increasing pressure from western trade partners, China needed to carefully decide its next move. Whilst the majority of the western world had clearly expressed desire for China to adopt the policy of domestic currency floating exchange rate (the policy that most major economies had already adopted), some countries led by the United States had gone so far as to threaten China with possible economic sanctions and taxes. At the heart of these threats was the claim that China's manipulation of its domestic exchange rate consequentially, negatively impacted worldwide trading partners, namely current accounts' trade deficits.

In 2006, Chinese exports totaled \$0.97 trillion whilst imports totaled \$0.79 trillion, making China a net exporter. Moreover, the Capital and Finance Account deficit indicated capital outflows from China where funds were mainly invested into US Treasury Bonds. Chinese investments increased on average by 37% year to year between 2003 to 2006, and totaled \$1.07 trillion USD by the end of 2006. However, despite the large renminbi sell-off and trade surplus for China, the renminbi rate was kept fixed until mid-2005. By the end of 2006, China continued to maintain a non-floating currency which was not tied to any other currency or commodity combination. However, in order to appease foreign partners, it had partially depreciated the renminbi by mid-2005 and gained large exposure to US national debt. These factors put China in a challenging situation of whether it should appreciate its currency, and if so, whether this appreciation should be a one-off, progressive, or some other type of reform.

Given the substantial exposure to US debt, a one-off revaluation of renminbi of 20%, for sake of example, would lead to an immediate loss of 20% of its \$1.07 trillion US debt exposure, plus approximately 20% loss off USD exports, leading to a cumulative \$400 billion loss for Chinese budget. Such revaluation will adversely affect the Chinese economy since less money will circulate inside China's borders. Given that China did not follow additional currency emission policy, this would immediately trigger unwanted inflation, reduced government expenditure, decreased import values (leading to general exporting companies cost cutting in the form of underpayment to its workers), and a decrease in Foreign Direct Investments. As a result of in this revaluation, China's importers will be better off, as they realize additional revenue, whilst gaining additional incentive to locate its production facilities on foreign soil due to the increased labor cost in China. Ultimately, given China total budget of \$2.71 trillion in 2006, such a radical decision (loss of 14.7%) does not seem plausible.

Thereupon, China would obviously seek an alternative implementation that will promote flexibility of the exchange rate, lead to gradual liberalization of the Chinese capital account, and be compatible with a free movement of capital. Therefore, to continue lifting capital controls and maintain low inflation, the Chinese currency should move to a more flexible regime.

Fixed Rate Regime

Utilizing a fixed versus floating exchange rate regime can extend many of the aforementioned, intrinsic advantages. Firstly, a fixed rate discourages speculation on anticipation of possible changes of the exchange rate. Moreover, maintaining a fixed currency peg helps businesses build efficient long-term plans and forecasts, as well as aids the government to produce a solid economic outlook.

Secondly, when a country decides to make its currency pegged to another, it prefers to keep it weak. A weak local currency: 1) makes products produced for export appealing for foreign consumers, thus, 2) stimulates exports, 3) supports its competitiveness, 4) stimulates foreign direct investment, and finally, 5) when revenue in foreign currency is being exchanged to the local currency, exporters benefit from additional profit. Contrastingly, a weak currency makes imports relatively more expensive, leading to a budget surplus. From 2005 to 2007, the US and European trade deficits with China continued to rise, forcing the U.S. and other governments to pressure the Chinese government to appreciate its currency.

Finally, due to the comparative attractiveness of low costs, a fixed and weak local currency helps to attract foreign direct investments (FDI) which helps the local economy. FDI's helped the Chinese economy to flourish, starting from the "economic opening in 1978". This, in turn, led to a rapid economic boom that cyclically fostered further FDI.

However, it is important to note that fixed rate policies exhibit numerous disadvantages. Firstly, they require a substantial amount of administrative work (capital control) from the Chinese Central bank for daily monitoring of the accredited 350 institutions "exclusively authorized to conduct transactions of foreign currency". Secondly, to stabilize the rate the government may need to intervene and, thus, be forced to actively use monetary policy such as decreasing the interest rate to depreciate the local currency such as in the Chinese case; or buy/sell foreign currency reserves. Thirdly, to maintain the fixed rate the central bank would purchase large amounts of US notes, therefore, automatically increasing the amount of domestic currency in circulation. Such actions may lead to inflation, overheating of the economy, and to rapid rise of real estate prices (which is the key indicator of too-fast growing economy). As a result, the central bank must constantly conduct open market operations in order to regulate liquidity ratios of lending institutions and control the amount of local currency (renminbi) in circulation.

Floating Rate Regime

At the time of this exchange rate regime, the Chinese government continued to lead its rigid exchange rate policy by keeping the renminbi exchange rate at the level of roughly 8.28 RMB/USD. Since then, the Chinese have allowed the renminbi to appreciate significantly over the past few years (since 2005). However, the renminbi is still not a completely floated currency (like the USD, JPY, EUR, etc.) because of strong exercisable monetary control retained by the Central Bank of China.

If the Bank of China were to let the renminbi float freely, then it would likely appreciate at a much faster rate against the USD, and other currencies of countries that China runs a current account surplus with, than any alternative policy. International finance theory states that relative currency values should mirror differences in interest rates to account for the ability to borrow in a lower-rate currency and invest in a higher-rate currency. The

higher-rate currency should be more expensive. Hereby, interest rates are significantly higher in China, which would suggest a stronger renminbi if it were totally freely traded.

As a result, a free market renminbi can benefit China's frail banking system and undeveloped financial markets environment. Opening the renminbi to a global speculative market provides a unique opportunity to develop financial markets specific to RMB spot and derivative trade and ultimately bolster China as a major financial exchange and inadvertently fuel its economy.

Additionally, a key note is that China was, and remains today, one of the biggest world exporters, leading to strong demand for renminbi. If the renminbi were allowed to be floated, in short term it would increase vastly to the USD, rising until it reaches a demand and supply equilibrium price. Simultaneously, such appreciation would diminish the value of the USD. As a consequence, such a change in exchange rates would lead Chinese import prices to decrease and export prices to increase, thus making Chinese products less appealing to foreign investors. As a result, the Chinese exports to the US, and other main trade partners, would decrease, and ultimately, the trade deficit between China and its main trade partners (predominantly the US) would be reduced, therefore benefiting US companies.

What Should Be China's Exchange Rate Policy?

A possible solution that could benefit Chinese trade partners, reduce international tensions, and also satisfy China economically, seems to be to peg the renminbi to a basket with various assets and corresponding weightings. This basket could include liquid assets such as currencies and commodities.

Firstly, such a basket may contain a balance of correlated assets (e.g. gold is inversely correlated with USD) that will exhibit steady counter-cyclical factors. This helps stabilize possible volatility, foster a gradual shift of the renminbi exchange rate from a one-way movement to two-way fluctuations, and promote exchange rate equilibrium in the medium- to long-term. Secondly, the central parity interest rate of RMB/USD would be determined by "exchange rate movements of a basket of currencies", a mechanism that will make the parity both correspond to free movement of capital, and not completely dependent on USD at the same time. Ultimately, such a regime would bolster the confidence of international investors in Chinese renminbi, making it significantly close to market equilibrium, whilst, most importantly, leaving Chinese influence to change the composition of the basket and its weights.

However, regardless of China's current exchange rate policy, and what "easing measures" it introduces, the United States will continue to exert pressure on China, until it changes the exchange rate to be completely free market floating. Therefore, given the aggressive US external politics towards countries, the nature of U.S. foreign policy has a huge conflict of interest. In order to facilitate its desires, the US has threatened high tariffs and sanctions on Chinese imports to close the trade deficit and pressure China to a free float.

Conclusion

Throughout this short study we undertake a comprehensive and objective assessment of the past political and market drivers pressuring the renminbi. We examine economic

theory and international trade data which appears to cohesively support the hypothesis that, at the time of this case, the renminbi is artificially undervalued through both: market inefficiencies, and a vested Chinese interest to support lower exchange levels, and therefore propagate export attractiveness.

Examining the shift of trade value as a result of China's exchange rate monetary policy proves to exhibit a non-zero sum game whereby any gains associated with China's weak currency are not directly associated with a foreign loss under a linear relationship. For example, whilst the U.S. has been vocal about the negative effects hindering producers competing unfairly with China, U.S. consumers have conversely benefited from cheaper Chinese goods. Moreover, an undervalued renminbi has facilitated tremendous U.S. infrastructural development since China has been the predominant purchaser of cheap U.S. debt out of a need to invest USD cash reserves created in stabilizing a fixed renminbi. The ability for the U.S. to sell debt treasury notes at extremely cheap interest rates has proven a financial backbone that has facilitated long term U.S socioeconomic benefits, despite the highlighted negative U.S. labor implication claims.

Despite this, based on the prospect of punitive U.S tariffs and the significant Chinese political desire to develop China as a larger importer, it is clear that China must plan ahead to succeed in what will likely be a very different future economic climate than it had previously flourished within. With this in mind, we recommend a basket pegged revaluation of the renminbi to benefit China's desired importer growth through an appreciated domestic currency and therefore cheaper imports. This will allow China to maintain a relatively high monetary control through basket weighting adjustments, whilst meanwhile instilling additional investor confidence and establishing a strong platform to control against inflation.

Sources: Bloomberg, Asia Case Research Center, Journal of Social Science Studies, CRS Report for Congress, Journal of Monetary Economics, Reuters News, Library of Liberty

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