## Weekly Report

## Reduction of Global Trade Imbalances: Does China Have to Revalue Its Currency?

China's growing trade surplus with the USA has triggered a discussion whether the Yuan is fundamentally undervalued in relation to the US Dollar. So far, China has resisted the demand to drastically revalue its currency. This creates tension as the US economy is only slowly recovering and unemployment rates will probably remain high for a while. In return, this increases the risk of protectionist measures by the US government, such as punitive tariffs on Chinese exports, in order to pressure China to revalue the Yuan. This would also pose a serious threat to growth opportunities in Germany.

Since China joined the World Trade Organization (WTO) in 2001, the country has developed a rapidly growing foreign trade surplus. This is not only due to exports to the USA. In fact, the EU and mainly the Central and Eastern European member states have become a key market for China. On the whole, China has strongly diversified its export activities according to customer regions on a global scale. Its export success is mainly based on high competitiveness regarding prices. Over the past years, China has become a workshop of the global economy: An ever growing part of global production of goods of the manufacturing industry is (either completely or in part) produced in the People's Republic. In case of a revaluation of the Yuan, China's price competitiveness would decrease.

Since a trade surplus implies corresponding capital movements, China is not only the country with the highest foreign trade surplus-overtaking Germany as export champion in 2009 -but has also pushed Japan back to only second biggest capital exporter. A large amount of these funds is managed via sovereign wealth funds that are under direct influence of the government.

## Trade surplus with the US increased rapidly

China's trade surplus with the US has more than doubled since 2002. In the record year 2008, it was at 268 billion USD (see Figures 1 and 2). At the same time, Chinese products have risen to a $20 \%$ share out of all US imports of commodities. In this context China was able to build up currency reserves of already 2.5 billion USD, ranking first place once more (see Table 1). A revaluation of the Yuan against the

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## Figure 1

US Trade Balance in Commodities
In billions of USD


Source: U.S. Census bureau.
DIW Berlin 2010
The US trade deficit with China has passed its climax; since 2007, the negative balance has become smaller.

Figure 2
US Trade Balance with China
In billions of USD ${ }^{1}$


1 seasonally adjusted monthly values.
Source: U.S. Census bureau.
DIW Berlin 2010
The US trade deficit with China is caused by commodities; the service sector cannot balance this deficit.
dollar would probably entail considerable losses for China. From the US point of view, this would equal a corresponding debt relief. China holds more than $20 \%$ of US government bonds owned by foreigners, which makes it its most important creditor (see Table 2). Since US savings will not be sufficient in the medium term to finance the US budget deficits, the country has to rely on foreign capital (see Figure 3). The threat to drastically limit the purchase of public bonds in case the USA introduces trade protectionist

Table 1

## Currency Reserves of Most Important

## Countries ${ }^{1}$

## In billions of USD

| 1 | People's Republic of China $^{2}$ | June 2010 | 2454.3 |
| :--- | :--- | :--- | :--- |
| 2 | Japan | June 2009 | 1019 |
| 3 | Eurozone | October 2009 | 716 |
| 4 | Russia $^{3}$ | April 2010 | 456 |
| 5 | Republic of China (Taiwan) $^{2}$ | April 2010 | 357.6 |
| 6 | India $^{4}$ | March 2010 | 277 |
| 7 | South Korea | November 2009 | 270.9 |
| 8 | Switzerland 5 | May 2010 | 262 |
| 9 | Brazil |  |  |
| 10 | Hong Kong | Nove 2010 | 253.5 |
| 11 Singapore | May 2010 | 240 |  |
| 12 Germany | September 2009 | 184 |  |

1 Ranking based on most recent accessible data (end of month).
updated quarterly.
updated weekly.
updated monthly
5 Currency reserves of the Swiss National Bank drastically increased in this month by $50 \%$ from 145.6 billion USD in April to 261.9 billion in May 2010.
6 updated daily.
Sources: IMF, national central banks.
DIW Berlin 2010
China holds more currency reserves than Japan, Russia and the eurozone taken together.
measures has so far established a fragile equilibrium between China and the USA. However, the question is how Chinese export proceeds could be invested in a different manner: The European capital market is not yet equivalent to the US market; especially the European bond markets are still too fragmented.

In order to avoid protectionist measures, China has gradually revalued the Yuan between 2005 and the beginning of the financial crisis in 2008 by altogether $20 \%$ against the US Dollar (see Glossary). But when the crisis hit, this process was stopped and the Yuan became again pegged to the US Dollar. This strict peg was only lifted in June 2010. Since then, short term exchange rate movements against the US Dollar are permitted. But they are limited to fluctuations of half a percent in both directions compared to the average of the previous day. This mechanism guarantees the Chinese government enough leeway to prevent unwanted exchange rate fluctuations.

## Table 2

## Leading Foreign Owners of US Public

 Bonds ${ }^{1}$|  | Billions USD | Percentage |
| :--- | :---: | :---: |
| People's Republic of China | 867.7 | 21.9 |
| Japan | 786.7 | 19.8 |
| Great Britain | 350 | 8.8 |
| Brazil | 161.4 | 4.1 |
| Hong Kong | 145.7 | 3.7 |
| Russia | 126.8 | 3.2 |
| Republic of China <br> (Taiwan) | 126.2 | 3.2 |
| Total | 3963.6 | 100 |

1 May 2010.
Source: US-Treasury. DIW Berlin 2010
China is the most important creditor of the USA and holds more than a fifth of US public debts.

## Danger of unilateral US punitive tariffs on Chinese products

For years the USA has been accusing China of systematically manipulating its exchange rate against the US Dollar too low. ${ }^{1}$ This would mean unfair competitive pressure, especially on US manufacturers. Since China does not comply with the system of flexible exchange rates and instead uses its exchange rate policy (as is typical for economies at a similar point of development) to support exports to the USA, a quick exchange rate adjustment seems improbable. This excludes an adjustment mecha-

1 See Mussa, M.: IMF Surveillance over China's Exchange Rate Policy. Peterson Institute of International Economics Working Paper, Washington 2007; Staiger, R.W., Sykes, A.O.: Currency Manipulation and World Trade. NBER Working Paper 14600; Bergsten, F.: Correcting the Chinese Exchange Rate: An Action Plan. Statement of the Director of the Peterson Institute for International Economics for the Committee on Ways and Means, US House of Representatives, 24 March 2010.

## Figure 3

Balance of Payments by Countries
In billions of USD


Whereas China has massively increased its balance of payment surplus since 2004, the USA is deeply in the red.
nism which could be used for reducing trade imbalances.

An alternative could be punitive tariffs in order to prevent the import of commodities which oust domestic producers because of a systematically undervalued currency. The significance of this possibility is proven by debates in the US congress aiming at a commitment of the US government to impose pu-

## Glossary

Renminbi or Yuan?

The name of the Chinese currency has repeatedly been a source of irritation: Renminbi or Yuan-which means what? And which one is correct?

This irritation is caused by the differentiation between the currency as such and the different denominations-a difference not common in Western languages. Renminbi means the official Chinese currency as such, whereas

Yuan stands for the denomination. Another difference to most Western currencies is the currency's further denomination: one Yuan equals 10 Jiao, which in turn equals 100 Fen.

Conclusion: As name for the Chinese currency both Renminbi and Yuan are correct, Yuan being the most commonly used term in the West.


Sources: U.S. BLS;
National Bureau of Statistics of China.
DIW Berlin 2010
Since 1998, consumer prices in China have been similarly stable as in the USA.
nitive tariffs of up to $25 \%$ on all Chinese imports. ${ }^{2}$ The central argument is the question whether the US government should have certain latitude of judgment if, in the framework of a regular check of unfair trade practices, it should come to the conclusion that certain countries manipulate their exchange rate. In the existing reports of the U.S. Department of the Treasury, China is not accused of being a currency manipulator. But so far this was also based on a relatively optimistic view on the American economic development.

However, the economic situation of the USA is currently being considered a lot more critical. In view of the mid-term elections in November 2010, the debate will probably heat up, especially since the call for punitive tariffs is not only supported by associations of business enterprises like the Alliance of American Manufacturing, but also by some economists. The IMF also assumes an undervaluation of the Yuan against other currencies. ${ }^{3}$

2 See US Congress: Bipartisan Group of Senators Unveils New Legislation to Crack Down on Unfair Currency Manipulation by Countries Like China. Press Release of 16 March 2010, schumer.senate.gov/record_ print.cfm?id=323135; and draft bill: Currency Exchange Rate Oversight Reform Act of 2010. 17 March 2010; Krugman, P.: Taking On China. In: New York Times, 14 March 2010.
3 IMF: Chinese Currency Undervalued. Depending on the method used, the Yuan's undervaluation is estimated at 20-45\%.

## China rejects accusation of currency manipulation

China strongly rejects accusations of being a currency manipulator. ${ }^{4}$ However, the fainthearted flexibilization of the Yuan of June 2010 will hardly contribute to reducing the trade surplus with the USA. Admittedly, the Yuan has seen a slight revaluation since then, which has accumulated to $2 \%$ in September 2010. But this is mainly the result of China's fast increasing inflation, which in turn goes back to above-average wage increases in exportoriented coastal regions (see Figure 4). But it is unlikely that this process will continue or even gain momentum, because companies concerned by these increases of wages and salaries are already planning relocation of their production sites, eliminating the wage differential to the booming export regions.

Instead of revaluing the Yuan, China is trying to establish the Yuan as a world reserve currency, or at least as a regional reserve currency. For this purpose, a free trade agreement was negotiated with the ASEAN countries, which has come into force at the beginning of this year. ${ }^{5}$ Since then, Taiwan has become another partner in this free trade zone. This way the People's Republic of China creates even stronger economic ties with Taiwan. Additionally, China is establishing export platforms as special economic zones under Chinese leadership in some ASEAN countries like Cambodia. ${ }^{6}$ However, the exchange rates of these countries first need to stabilize against the Yuan in order to pave the way for China's goal of the Yuan as a regional reserve currency (see Figure 5 and Text box).

Furthermore, China has challenged the leadership of the US Dollar as a global reserve currency at the G20 meeting in London, pleading for special drawing rights as alternative global payment method. This is one of the reasons why the country has agreed to an increase of its deposits by 100 billion USD in the context of the enlargement of the IMF's funding framework. By this, China has also increased its voting power in the IMF's executive committee. Now China is the only country apart from the Big 5 (USA, Japan, Germany, France, UK) with its own director. At the same time, China is slowly reducing its long-term investments in US securities,

4 Jiao, W., Zhiming, X.: Wen Stands Firm on Yuan. China Daily, 15th March 2010; Zhiming, X.: Yuan, Not Cause of US Woes: Scholar—Deficit Result of Low Savings, High Consumption. China Daily, 17th March 2010; Bo, W.: Rising Yuan Will Not Hurt Trade, Say Bankers. In: China Daily, 31 July 2010.
5 ASEAN member states include Thailand, Indonesia, Malaysia, the Philippines, Singapore, Brunei, Myanmar, Cambodia, Laos, and Vietnam.
6 Asean Affairs: Cambodia-China/Infrastructure Development SEZ Foundation Laid in Sihanoukville. 26 February 2008.

## Text Box <br> Exchange Rate Development of the Yuan and Other Asian Currencies in Relation to the US Dollar

When assessing the exchange rate development of the Chinese Yuan against the US Dollar, the chosen time period for analysis is crucial. Because China has been fixing its exchange rate traditionally arbitrarily since 1950 (meaning uncontrolled by market forces), considerable valuation errors against other currencies were principally possible. Until 1995, China had a divided currency system. The domestic currency, the Yuan, could not be used by foreigners. Instead, they had to buy so-called Foreign Exchange Certificates (FEC) from the Bank of China with a markup of $20 \%$ against the Yuan. Since these FECs were also used for purchasing imported goods or other scarce commodities, a black market emerged that upped the FEC rate against the Yuan because of high demand.

This system was abolished in 1995, making the Yuan the only means of payment. ' In order to accommodate the higher black market rate of the FECs against the Yuan at this time, the Yuan was devalued by more or less 60\% beforehand. Already in 1990, the value of the Yuan against the Dollar had fallen by more than $20 \%$. This way the Yuan started with a very low exchange rate against the US Dollar in 1995. Since only relatively small exchange rate adjustments of the Yuan against the

1 Ellis, C.D.: China's Foreign Exchange Certificates-Ten Years Gone. In: ChinaExpat web site, 2008.

Dollar were made until the first floating in June 2005, only the differences in their inflation rates had significant influence on the real exchange rate. However, China had very low inflation rates in the second half of the 90 s and until the beginning of 2002; in some cases the prices even declined. Only in the years 2004, 2007 and 2008 was the Chinese inflation rate higher than the US rate. This will probably also be the case for this year. This way the difference between the two inflation rates has been an ongoing advantage for China's competitiveness in prices. The real exchange rate against the US Dollar declined compared to the stable nominal exchange rate. These price effects were balanced by the nominal Yuan revaluation between 2005 and 2008. Thus, a decisive factor for analysis is the assessment of the situation at the transition to a single Yuan exchange rate at the beginning of the 90 s.

The strong increase in Chinese consumer prices in the first half of the 90s can probably be traced back to a successive adjustment of government-controlled prices to market price levels in the context of China's market orientation. This increase should therefore not be misinterpreted as rampant inflation. Especially the decrease of subsidies for food and accommodation quite likely contributed a lot to the increase of prices. We have seen similar price adjustments after reunification in East Germany
preferring for example South-Korean and Japanese government bonds. ${ }^{7}$ On top of that we see increasing investments in the Euro and in gold. Additionally, China tries to establish the Yuan more and more as an international foreign trade currency. This holds especially true for regional trade with China's most important trade partners in Asia.

On the whole, China is currently taking a number of steps all aiming at reducing direct dependence on trade with the USA in the medium to long term. This way the country tries to contain possible negative consequences of American trade protectionism. At the same time alliances are built, which support China's interests in multilateral negotiations.

7 Goodman, W., Kruger, D.: China Reduces Long-Term Treasuries by Record Amount. In: Bloomberg/Businessweek, 17 August 2010; Wang, X.: China Doubles ROK Debt Holdings, Buys More Fannie Bonds. In: China Daily, 19 August 2010; China Daily: China Ups Japanese Bond Holdings in June. 9 August 2010.

## The future global currency systemto the disadvantage of the Eurozone?

At the moment a further increase of Chinese currency reserves can be observed. Another aspect is the fact that the USA offers more than enough safe and liquid assets in form of government bonds, giving the impression that financing its high current account deficit still seems possible. ${ }^{8}$

True, the Euro could possibly challenge the US Dollar as dominant reserve currency. After all, the European currency area is in economic terms of similar size as the United States. ${ }^{9}$ However, the less

8 See Gros, D.: Perspectives for Global Liquidity and Commodity Prices. Presentation at the International Conference on "Global Financial Go-vernance-Challenges and Regional Responses", 3/4 September 2009; InWent-Capacity Building International und DIE-Deutsches Institut für Entwicklungspolitik, Berlin
9 See Alcidi, C., Brender, A., Gros, D., Pisani, F.: The Future Global Reserve System. Issues Paper prepared for the ADB, Brussels 2009.

Figure 5
Exchange Rates Against the US Dollar
Index ( $1^{\text {st }}$ quarter $1990=100$ )


Between 2005 and 2008, the Yuan was revalued by 20\%. Since the beginning of the economic crisis the rate is pegged again.

Figure 6
Virtually Risk-free Securitites
In billions of USD ${ }^{1}$


1 Assets end of 2008
2 Germany, Italy, France and Spain taken together.
Sources: Alcidi, Brender, Gros, Pisani.
DIW Berlin 2010
The European securities market is not even half the size of the American market.
integrated European financial markets make this option seem not very likely. Insofar the Euro is no serious challenge for the US Dollar as lead currency (see Figure 6).

Another weak point is the lack of a common European position (with the exception of European monetary policy) which would be useful in a restructuring of the global financial system. In most cases countries speak with their own voice instead of finding a common European one. If we take the IMF quotas as a yardstick, i.e. the countries' payment contributions to the International Monetary Fund which also define the countries' voting power, Europe's influence could be much bigger even after the planned reform.

On the other hand, the Eurozone with the Euro as dominant global reserve currency instead of the US Dollar would also be faced with the Triffin dilemma, resulting in a conflict of goals in monetary, currency and trade policies. In order to ensure sufficient liquidity in the global economy, the money supply of the Eurozone would have to expand according to the liquidity needs of the global economy. But since the Eurozone will probably continue to expand more slowly than the total global economy, this would only be possible through a cumulating trade deficit with the rest of the world. This, however, would in the long run undermine credibility of the Euro as stable means of payment, as is the case with the US Dollar now. Consequently, a long term solution would be to create a currency basket of global reserve currencies, whose economic growth in total corresponds to that of the global economy and whose shares are adjusted according to the share of total growth of the reserve currency countriesa method already used for special drawing rights. The propositions of the Chinese government also go into this direction. It remains to be seen whether the USA will accept such a solution. The upcoming G20 meeting in South Korea in November 2010 will hopefully bring more clarity.

## Conclusion

So far, China's reaction to criticism of its exchange rate policy, especially coming from the USA, has shown little effect. The essential question is whether China is going to give up on its export-oriented growth policy. If we take the revaluation of the Yuan against the US Dollar between 2005 and 2008 as basis, we realize that the slow exchange rate adjustments have not visibly slowed down the US trade deficit with China. Instead, the adjustment was overcompensated by an increased productivity of Chinese exporting industries and wage restraint. Therefore the exchange rate mechanism alone is
not enough to compensate trade imbalances in a sustainable way.

For the absorption of the Chinese trade surplus Europe is becoming more and more important. ${ }^{10}$ This is why speedy agreements are necessary in order to prevent a similar problematic development like between China and the USA. Especially Germany, which is currently profiting from its export success to China, should quickly recognize that because of even faster growing imports there is the risk of falling into a debt trap in the balance of payments concerning the trade with China. Already today China is Germany's most important supplier. This increasingly includes also high quality products. ${ }^{11}$

Market participants have regularly underestimated the necessary scope for exchange rate corrections. ${ }^{12}$ Gradual adjustments, which enable a soft landing, are usually made too late and/or too modestly, so that shock-like corrections dominate the picture. But this kind of corrections is hardly predictable regarding scope and time. In many cases market participants abruptly realize the exchange rate risk only afterwards.

A significant revaluation of the Yuan is probably going to play a major role at the upcoming G20 summit in November in South Korea. Only with such a revaluation a threatening trade war between China and the USA can be prevented. Such a war could also negatively influence the general economic development of the export nation Germany.
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    11 Belke, A., Spies, J.: Die Außenhandelspolitik der EU gegenüber Chi-na-"China-bashing" ist keine rationale Basis für Politik. In: Wirtschaftsdienst, Vol. 87/7, 2007, p.458-466.

    12 Krugman, P.: Will There Be a Dollar Crisis? Economic Policy, July 2007, p.435-467.

