Speaking truth to power: The use of economic arguments in the political debate about RMB undervaluation

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December 20, 2012

Contents

1 Introduction

In the presidential election 2012 the Republican candidate Mitt Romney made a tough stance against the currency policy of the People's Bank of China: In the presidential debate on foreign policy of October 23, he declared that 'on day one in office, I will declare China a currency manipulator'.[1]Already in 2008, then presidential candidate Barack Obama made a similar pledge.[2]

The Chinese reply on a equally high level. Premier Wen Jiabao

How comes a seemingly technocratic and complicated issue like China's currency policy plays such an important role in US politics? And, given its actual economic importance and the United States' possibilities to influence it, does the Chinese currency policy deserve such a central position in the United States' foreign policy debate?

In the first Chapter, we will look at the economics of the issue, first focusing on standard, textbook economic models. What is the importance of the exchange rate? What does it mean for a currency to be undervalued? And how do economists know if and by how much a currency is undervalued? We will then portray the academic debate among economists about China's currency policy.

In the next Chapter, we will look at the political debate: How has it develloped in the US over the last ten years? What are the arguments brought forward and who are the main participants? On the Chinese side, what are the political arguments for (and against) current Chinese monetary policy? In this chapter, officials' statements and press releases are the main source of analysis.

In the third chapter we will discuss the issue from a diplomatic point of view: What are the diplomatic options for the USA to put pressure on China to change its foreign exchange policy?

In the final chapter we will bring together the economic, political and diplomatic threads to answer the question how economics inform the diplomatic and political debate about China's foreign exchange policy.

[1]http://www.guardian.co.uk/world/video/2012/oct/23/debate-obama-romney-china-video

[2]**?**

2 Economics

The exchange rate between two currencies is based on how much it costs to buy a fixed amount of one currency with the other. This price depends on the demand and the supply of each currency on the money market.
Macroeconomic theory postulates, that for every two currencies at every moment, there exists a balanced exchange rate, called the *equilibrium exchange rate*.[3]. There is a number of different theoretical methods for defining the equilibrium exchange rate. We can broadly group them in two approaches:

- Estimates based on purchasing power parity (PPP)
- Estimates based on macroeconomic balance ideals

The basic idea of PPP approaches is to declare the exchange rate as ideal, at which you could buy exactly the same goods in two countries. A famous example of such an approach is The Economist's Big Mac Index.[4] If a Big mac costs 1 USD in the US and 5 RMB in China, the ideal exchange rate would be 1 to 5. You can then calculate the deviation of the actual exchange rate to the ideal equilibrium exchange rate. Of course this is also done with a more sophisticated basket of goods than a Big Mac.
The second group takes some macroeconomic indicator as a basis, most prominently the current account. The current acount is the difference between a country's total exports and its total imports. If a country exports more than it imports it has a current account *surplus* - China, Germany, Japan and Switzerland are all current account surplus countries. If a country imports more goods and services than it exports, it has a current account *deficit* - the USA are currently the most prominent and by far the biggest surplus country. Economists now take the current account and define a 'normal' value. Some theories take a current account of zero as normal. Others, based on the difference between emerging and advanced economies take a current account of around 3% as normal. The equilibrium exchange rate is now defined as the exchange rate, at which the current account would move down (or up) to the previously-defined normal level.
If the market for currencies was working like a standard market of goods, with firms and private persons being able to buy and produce money as a good, all exchange rates would always be at their equilibrium rate. However, money is not a normal good, and the production of money for every country

[3][**?**, pp. 505].

[4]http://www.economist.com/markets/Bigmac/Index.cfm

is controlled by their national bank. A national bank can print a discretionary amount of money in their own currency.[5]. But how much money should a national bank print? This decision is a matter of *monetary policy.*

2.1 Monetary policy

The standard monetary policy of western countries is to define a target for inflation, normally around 2%. The National Banks are mandated to control the supply of money such that this target is met. Currencies of these countries are then freely traded and their exchange rate fluctuates with varying demand.

Nations can also chose to exercise a tighter control of the value of their exchange rate. This is very common: Some national banks even use their money supply to 'peg' their currency to another, so that exchange rates are fixed. For example, the Swiss National Bank (SNB) offers every vendor of an euro CHF 1.20 in exchange. Since the SNB controls the money supply of Switzerland, it will never run out of CHF and the exchange rate of the Swiss franc. As a consequence the euro will never be lower than 1.20 until the SNB changes its exchange rate policy. In this case monetary policy becomes an *exchange rate policy*: Instead of focusing on inflation, the goal of the policy is to control the exchange rate.

There are incentives for a national bank to maintain a *low* exchange rate, i.e. to keep its currency at a low value. Take a typical tradable good as an example: A watch produced in Switzerland sells at a fixed price in Swiss Francs (CHF). If for one euro you get 1.50 CHF exchanges for 0.7 Euro, a watch worth 1000 CHF costs 666 Euro in Germany. If the value of the Swiss Franc rises, so that one CHF exchanges for exactly one euro, the price of the same watch is now 1000 euro in Germany - this watch is now a much less competitive good on the world market.

With the notions of the equilibrium exchange rate and monetary policy in mind we can now restate what it means for a currency to be undervalued: A currency is undervalued when its exchange rate is held below the equilibrium exchange rate by a national bank by means of monetary policy.

2.2 Is China manipulating the RMB exchange rate?

Chinese goods have been very competitive on the world market during the last ten years and Chinese exports have more than quadrupled since China

[5]The process is somewhat more complicated than printing bank notes, but the effect is the same for the purposes of this section.

joined the WTO in 2001.[6] It is this stunning growth that has prompted accusations against China: Since manipulating the exchange rate can be beneficial for a nations exports and foreign investments, the People's Bank of China might have been following such a policy and keeping the Chinese currency, the renminbi (RMB) undervalued.[7]

2.2.1 Yes

Critics of China's monetary policy generally make an argument of the following structure: First they ask what a national bank would do if it were trying to manipulate its currency. Second they point out that the Chinese national bank is doing exactly that.
So how would a National Bank keep a rate below its equilibrium rate? According to textbook economics this can be done in three ways:[8]

1. The government can shift supply and demand for its currency by intervening on the foreign exchange market. By buying foreign exchange and selling the local currency the government can drive the price of foreign exchange up and the price of the local currency down.

2. The government can shift supply and demand by means of monetary policy, namely by keeping interest rates low. Lower interest rates mean lower returns for foreign investors. If foreign investors refrain from investing locally, the demand for the local currency decreases. which drives the price of the local currency down.

3. The government can impose foreign exchange controls, forbidding foreigners to buy the local currency. This reduces the practical demand by outlawing it, which makes the currency price go down.

According to Goldstein and Lardy[9] this is exactly what the People's Bank of China has been doing for a decade:

1. The Chinese government has intervened on the foreign currency market on a massive scale: It has been buying foreign currencies, mainly US Dollars (in the form of US government debt) in exchange for RMB to the amount of 10% of its GDP, i.e. 10% of the value of all goods and services produced in China.

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[6] **?**.

[7] The renminbi is also abbreviated to CNY, reflecting the name of the basic unit of the Renminbi, the Yuan.

[8] [**?**, pp. 514]

[9] [**?**, pp. 40].

2. Interest rates in China are relatively low: When the interest rate is adjusted for inflation, the so called *real* interest rate have actually been negative for the most part since 2006.

3. China imposes foreign exchange controls that limits the amount of RMB that is sold international investors or other governments.

As a result, critics of Chinas exchange rate regime say, China's export sector has become unfairly competitive.
Adding further to the pile of evidence, critics argue, is China's practice of *sterilization*.[10] If the Chinese government buys foreign currency paying with RMB, it is increasing the amount of RMB in circulation in the economy.[11]. According to standard economic models an increase in the money supply means that the currency has less value and (other things equal) prices go up, leading to inflation.[12] As a result, goods produced in China would become more expensive on the world market not due to currency appreciation, but because production costs (e.g. wages of Chinese workers) rise with inflation. According to this model, even though the People's Bank of China (PBC) keeps the *nominal* exchange rate fixed, the *real* exchange rate would increase.[13] Inflation would offset the competitive advantage of Chinese goods in the long run and cancel out the effects of the lower exchange rate for the RMB.
Again, the People's Bank of China is taking measures that are suited to prevent a appreciation in real terms: It is *sterilizing* the money inflow, mainly by raising reserve requirements for Chinese commercial banks. Raising reserve requirements limits the amount of money the commercial banks can issue as loans, therefore 'extracting' money out of the economy. This in turn limits inflation and prevents the *real* value of the RMB to rise.
By raising reserve requirements, China has prevented about 40% of the money inflows of entering the monetary base since 2003.[14]
Despite these measures, China has seen some inflation during the last ten years - heavily fluctuating it was at times rampant, at times moderate.[15] But unregarding of their success, China clearly has been taking measures to fight inflation and was thereby lowering its *real* exchange rate. Accordingly,

[10] **?** and [**?**, p. ?]
[11] In economical jargon it is expanding the *monetary base*, what (other things equal) leads to an increase in money supply
[12] [**?**, pp. 432].
[13] [**?**, p. 509].
[14] **?**.
[15] **?**.

while inflation should compensate a undervalued nominal exchange rate in the long run, China is accused of procrastinating 'the long run' by preventing inflation to happen.

2.2.2 No

There is a variety of arguments in defense of Chinese monetary policy. One group of economists denies the importance of the exchange rate. A second group denies that China is indeed manipulating the exchange rate.
The first line of defense points out that China's export success can be explained with other factors than the exchange rate. Different authors point to different reasons:
One factor is *labor arbitrage*:[16] Chinese workers are willing to work at lower wages than workers in importing countries. Importantly, accepted wages are not only lower in absolute terms but also in terms of purchasing power: A typical wage in China allows for a lower standard of living than a typical wage in an industrial country, thereby allowing Chinese firms to produce with much lower labor costs, both absolute and relative.
Another explanation is that Chinese producers profit from very cheap energy and land rents.[17] These markets are not liberalized and prices can therefore be strongly influenced by government policy. For Chinese officials on the local as well as on the federal level GDP growth is a major ambition, they maintain energy and land use prices that are cheaper on average than in industrial countries as well as other emerging economies.
Another factor explaining strong Chinese exports has been introduced in 2005 by Ben Bernanke, shortly before he was named chairman of the US Federal Reserve.[18]: The *saving glut hypothesis*. According to Bernanke a special series of circumstances has lead to exceptionally high saving rate, i.e. the percentage of income that is saved. These circumstances include repercussions of the financial crises in emerging economies in the late 90's, but also the unique saving behaviour of Chinese households. Partly due to the lack of social security institutions and to the One-Child-Policy, the saving rate of Chinese households is among the highest in the world - in 2007 it was 53% as opposed to Switzerland's 17,5%.[19][20] These savings drive

[16] This factor was pointed at by Xu Mingqi of the Institute of World economy of the Shanghai Academy of Social Sciences in a talk to our class on September 4 2012.

[17] [**?**, pp. 25].

[18] **?**

[19] [**?**, pp. 20].

[20] **?** .

down interest rates in China and allow the local producers to access very cheap loans, which in turn allows them to expand production.[21]
A similar approach is to point out the symmetry of the world market.[22] While China is running a current account surplus, the US in turn run a current account *deficit*, importing much more goods than exporting. According to Wyplosz, this deficit is caused by the low saving rate of US households and the budged deficit of the US government. Instead of trying to explain China's export success with the alleged undervaluation of the RMB, one could with equal justification explain the US deficit with the *over*valuation of the US Dollar.
What all approaches mentioned have in common is the insistence that there is no need to invoke the alleged RMB undervaluation to explain China's success on the export market. A different line of defense does not deny the importance of the exchange rate but states that each of the practices taken by the POBC may also have legitimate purposes. China is no the only country that pegs its currency to another currency - we already mentioned Switzerland and Denmark doing so. A fixed exchange rate has the advantage of giving firms and consumers certainty about the future value of a currency.[23] Lowering interest rates to spur growth is also a tool widely used by National Banks worldwide. And limiting inflation is considered to be one of the main goals of *any* National Bank.[24]. Finally, many other countries - among them Japan, Germany and Switzerland - run current account surpluses that are as big as China's, relative to their GDP.

2.2.3 Maybe, but how much?

Because many economists seem to agree that the RMB was undervalued during several years in the last decade, there is a substantive body of research trying to estimate *by how much* the RMB is undervalued.
The most prominent estimates are based on the macroeconomic balance approach described above. In particular a 2008 report by the Internation Monetary Fund outlines three macroeconomic balance indicators that can be used to estimate the disparity between the real and equilibrated exchange rate[25]:

[21] This explanation is also favoured by [**?**, pp. 41] and **?**Reisen2010.
[22] [**?**, pp. 39-40].
[23] [**?**, p. 515]
[24] China's capital controls might be the only exception, but their importance pales against that of China's foreign exchange reserves.
[25] **?**Lee2008.

The current account approach looks at projections of a country's current account and tries to estimate how much the exchange rate would need to be adjusted for it to stabilize within a certain level.

m real exchange rate approach tries to estimate the equilibrium directly as a function of the net foreign asset as well as a number of trade indicators.

xternal sustainability approach tries to find the exchange rate that would stabilize the net foreign asset of a country to within a certain level.

These techniques have been used by Cline and Williamson in their yearly policy brief on equilibrium exchange rates[26] of the Peterson Institute for International Economics, a private research institution whose researchers have taken a leading role in criticizing Chinese exchange rate policy during the last decade.[27] Their estimates are the most widely cited numbers. They are based largely on the first and third methods proposed by the IMF. They designate that debt and trade surplus above 3% of GDP is abnormal and try to calculate how much the exchange rate would have to change to bring the current account within a normal treshold. In 2009 their results showed that the Chinese RMB was undervaluated by 21.4%. Additionally they found the US dollar to be 17.4% percent overvaluated, futher contrasting the value gap between the two currencies.
However, in a similar approach using international trade flows Cheung, Chinn and Fuji find diverging results for 2009.[28] According to their calculations the RMB might be undervalued by as much as 50%, but they do not find the deviation to be statistically significant and being highly volatile for small variations in the data. In a newer paper in 2010, reviewing several different estimates they stress the fact that large uncertainties surround all the estimates.[29]
Estimates based on the PPP approach again deliver varying results from the RMB actually being *over*valued by 5% to 20% undervaluation for 2009, according to Cheung, Chinn and Fuji.[30] Other researchers also find huge swings in different estimates, with the RMB being undervalued by up to 47%.[31] One problem of PPP approaches is, that the price level in emerging economies is generally lower than in advanced economies. According to the

[26] **?** and **?**.
[27] http://www.iie.com/
[28] **?**.
[29] **?**.
[30] [**?**, pp. 82].
[31] [**?**, pp. 72].

so called Balassa-Samuelson effect, this is mainly because services and non-tradeable godds (e.g. a haircut or a restaurant meal) are much cheaper in emerging economics.There are attempts to take account of such effects and calculate a revised PPP equilibrium exchange rate, but the results are mixed: The above-mentioned variations depend largely on different assumptions in the calculating models.
To sum up, the economic profession does not seem to agree on an exact estimate of how much the Chinese currency is undervalued. A lot depends on assumptions, so that the required amount of 'judgement' obfuscates the reliability of equilibrium exchange rate estimates.

2.3 Wrap up: Up to 15% or more

3 The political debate

The following graph depicts the movement of the RMB real exchange rate against the US Dollar:
The RMB was pegged to the Dollar from 1994 at a rate of 8.28 until 2005. Then it appreciated at about 6% per year, before the appreciation came to a halt in the aftermath of the financial crisis. The RMB appreciated again from mid 2010 up to now.
Following this movement of the RMB exchange rate, this chapter will depict the political debates about RMB appreciation in the USA and China.

3.1 The political debate in the USA

The history of the political debate in the USA about RMB undervaluation can roughly be seen in four phases:
It started shortly after China had joined the World Trade Organization WTO in 2001. As a member of the WTO, China gained access to Western markets (and vice versa) within an international regulatory structure ensuring free trade and banning protectionist measures. Critics in the USA argued that China was taking unfair advantage of these rules and bending them to China's own advantage. At the core of the critics of Chinese foreign exchange policy were the American labor unions.[32] Organized labor in the US has been critical of free trade in general, at least since the North American Free Trade Agreement (NAFTA) had been signed into law in 1993, and due to the ongoing decline of manufacturing in the US. In addition, the decline of products 'made in USA' was contrasted with ever

[32][?, pp. 14]

more products labelled ‘made in China’, as a result of China’s export surge. Labor unions held the position that this decline was at least partly due to employers shifting production from the US to China. In 2004, the Assistant Director for International Economics at AFL-CIO, the umbrella federation for US unions, stated before the US Congress:

> [. . .]it is clear that the Chinese governments manipulation of its currency, violation of international trade rules, and egregious repression of its citizens fundamental democratic and human rights are key contributors to an unfair competitive advantage.[33]

Speaking of currency *manipulation* and an *unfair* competitive advantage, the AFL-CIO Director makes clear that she does not consider China’s exchange rate policy as purely technical but as an issue where political action of the USA is needed to protect the interests of American manufacturing workers.

In the early 2000’s, labor unions were largely alone in their call for action against China’s currency policy. For example, in a 2003 issue of *The international economy magazine* over thirty international analysts from business and academia shortly answered the question ‘Is China’s currency dangerously undervalued and a threat to the global economy?’.[34] Most US analysts held the view, that even if China’s currency was undervalued, export surplus did not come at the cost of US manufacturing. In their view, manufacturing was inevitably moving from the US to emerging economies. If the RMB exchange rate had been manipulated, it had been so at the cost of other emerging economies like India or Vietnam. Correspondingly, experts representing other East Asian countries in the *International economy magazine* tended to a more harsh view of China’s exchange rate policy. In addition, US experts pointed out the benefits of cheap Chinese exports for American consumers, who could choose from a growing variety of cheap consumer products like toys and electronics. Thus, cheap Chinese exports helped in holding US inflation low.

In 2005 the *saving glut hypothesis* brought forward by Ben Bernanke opend a new line of criticism on China’s export surplus.[35] In this view, the Asian export surpluses posed a threat to global economic stability. However, since this critique came in a time of worldwide economic prospoerity, and since the

[33] AFL-CIO on U.S.-China Ties: Reassessing the Economic Relationship, http://www.dossiertibet.it/news/afl-cio-us-china-ties-reassessing-economic-relationship

[34] **?**.

[35] as explained in section ...

RMB had started to appreciate against the US Dollar anyway, the critique was not initially drawn into political spotlight.[36]

During the *Great Recession*, the financial and economic crisis that started with the burst of the US housing bubble in 2006, the critique of China intensified. As the view prevailed that the crisis was partly due to lack of demand and excess of savings worldwide, prominent economists like Paul Krugman - writing for the New York Times - joined the critics.[37] In addition, the continuous appreciation of the RMB had stopped in 2008. As a result, the critique became more heated on a political level. With each American election, a new batch of politicians paraded their toughness on China's economic policies promising tougher measures and severe consequences. The most prominent are of course the presidential candidates and Barack Obama in 2008[38] and Mitt Romney in 2012[39] both made a tough stance against China's currency policy part of their agenda, wit both candidates following a remarkably similar argumentation, basing their argument on the trade ramifications of a purportedly undervalued RMB. Interestingly, Obama made the above-mentioned statement during a speech to the 'Alliance of American Manufacturing', an interest organization representing a part of the US manufacturing industry. Seemingly, after being joined by monetary policy officials and economists, the labor unions still remain at the core of the critics of China's exchange rate policy.

The debate in the US reached a climax in 2009 up to the spring of 2010 when the Obama administration, as well as policy experts worldwide were discussing the options for US political action against China's exchange rate policy.

3.2 The political debate in China

Political discussions of the RMB issue in China are of course much less public and transparent than the debate in the USA. It is the State Council in Beijing, headed by the Premier Minister - until 2012 this was Wen Jiabao - that sets macroeconomic policy, including the exchange rate regime. This policy has ultimately to be approved by the Politburo Standing Committee, headed by Hu Jintao until 2012. Instead of following the debate we will focus on different motivations and interest groups that might influence this political sphere.

[36] says [**?**, p.16].

[37] **?**.

[38] **?**.

[39] **?**.

The interst group most directly concerned by exchange rate policy are Chinese exporting firms. Exporters generally have a strong interest in a weak RMB, since it makes their products cheaper and thereby more competitive on the world market. They are mainly located in eight provinces along the Chinese coast. Exporting firms make up only 5-6% of Chinese employment, but their influence is amplified by their enormous profits and their close relations to the government, especially through politicians of said provinces.[40]
Also in favor of expansive monetary policy are many representatives of local Chinese government. Their main legitimization - and sometimes source of income - is economic growth.[41] Ultimately, this is also the only legitimization of the central government in Beijing, giving a strong rationale for growth-spurring monetary policy, including a low RMB exchange rate.
As mentioned in the section on economics, one problem in maintaining a low exchange rate is inflation. Inflation can be politically disruptive, spurring popular discontent. Accordingly, controlling inflation is one of the main macroeconomic goals of the central government.[42]
Officials concerned with inflation are joined by officials aiming at balancing the Chinese economy more towards domestic consumption, away from the production surplus. Pushing for this are more traditional 'communists' who feel Chinese workers did not profit enough from the economic boom, but 'balancing the economy' has by now become an official goal of economic policy.[43]
Stability in terms of inflation and growth in forms of exports are joined by Chinese nationalism as the main motives behind policy choices. The percieved humiliations of the 19th century and Chinas' lackluster economic performance up until recent times has fueled a political will to reinstante China in it's rightful place[44]. This has lead to a political atmosphere where it's important not to appear weak in confrontations with western powers.
In terms of economic policy these factors are all in part making China less open to suggestions on economic policy from the US. It would be political suicide for a Chinese politician to appear as if he or she were taking orders from abroad. Just like US politicians gain domestic support from appearing tough on China, Chinese politicians gain from having a tough stance on US politician meddling in Chinese affairs.
With these motives in mind we can now identify the two turning points, in

[40] [**?**, p. 202].
[41] [**?**, pp. 19].
[42] **?**.
[43] **?**.
[44] Much more can be read in **?**

2008 and in 2010, of the RMB exchange rate. Before the year 2008 China saw spectacular growth rates. The main concerns then was preventing inflation and balancing the economy - the concerns of exporters were marginal and China let the RMB slowly appreciate. In spring 2008 the global economic crisis hit exporters hard and growth was coming to a halt. Money inflows were increasing, accelerating inflation.[45] At the same time a new economic team at the State Council was enacted in which according to Barry Naughton Wang Qishan, a official friendly to exporting firms, was the new strong man. This team decided a pause in RMB appreciation and pegged the RMB to the US Dollar at about 6.8 Yuan per Dollar. In addition, the new policies included tax reliefs for exporting firms and easier access to loans. With this stimulus, the exporting sector was soon thriving again and by 2010 inflation again became the major concern.[46] The peg was loosened and since 2010 the RMB is appreciating again. Although the appreciation is slower than between 2005 and 2008, the appreciation in real terms is even faster, due to Chinese inflation and *de*flation in most Western countries.

4 Diplomatic options

The diplomatic debate between the US and China takes many different shapes. While the dialogue is defined by continuous attempts from the US to convince China to appreciate the RMB, the methods span from passive domestic policy statements to efforts of using international bodies to persuade China to change their economic policies.
In this section we will explore the different means of diplomatic pressure that has been in use during the last decade. For each method we will look at the following characteristics:

1. The Argumentation: What is the specific reasoning brought forth in the economic debate?
2. The Channels of Communication: Where does the debate take place and with what authority?
3. The response: What is the reaction to the debate from China's side?
4. The Context: Under what political or economic circumstances is the debate brought forth?

[45] **?**.
[46] **?**.

4.1 Unilateral action

The most discussed and most direct option for the US would be to label China a ‘currency manipulator’. The US Treasury department is mandated in writing a biannual report on whether trading partners manipulate their currency.
Labeling China a ‘currency manipulator’ doesn’t do anything in itself - it merely amounts to an international insult. But with labelling a country a currency manipulator the US Treasury Department has the mandate to

> [...] take action to initiate negotiations with such foreign countries on an expedited basis, in the International Monetary Fund or bilaterally, for the purpose of ensuring that such countries regularly and promptly adjust the rate of exchange between their currencies and the United States dollar [...] to eliminate the unfair advantage.[47]

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In 2009 a bill was proposed by the republican senator Timothy Ryan (Ohio), aiming to introduce a tariff with the stated purpose “*To amend title VII of the Tariff Act of 1930 to clarify that countervailing duties may be imposed to address subsidies relating to a fundamentally undervalued currency of any foreign country*”**?**. The bill died in the senate after passing the house.

4.2 Multilateral action

In the world of international finance there are several agencies responsible for coordinating various aspects of the world economy. A big part of the role of these organizations is to offer an avenue to settle disputes between member nations.
The three most relevant of these organizations in this context is the G20, the International Monetary Fund (IMF) and the World Trade Organization (WTO).
The G20 is a group of 20 finance ministers and central bank governors from 20 major economies that try to promote economic cooperation and a venue for discussions on the international finance system. Pushed by the US several attempts at making the participating leaders pledge their allegiance

[47] OMNIBUS TRADE AND COMPETITIVENESS ACT OF 1988 (H.R. 3) SEC. 3004. INTERNATIONAL NEGOTIATIONS ON EXCHANGE RATE AND ECONOMIC POLICIES., http://www.treasury.gov/resource-center/international/exchange-rate-policies/Documents/authorizing-statute.pdf

to economic policies that would prevent countries from manipulating their currencies. However the strongest statement so far was reached at the 2009 Summit in Pittsburgh where the leaders agreed "*to adopt the policies needed to lay the foundation for strong, sustained and balanced growth in the 21st century*". Later attempts at further defining exactly what is covered by "balanced" have failed[48].

An alternative approach would be to go through the IMF which stated goal is to stabilize exchange rates and lend money to countries that might need them. In fact Dominic Strauss Kahn has on behalf of the IMF publicly stated that the RMB is undervalued in 2009, and the IMF has repeated this sentiment with slight modifications since then**?**. Despite these statements no action has been taken by IMF to regulate or penalize China, largely because the organization lacks the means to influence countries that aren't dependent on it for borrowing money.

Last the World Trade Organization is deliberately set up to supervise and liberalize international trade. In **?** several chapters are devoted to an extended discussion about the interpretation of the ruleset laid out by WTO to ensure free trade. The central question being whether there are provisions in WTO agreements that can be used to prosecute China. However as discussed in **?** the WTO is unable to cope with such a situation even if there were an article clearly stating that China was being guilty of economic misconduct.

In China the IMF labeling the RMB as undervalued elicited a strong response. After the label of the RMB as "moderately undervalued" in 2011, the chief of the Institute of International Finance at the East China Normal University, Huang Zeming conceded that " *it is certain that the RMB exchange rate has been underrated, but there is no fixed standard that could be used to test whether the appraisal method is proper*"[49], arguing that the conclusions made by the IMF are meaningless.

4.3 The hypothetical case

To illuminate the diplomatic dead end the US administration has found themselves in, it is illustrative to explore a few scenarios of what would have happened had the US decided to take a step further.

In order to persuade China to do anything, the US must be able to either coerce China into doing so, or be able to offer something in return. Coercion can happen either through military force or economic pressure while

[48] An interesting account of this process can be found in **?**

[49] A more in depth response can be found in **?**

agreements can be reached only when both parts think they gain a benefit from doing so.
In terms of international trade it could be argued that it is mutually beneficial for the world economy when the current account surplus or deficit of every nation is kept within a certain factor of their GDP[50]. While the US has tried to influence the G20 by having them include the word 'balanced' in a central statement about the global economy further efforts haven't born much fruit. However had this been a high priority for the US, it seems likely that they could have exerted diplomatic pressure on other nations to commit to a clear defined policy by for example making it easier for foreign nationals to invest on the US market, or threatening to make it more difficult if other countries were unwilling to sign.
The consequence of such a treaty if it were strictly worded would be that participating countries could face penalties in case they were running a budget deficit or trade balance surplus. This is a huge dent in the right of most countries to autonomously decide on their monetary policy, and seeing that the US has been running a large current account deficit for most of the last decade, it's not clear that such a treaty would even be in the interest of the US.
Military coercion against China has most probably not been on the table. While it would be an effective way of forcing China to changing their economic policy, it would also destabilize the entire region and ruin the diplomatic relationship between the two countries. The US does have a large strategic presence in the area and it wouldn't be impossible to imagine that an agreement could have been reached where China would adjust their economic policy against the US exercising their influence with regards to specific issues with e.g. North Korea or Japan. This scenario is difficult to substantiate or for that manner disprove since in the realms of all possible worlds it could well have happened and could just as well be impossible for reasons that would never be known. Still, in light of the self-sufficient trait of Chinese policy it is probably unlikely that China would want to depend on US influence in these matters.
Based on historic precedence the most realistic path for the US to take is most likely to instate a tariff on Chinese Products like Senator Timothy Ryan tried to in 2009. In 1971 Nixon decided to instate trade tariffs against goods imported from Japan and Germany after having pressured them into appreciating their currency in vain. The tariffs forced Japan to appreciate the Yen against the Dollar shortly after, but the overall economic gains for

[50] This argument is put forward by for example **?**

the US are debatable[51]. The US could easily have decided to take similar measures against China but have so far abstained. Had these measures been instated it would have been very likely that China would had been forced to implement equal measures leading to a trade war with negative economic consequences for both nations[52].

While these scenarios might not encompass all possible avenues of response from the US' side, it does illustrate how the most obvious actions that could be taken aren't currently beneficial for the US.

4.4 To argue convincingly

Critics of China sometimes supplement their case with the assertion, that a higher-valued RMB would actually be in the interest oft the Chinese people, if not its export sector.

For an ordinary Chinese factory worker, the cheap RMB might on one hand mean that their factory is doing great on foreign markets, but at the same time buying foreign products like European cars or American gadgets becomes very expensive.

Additionally the artificially low interest rates, in combination with inflation, deprive Chinese citizens of attractive saving options on their bank accounts. Due to capital controls they cannot place their money in foreign banks where interest rates are higher. In absence of a comprehensive social welfare state, retirement provisions become a major concern for many citizens.

Lacking other saving opportunities, many Chinese invest their money in real estate as a saving asset, driving real estate prices up. This confronts less affluent citizens with serious difficulties when they are looking for habitation in urban areas. Infamously high housing prices, e.g. in Shanghai, have become a major social issue, also reflected in popular culture.

One interesting example of an important public figure arguing along these lines is the head of the US Federal Reserve, Ben Bernanke. In a speech at the Chinese Academy of Social Sciences in Beijing he argued that: "*Greater scope for market forces to determine the value of the RMB would also reduce an important distortion in the Chinese economy, namely, the effective distortion that an undervalued currency provides for Chinese firms that focus on exporting rather than producing for the domestic market*"[53]. Given to a Chinese audience, Bernanke attempted to make the point that Chinese con-

[51] For a more thorough discussion see **?**

[52] As argued by Levy in chapter 20 of **?**

[53] The transcribed speech **?** used the term 'subsidy' which created a lot of debate in the US, but the word was never uttered by Bernanke himself while giving the actual speech**?**

sumers would benefit from a stronger RMB as it would give them access to cheaper imports and strengthen Chinese companies on the domestic market. With this rhetoric he mirrors the politicians focusing on the currency value as a driver of product prices.
However, in the same Speech Bernanke points out that one of the most effective ways to increase the welfare of Chinese households would be to reduce the domestic savings rate. This argument plays nicely together with a line of reasoning he presents at a lecture in Virginia a year earlier, which shows a significant shift away from the manufacturing driven argumentation[54].
In this speech the main argument centers around how the savings rate of Chinese citizens distorts international economy. Here Bernanke argues that the poor welfare offered by the Chinese state forces a most Chinese to set aside a lot of money for retirement and medical self insurance. As the money is deposited in bank accounts, it gets reinvested in domestic and international projects, and particularly the US is a big receiver of foreign investment, which creates a current account deficit. The main point of this argument is the idea that the current account deficit or surplus is largely driven by the international economic environment and as such is not solely a domestic issue. Following this line of reason, it is not solely the responsibility of the US to eliminate their deficit with budget cuts, but equally the responsibility of large international players like to China to take measures to assure a balanced world economic. In the particular case of China this could be done for example by strengthening their currency.
These speeches were given at a point in time where China was giving up their peg of the RMB to the Dollar, slowly increasing the value over a 4 year period between 2006 and 2010.

5 Discussion

Seeing that one decade of intense discussion hasn't answered the question of whether China should appreciate their currency, so it might be a little ambitious to aim for a definitive conclusion on this matter. Instead, what we set out to do in the following part is two-fold. We will first try to look at how the viewpoints from the two sides of the academic debate diverges. Secondly we will assess the political debate looking at the motivations to argue one way or another.

[54]The speech can be read found here **?**

5.1 Academic Tug of War

At the center stage of the Academic debate we see the discussion surrounding the equilibrium exchange rate. Every single way we choose to measure this rate shows us that the RMB is severely under appreciated creating a strong argument in favor of appreciation. Supporting this idea we have Goldstein and Lardy enumerating how the Chinese state is guilty of doing everything you would expect a currency manipulator to do.

However, the response in defense of China's economic policies points out that this critique completely misses the point. Their argument is shortly summarized in two parts: 1) The monetary policy of China is a reasonable response in light of the economic circumstances and 2) Historically other nations such as Vietnam and Japan has been pressured into appreciating their currency with negative consequences to follow.

Economically speaking this highlights a clash of economic cultures. One the one side we see an economics tradition based on complex modelling and theoretical frameworks to understand the world. The idea driving this work is that we can deduce economic policies based on a deep understanding of the key factors the play a role in macro economics, i.e. by estimating a theoretical property such as the equilibrium exchange rate, we can deduce the policy that should be implemented.

The other side of the debate is represented in a larger degree by a practical and empirical method. Here the theoretical argument is discarded because it is too vague and imprecise. Instead the policy is based on using a set of practical tools (sterilization, foreign currency accumulation, etc.) used to obtain growth and prosperity. From this angle it is much more important to look at past experiences from other countries and learn practical lessons from their mistakes and successes, than it is to adhere to a theoretical model of how the perfect economic policy would look like.

5.2 Motivations

While the theoretical approach can easily look far fetched and out of touch with reality, the danger of the practical approach is that it might miss the big picture and end up shortsightedly driving the world economy towards a sub optimal economic environment. After all, a well-functioning domestic economic policy might easily work at the expense of neighboring nations, like the classical "beggar thy neighbor" situations introduced earlier. No man is an island, and similarly no economy stands alone in a global market. The question that lingers is to what extend a nation should be limited in

it's internal affairs to the benefit of other countries.
Historically China has been a small player on the world market for most of the past century despite its population size. Being a small player comes with the advantage that your economic policies affect other countries in a very minor degree which permits a wide liberty in setting them. China's economy can by no means be called small anymore, but the attitude put forth in their economic policies still mirrors those of a China that would best like to be left to do as they wish with regards to their own internal affairs.
The US on the other hand has historically been promoting free trade with the rest of the world, using IMF and WTO as instruments to open up the global market partly to their own advantage. Economically speaking the US has a history of meddling in the affairs of other countries convincing for example Japan and Vietnam to appreciate their currencies when it was seen as economically beneficial for the US that they do so.
These extremes set the stage for negotiations where any argument made by the opponent side can easily be distorted to reflect the more extreme part of their position. If the US tries to find common ground on currency speculation they can quickly be labeled as imperialistic, while any attempt China makes to retain control over their economic development could be categorized as protectionist.

5.2.1 Manufacturing Jobs

In his article "Assessing China's Exchange Rate Regime", Jeffrey Frankel and Shang-Jin Wei[55] starts by looking at the yearly US Treasury Reports. They found that the whether China would be labeled as a currency manipulator correlated not just with the current account ration as expected but also with metrics that aren't usually deemed to have an effect on China's currency policy such as the trade balance or the unemployment rate on election years.
There is no doubt that China to a certain extend serves as a scapegoat when manufacturing jobs are disappearing, and not without right. Manufacturing jobs are to a large extend being moved away from industrialized countries, often because of circumstances similar to those that the company Fluttr faced in our fictional example. It is however nonsense to expect that raised exchange rates is enough to stop this trend. If jobs aren't going to China, there are countries like Malaysia, Indonesia and India ready to step in, and

[55] **?**

if the RMB strengthens, those countries are where the jobs will go, and not the US.

With this in mind it's clear that presidential candidates like Obama in 2008 and Romney in 2012 are merely paying lib service to the large share of dissatisfied voter groups that they hope will help them win the election. In US domestic policy China is an easy target because invoking the Chinese problem evades looking at domestic causes for the same problems.

This doesn't mean however that China couldn't potentially gain from strengthening the RMB. When Bernanke argues that raising the value of the RMB could be a win/win, he is not necessarily merely protecting national interests by perpetrating the myth of the disgruntled manufacturing industry. As we mention earlier, China needs to take strong measures to prevent inflation on their domestic market. On top of that the cheap RMB makes it difficult for Chinese people to buy products abroad, limiting their experienced prosperity in spite of the staggering growth rates.

5.2.2 Responsibilities

Academics are free to poke at China with a stick arguing that the RMB is under valued according to this or that model, and American politicians and manufacturers can complain about the joblosses that China's policy is leading to. However they won't get results unless either Chinese policy makers decide that it is in their best interest to appreciate the RMB or an international organization is able to pressure China into doing it anyway. Outside of a modest appreciation between 2006 and 2010 neither happened despite consistent pressure from the US. Depending on your viewpoint this end result can be seen either as a confirmation that China never had an obligation to react, or that China neglected to step up to their responsibilities as a major economic power.

The idea of a savings glut introduced by the chair of the US Fed Ben Bernanke gives a strong argument for the latter by demonstrating how Chinese policies create a situation where enormous amounts of liquidity is created by the Chinese savings rate which gives an imbalanced investment abroad which to a certain extend explains both the current account deficits of the states and part of the current account surplus experienced by China. Because this savings rate is tied up to domestic economic policies in China but has global consequences, it would be frivolous to let China get away with manipulating it in ways that hurt other economies.

China is naturally not interested in giving up this kind of autonomy, and so far they have not seen any initiative that could challenge them to that right.

In the current situation it is hard to judge if they are taking unfair advantage of a broken system, or if they have every right to remain sceptic of foreign attempts at influencing their policies. However what the conflict shows very clearly is that had it been the case that China had been wrongfully taking advantage of their position as a major economic player, there would have been no system currently in place that would have been able to stop that from happening, outside of a full blown tariff war with the US.
In a future scenario it is likely that China will stand at the other side of the argument losing manufacturing jobs to poorer nations like Indonesia or India and arguing that these countries in turn are undervaluating their currency. When that time comes, it will hopefully be a little clearer when exactly this kind of policies is actually hurtful to the world economy, and not just an opportunity for poorer countries to get a foot in the door of mass manufacturing.