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Focus/Opinion

Expert view

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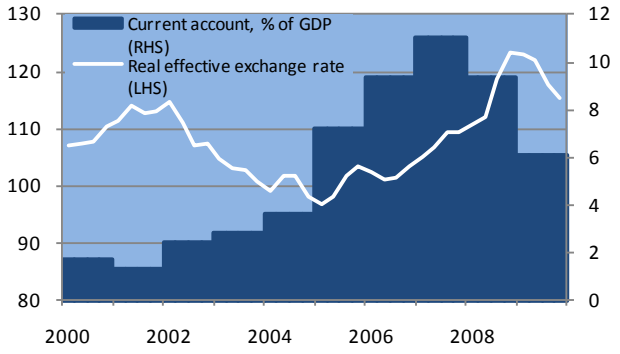
Don't overvalue the Chinese currency

For several years China has been accused of manipulating the external value of its currency, the yuan. Some analysts and many politicians feel that the weakness of its currency has given China a major competitive edge in world trade. China's large current account surplus has often been cited as evidence of the significant undervaluation of the yuan's exchange rate.

China's current account surplus in 2006–2008 was 10% of GDP on average, but in 2009 it shrank to 6.1%. China's current account surplus and particularly the corresponding US deficit have fuelled discussion on the value of the Chinese currency. In July 2005–August 2008, the yuan appreciated steadily against the dollar, but since then China has kept the external value of its currency stable.

Chart 1 China's real effective exchange rate (upward trend indicates yuan appreciation) and current account surplus, % of GDP

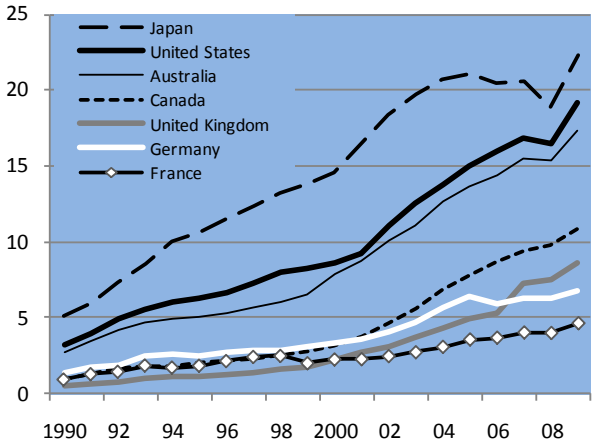


Source: IMF.

The Obama administration has delayed the release of its report on China's exchange rate policy (BOFIT Weekly 14/2010,). If the report accused China of manipulating its currency, it would significantly increase the likelihood of trade sanctions.

Chart 1 shows that China's REER is currently at the same level as at the start of 2002. Economic history shows that periods of rapid economic growth are most often accompanied by real appreciation of the country's currency; in this sense, the case of China is of course somewhat extraordinary. On the other hand, it is noteworthy that in 2005–2008, the yuan, in real terms, appreciated over 20% against the currencies of China's main trading partners. In 2009, the yuan depreciated again in real terms, following the trend in the US dollar.

Chart 2 China's share of imports in selected countries, 1990-2009, %



Source: IMF.

The great concern about the value of the Chinese currency can be partly explained by the country's rise to a global economic power status in the past two decades. Chart 2 shows China's share of imports in selected countries. In the Pacific region, China is already the largest trading partner for a number of countries, and its importance has risen also in Europe. In 2009, the year of the financial crisis, China's share of imports in Japan and the United States rose to record highs, which may partly explain the recent discussion on the external value of the yuan.

An alternative to the view emphasizing the role of the exchange rate in explaining China's current account surplus is that in China, the savings ratio is clearly higher than the investment ratio, which naturally creates a current account surplus. In fact, China's current account surplus started to grow significantly only in 2005; in 2001–2004, the current account surplus was on average 2.5% of GDP. The strong growth in the current account surplus thus coincided with the fairly rapid appreciation of China's REER. On this basis, it is more difficult to argue that China's large current account surplus is the result of exchange rate manipulation.

Many people think China's current account surplus corresponds to the large US current account

deficit, which is related to an extremely low household savings ratio. In 2005–2007, the ratio fluctuated between 1 and 2%, whereas Chinese households' savings ratio was over 20%. Moreover, Chinese non-financial corporations' extremely high savings ratio boosted the savings ratio of the whole economy.

Many ways to study the equilibrium exchange rate

China's equilibrium exchange rate has naturally attracted wide attention also among researchers, who have estimated the yuan's equilibrium exchange rate using various approaches. They usually employ a macroeconomic model of the Chinese economy in order to define the exchange rate that would guarantee the country's external balance.[1] Estimation of the FEER is hampered by the fact that a country like China can be assumed to continue to attract capital inflows for some time. China could thus even have a current account deficit with a balance of payments surplus, ie with a net capital inflow. Differing assumptions on expected capital flows yield a wide range of results for the FEER.

Another common method of estimating a country's equilibrium exchange rate is to employ fairly simple econometric methods; ie estimations based on large numbers of variables that can be assumed to affect the exchange rate.[2] The estimations are typically made using an extensive panel of data, which may include data on nearly all the countries in the world for several decades.

Economists disagree on yuan's equilibrium value

Korhonen and Ritola (2009, BOFIT Discussion Paper 13/09) use meta-analysis of 30 recent studies on yuan undervaluation to get almost 100 estimates of the currency's equilibrium value. Table 1 is based on this meta-analysis, updated to include papers published in recent months. Research papers published in 2004–2009 on average estimate the yuan to be ca 20% undervalued. The range of the estimates is however large, even though an overwhelming majority of the papers concluded that the Chinese yuan is undervalued.

It should however be noted that the reported misalignment is influenced by several factors, including the choice of variables and methodology. Moreover, the affiliation of the researchers seems to influence the reported misalignments. Using time-series techniques results in smaller estimates of undervaluation. Refereed journals are inclined to publish papers that report larger misalignments. On the other hand, affiliation with an investment bank leads to lower reported misalignments. Chinese research institutions report observations that point to a lower misalignment relative to the equilibrium exchange rate than other studies, but this may be partly explained by the use of time-series techniques.

Table 1 Undervaluation of the yuan, based on 30 different studies

Year published	1998–2009	2004–2009
Number of observations	99	72
Average, %	22	23
Median, %	16	18
Maximum, %	76	76
Minimum, %	-10	-10

The estimated undervaluation of a currency depends of course also on the statistical data used. Chinn et al. (2009, NBER Working Paper 14673) show that the estimated equilibrium exchange rate depends largely on whether the latest statistical data on China's GDP is used or not. China significantly revised its GDP statistics at the end of 2005 and again in 2008. The much higher level of GDP changed the estimates on the equilibrium exchange rate. Chinn et al. (2009) claim that based on the new statistical data, the yuan was ca 10% undervalued, whereas earlier the undervaluation seemed to be nearly 50%.

Conclusion

Based on the above, it is clear that the results of any one study should be interpreted with caution. The yuan has probably been slightly undervalued in recent years, but a stronger yuan would have had only a small impact on China's large current account surplus. In 2009, the current account surplus decreased significantly as a result of the global economic downturn, even though the yuan depreciated against the currencies of China's most important trading partners.

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[1] Fundamental Equilibrium Exchange Rate (FEER) approach.
[2] Behavioral Equilibrium Exchange Rate (BEER) approach.