(very first draft, no quote)

Currency Asymmetry, Global Imbalance, and Reform of International Monetary System

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The US dollar has been volatile and falling again and again in recent decades as well as recent years, and for many concerned observers, it is going to be broken sooner or later. The central importance of the dollar is due to the fact that it is not just a currency for the US. Over half of all dollar bills in circulation are held outside of the US borders, and almost half of the US Treasury bonds are held as reserves by foreign central banks. The US dollar is supposed to be the anchor that stabilizes the global currency market. Instead, today it is a major source of instability.

In the back ground, the US fiscal deficits has been running high again under Bush administration, once up to almost 3% of US GDP. And current account deficit is set to about 7% in 2005 and more volatility is widely expected. The situation is very challenging for the central banks of Japan, China, Korea, Taiwan and Singapore which collectively hold about US$2.8 trillion worth of US Treasury bonds as part of their reserves. The moment that they reduce their purchases, the value of the dollar slips. Yet, the more they buy, the more they are exposed to a potential free fall of the US dollar.

And China has been blamed, not only by US congressmen who are understandably not very familiar with either the complicated currency issues or the domestic politics in any other country, but also many economists or business strategists, as the source of this

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"global imbalance" and currency instability – it was said that it was all because RMB did not revaluate!

How much revaluation of RMB would remove the US deficits of $700 billions, or at least the US-China trade deficits $200 billions (including Hong Kong)? 500% or 1000%? Of cause no body asked for that kind of magnitude now. Normally smart people say 30-50%, with the unsaid intention to blame-then-suggest again another 30-50% after some initial moves, then the third, the fourth. If no moves, more blames. The only problem is that the deficits stay and US dollar would fall anyway?

And this seems not really new phenomena at all. It has been all so familiar since the "Nixon shock" in early 70s' and "Plaza Accord" in early 80s'. The convenient targets of blames were the "gold standar", the Dutch Mark, the Japanese Yen. Only now the turn comes to Chinese RenMinBi.

So the real question is what are the real causes (not the cause) of the global imbalance and currency instability?

In this short paper, we first take a look at what is really going on with the Chinese economy and trade balance, and then try to identify the true contributors to the imbalance and instability; then, as a concluding remark, some thinking on what could be alternatives to the current system.

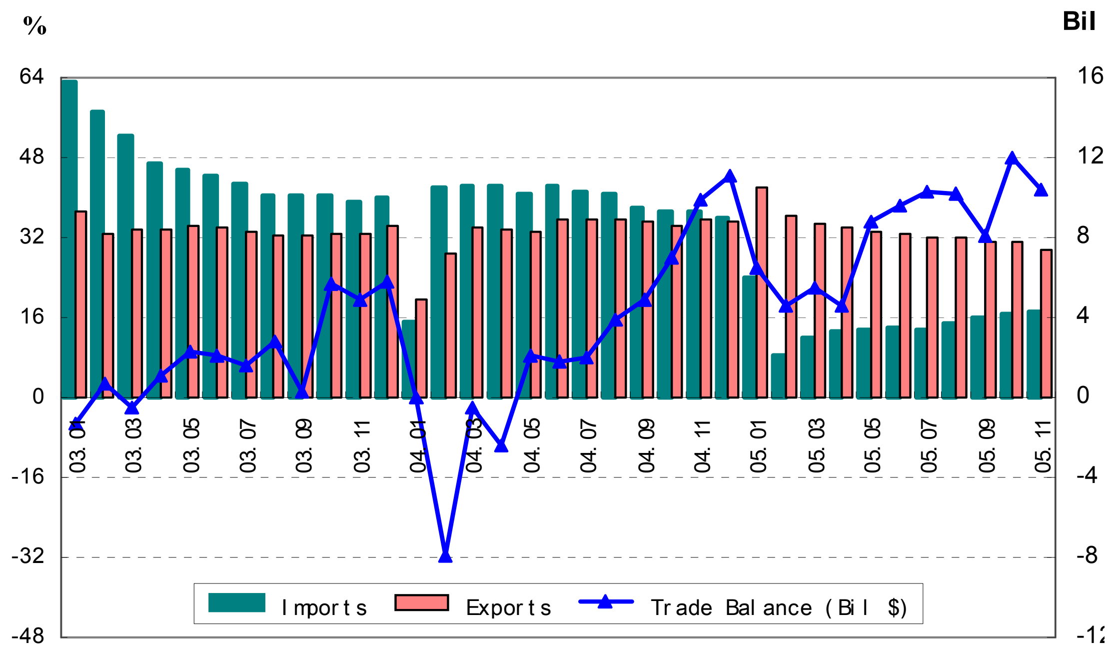
I. China's trade has been mostly balanced in past 27 years!

It seems strange in today's world if somebody says that China's trade is balanced. But without need to do any serious study everyone could see that actually this was basically the fact, if we take 2005 as a special case.

China registered record high trade surplus of US$101 billions in 2005. Although it apparently would put China in a worse position for all the blames, we should look into

the situation in more details. For many counts, 2005 for China was a special year of downward demand after the over-heating in previous 2 years. This can be evident by the fact that the growth rate of imports was 17.4% in 2005, sharply lowered down from previous almost 36% in 2004 and 39% in 2003, while the growth exports also slowed down to 28% from previous years of 35%.

China: Change in Imports, Exports and Trade Balance in recent years



Source: China State Statistical Bureau

Except for 2005 (maybe plus 2006 if we make expectation, because China will be in slow-down phase for a while after the over-heating), in most years in past 25 years, China's trade was more or less balanced, with small surplus in some years and small deficits in others. The previous record high trade surplus of $43 billion occurred in 1998 when China was in similar (to 2005-2006) slow-down/deflation period when everybody in the world was guessing when China would devaluate and US government was pressing China for not doing so (for US, China should always revaluate, at least not devaluate, no matter how much Chinese economy suffers!).

2. China’s trade imbalance with US and the new supply chain in Asia

Why did China get its trade balanced? Of course because China did not only export, but also import, and **imported a lot**! In most year, China’s imports grew by double digits, and during 2003-2004, China’s imports grew by almost 40% per year!

But why China still run large trade surplus with the US, if China imported a lot? The only problem here is that China import a lot, **but not from the US**. They were by large margins from rest of the world, particularly from Asian economies!

The following table shows how China run trade deficits with almost all Asian economies except Hong Kong which has been a major trade outlet of the Mainland.

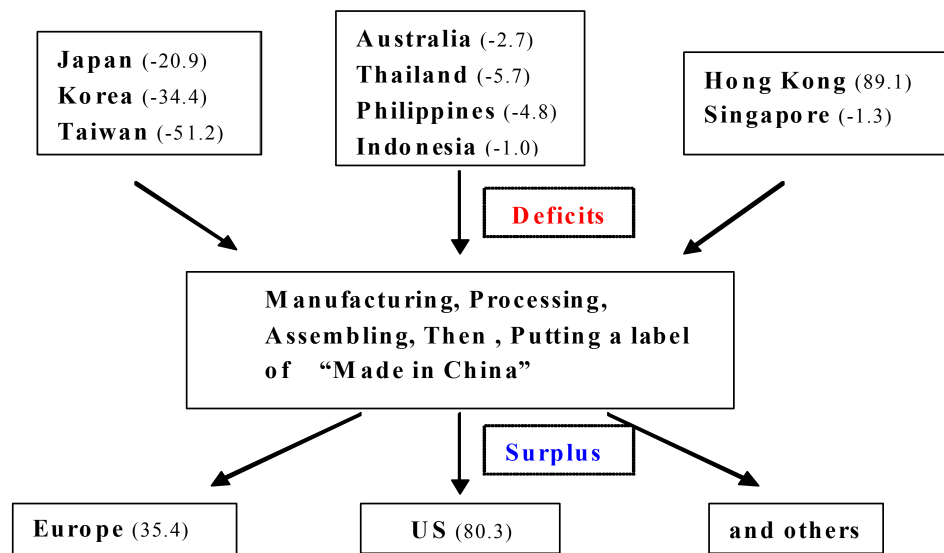
Table Trade Relationship between China and its Neighboring Economies US$ bil.

	1999	2000	2001	2002	2003
Taiwan, China	-15.58	-20.45	-22.34	-31.48	-40.36
Korea	-9.42	-11.92	-10.86	-13.03	-23.03
Japan	-1.35	0.14	2.15	-5.03	-14.74
Malaysia	-1.93	-2.92	-2.98	-4.32	-7.85
Thailand	-1.35	-2.14	-2.38	-2.64	-5
Russia	-2.73	-3.54	-5.25	-4.89	-3.7
Philippines	0.47	-0.21	-0.33	-1.17	-3.21
Singapore	0.44	0.7	0.66	-0.06	-1.62
Indonesia	-1.27	-1.34	-1.05	-1.08	-1.27
India	0.34	0.21	0.2	0.4	-0.91
Brunei	0.01	-0.05	-0.13	-0.22	-0.28
Mongolia	-0.13	-0.1	-0.12	-0.08	-0.13
Lao	0.01	0.03	0.05	0.04	0.09
Myanmar	0.3	0.37	0.36	0.59	0.74
Pakistan	0.19	0.18	0.23	0.68	1.28
Bangladesh	0.69	0.88	0.94	1.03	1.3
Vietnam	0.61	0.61	0.79	1.03	1.73
Hong Kong, China	29.97	35.09	37.12	47.74	65.16
Total	-0.72	-4.45	-2.93	-12.5	-31.8
of which: Total deficits	-33.75	-42.66	-45.43	-58.92	-102.09
Total surplus	33.03	38.21	42.5	46.42	70.29
Trade balance to the World	29.23	24.11	22.55	30.43	25.47

Source: United Nation, and WTO PC-TAS data bank.

What has happened in Asia was a newly emerged production/supply chain with China as a center of assembling/manufacturing. The following chart just shows how it actually worked, and how many things with a label "Made in China" are actually "Made in Asia". This is also reflected in the fact that more than 50% of China's exports are from "reprocess manufacture sectors" of which the value-added in China only counts for 10-20% of total prices.

Graph 5: Illustrated Triangle Trade Relations – China's Bilateral Balance in 2004 ($ Billion)

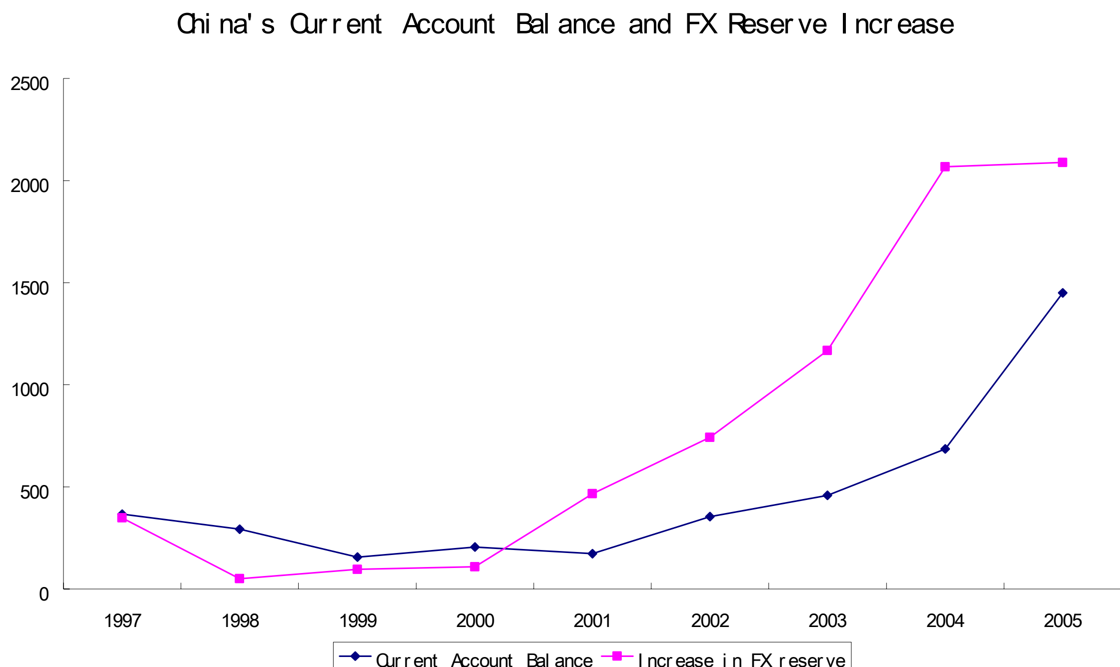


What this picture does not show is another relationship -- over 50% of China's exports are produced, in China of course, by foreign invested companies, including US companies. This fact is also relevant to the currency issues we are discussing because one of the factors which determine the currency balance is the labor cost which is one of major considerations for foreign investor or outsourcing companies.

3. Where did come from the large foreign exchange reserve?

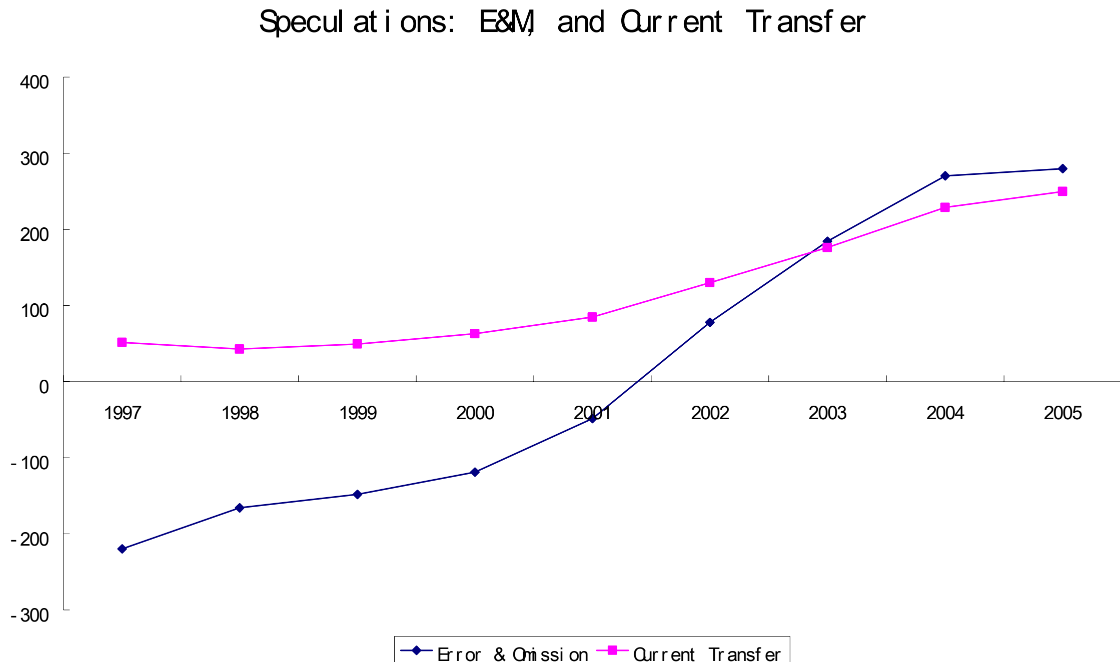
One of striking phenomena in middle of the global imbalance problem is the surge of fx reserves in China. It increased by more than $200 billions per year for the years of 2003, 2004, and 2005.

Take 2004 as an example. In this year, China's foreign exchange reserve increased by $210 billions. This of course included the current account surplus of $25 billions. But **the rest, as much as $185 billions must be explained by capital inflows! The capital which had been accumulated in other countries,** including $50 billions FDI (suppose it all came in cash and bought goods in Chinese domestic market), and $20 billions in the increases of foreign debt and foreign security investment, and other inflows, we suppose, motivated by the speculation on RMB revaluation.



The speculative capital inflows could be evidenced by many observations. For example, the "Error & Omission" item in China's capital account has been turned from negative (outflow) to positive (inflow) in 2001 as the "market sentiment" turned from RMB devaluation to revaluation. Also we can see that the item "current transfer" in the

current account, which includes the remittance between family members or movements between personal bank accounts, increased more rapidly after 2001.



This situation has been changed a bit in 2005 because in this year almost 50% of increase in fx reserve can be explained by current account surplus. Capital inflows reduced to $100 billions due to the calm-down of the expectation-speculation on RMB revaluation.

The fundamental issue here is that the fx reserves in one country may not be all its own national saving, but may be the capital inflow from other countries driven by some market forces including the speculation.

4. National savings vs. domestic savings

Here comes the issues about savings. The so-called global imbalance is often interpreted as the result of Chinese over-saving and American over-spending. Over-

spending maybe, but not necessary there is Chinese over-saving in the sense of international balance of payment.

Chinese does save a lot, often up to 40% of GDP. But as a nation, it spends a lot too – it invests up to 40% (45% in 2004!) of its GDP in industrial capacities, housing, and public infrastructures.

And therefore, China as a nation buy a lot in the international market, of course not much consumer goods, but a lot of **investment goods.** As the result, if people remember when they talk about the imbalance issues, China bitted up resource/commodity prices on the international market in recent years.

This means that China's high saving rate may have little to do with the global imbalance – **it saves, but it spends the savings in domestic investments! Sometimes it over spends too** – during 2003-2004, it over invested and therefore the economy was over-heated!

What is really relevant to the global imbalances is not the total savings of the nation, but the savings in foreign assets, that is the current account surplus owned by the nationals. We may distinguish various concepts from GDP identity:

Total National savings = S + (X-M)

Where the S now we may call as the "domestic savings", which is equivalent to the total domestic investment (normally noted by I, including inventory), and the "net exports" (X-M) or current account surplus we may call as the "net national savings" which has been saved as part (not total) of net change of the national holdings of foreign assets. It is this part of total savings, i.e., the net national savings which contributes to the so-called global imbalance, not the total national savings or domestic savings (S),

It is also important to understand that the net national savings is not equal to the increase of fx reserves – increase in reserves includes the capital inflows which may be the results of foreign savings (or the wealth which was saved before), not the national savings. Only those parts contributed by the current account surplus are the part of national net savings!

From this point of view, China did not have much net national savings in past years, normally only less than $20 billions per year. But then, how can we explain the large scale of global imbalances measured by the US trade deficits up to $600 billions per year?

Apparently, the surplus side of the imbalance is the add-up of current account surplus of all economies everywhere, some of them (including almost all economies in Asia) run surplus against China too!

From this perspective, we can see the following:

1. IF the US wants blame someone for the increase of its trade deficits, it may blame every one which has some surplus, and therefore "contribute" to the matter directly (as having surplus against US) or indirectly (having surplus in general but not necessary against US).
2. If the US wants someone to revaluate its currency in order to help the US to reduce its deficits, it should ask every one who has surplus.

However, here comes the problem: if you blame every one not to revaluate its currency, it actually just shows that the problem is not in others, but in yourself – it is not others' currency under-valued, but your one is over-valued! It is not because others want to under-value its currency by manipulating the exchange system, but yourself have problems which causes the repeated tendency of devaluation!

Therefore, **the real question we should ask is not why China's RMB have not revaluate, but why the US dollar has always got the tendency of devaluation against**

everyone else, since 1960's? The devaluation against gold standard (the Nixon shock in early 1970s) or all other currencies, the devaluation against Dutch Mark and Japanese Yen in 1980s, and then, Chinese RMB for now.

6. The "Currency asymmetry" and the constant tendency of US dollar devaluation

In order to achieve economic stability and growth after the World War II, people in Breton Woods in 1944 prescribed rigidly fixed exchange rates, with the US dollar fixed at US$35 per ounce of gold, and all other currencies de-linked from gold but all peg to the US$. .

Such a system was actually dismantled as Nixon shocked the world by announcing the US$ floating away from the $35 per ounce of gold standard and the blow off any US's commitment to the international treaty such as Breton Woods agreement!

But one thing has been left over from the Breton Wood system, that is the domination of US currency and the privilege of issuing/printing international currency by one nation of the United States of America, not an international public agency like a central bank in a nation. From that day when the Breton Woods agreement was signed, the world became a "**Asymmetry**", as it was divided into tow categories: the nation which issues its own currency but it serves as international currency (the US), and the nations which only issues their own currency but use USD in international market.

On one side, this arrangement of "Currency Asymmetry" has its positive effects. US is the largest and strongest economy with the most efficient financial markets in the world. The world financial system needs some one strong enough to play the role of anchor against the torrents. The unstable economies, such as developing countries, would like to hold some commonly trusted assets to increase their credibility in the international financial market. In return, the world pay the US with scynerige by holding US dollar or

US dollar denominated assets as a public goods in the world financial market. In some sense, Japan and China, which are the two largest foreign exchange reserves holders do not finance the US debts, they are paying, to certain extent, the seigniorage to US against their own weakness in the economic and financial system, either assets bubbles (Japan), the non-performing loans in the domestic banking sectors (Japan and China), or the massive under-employment of rural labor force in the process of economic transformation (China). And the world enjoy these benefits particularly because it would be cheaper than if the international public goods such as international currency would be provided by a expensive international organization, provided that the US would be a good anchor.

On the other hand, such an arrangement, i.e., US as one nation enjoying the privilege of issuing world currency, has it negative consequences. A government of any country has the right to print more money to stimulate domestic demand when growth is weak. But it has to bear its negative consequences such as inflation and financial instability within the country. Financial crises occurred because of irresponsible domestic policies leading to high fiscal deficits and current account deficits (or "TWIN DEFICITS"). However, the country which prints international money may face less penalties – along with the printed papers held or used by all other economies, the financial risks spread over to other corners of the world. As the result, it seems that no matter how much the US runs on deficits, it has less likely run into financial crisis like any one else in the world would do. This may delude, if not "corrupted", people and policy makers in the "anchor country", as they may not see much "their problems" for running high deficits and printing more money when the bad consequences more become "others' problem". Therefore, such a system would naturally result in the persistent fiscal deficits and/or over provision of liquidity as we can see in the US since 1960s. From this perspective, we can recognize the US twin deficits problem is not even a policy issue, it is institutional – not of the US domestic institutions, but of international financial institutional arrangement!

Meanwhile, being aware or not, other countries may face greater financial risks. The huge stock of (over supplied) financial assets denominated in US dollars moves around knocking down the doors of developing countries which are still fragile in domestic system and incapable of handling the risks the liberalized financial market and free capital flows may bring to them. But many countries were seduced to welcome more capital flows because those loans or portfolio investments were so attractive to the capital scarcity economies and they simply looked so cheap! When the trade deficits were financed by the provision of more cheap dollars (the present magnitude of capital flows is related to the previous money printing), the other economies may get over-heated and have to face the consequences of over capacity of production and over supply sooner or later. The so-called global imbalance today seems much more dangerous for other countries rather than the US.

One particular financial risk all the "other countries" have been facing since the break-down of Breton Woods system (actually before the break-down, people had already faced the "risks") is uncertainties caused by the repeated devaluations of our "anchor currency", i.e., the US dollar. For the other countries, the problem is that the tendency of US dollar devaluation is always interpreted or always looks as the need of revaluation of your currency! If you do not do it, you are going to be blamed as manipulating the currency system! Consequences of this illusion? Protectionist sanctions on your exports that will not only distort the goods market but also cause economic, financial and social problems in some "other countries"!

The "**currency asymmetry**" is reflected most clearly in the following fact: In the world of everybody else using dollar as denominating currency, when the dollar devaluates, the US foreign assets appreciate, but US domestic assets do not depreciate, while for everyone else, if you devaluate your currency, your own assets all depreciate! That is, **while everyone else may loss by devaluation, the US only gains from it!** No wonder devaluation for the US is such an attempting thing to do. But of course, the same asymmetry itself translates the US devaluation problem into others' revaluation problem!

Illustration: Asymmetry in Asset value changes by devaluation

	US	Any other country
Foreign Assets	Up	Up
Domestic Assets	**Unchanged**	**Down**

Such a global monetary system with the currency asymmetry is just like you would made Guangdong province to issue RMB for the whole China. Remember this has been never be the case before – no matter how weak was the Shelling during the World War II, GBP was never de-linked from Gold and was always bound to some negative consequences if devaluation or inflation (that was actually the reason why the world could have shortage of liquidity some times, not like the excessive liquidity we have today!).

7. Effective exchange rate and real exchange rate: what is developing countries' possible responsibility for global imbalance?

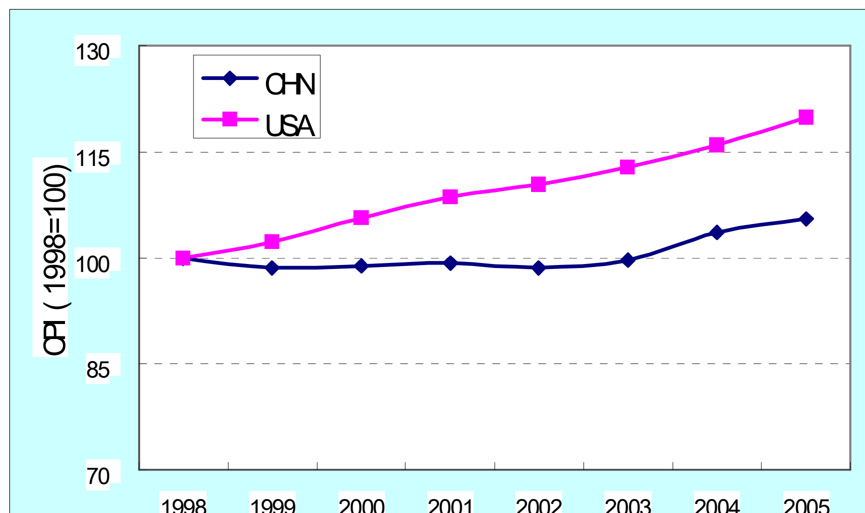
As economics can tell, two factors have the roles in determination of changes of real effective exchange rates and therefore the trends of exchange rates:

1. The differences of inflation rates in two countries in concern. If country A's inflation is higher than B, A's currency is to depreciate or over-valued otherwise;
2. The differences of wages changes related to the labor productivity changes in the two countries respectively. Productivity changes may vary country to country during different period of time. But as long as their wages can be adjusted fully to the extent the productivity changes, the real exchange rate stay unchanged. Otherwise,

the country whose wage increase is less than productivity change should appreciate its currency or its currency is under-valued.

In the previous section, we are actually dealing the factor which may cause the changes of effective exchange rates, i.e., the factor of inflation. The current currency arrangement which makes the US runs high fiscal deficits and provides excessive liquidity to the world results in higher inflation rates in US than in some other countries such as China in past years. As the results, US dollar has got the tendency to devaluate against the RMB.

Table Inflation in US and China



Source: IFS

The main conclusions we can draw from above arguments is that

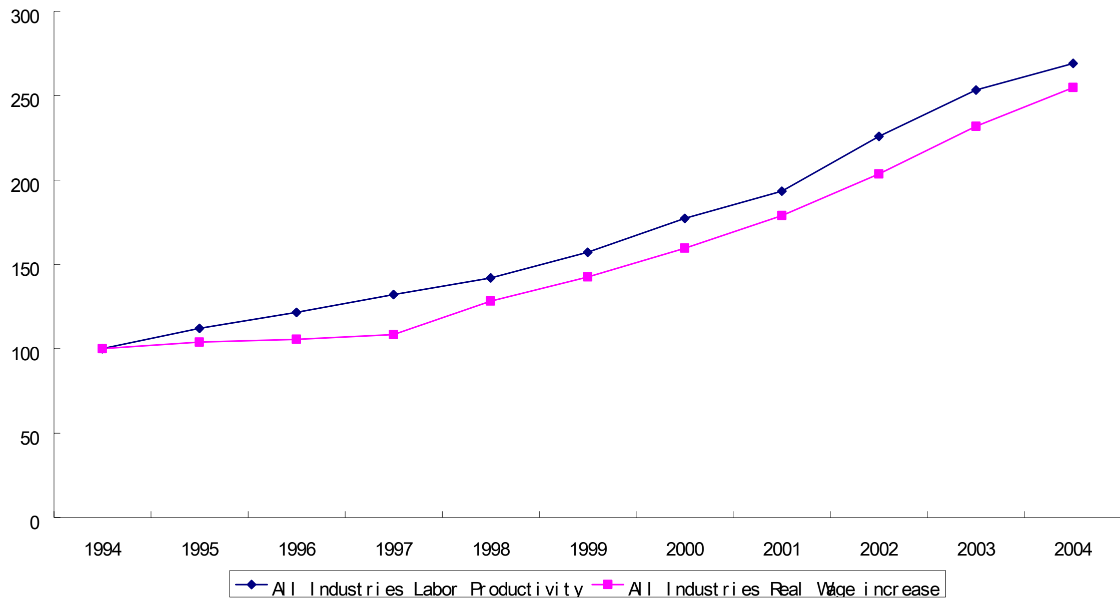
- If we take the financial factors only, the current problem is not RMB revaluation, but the dollar devaluation! And this is the major cause of the current imbalance.
- Or, this means that RMB revaluation will not solve the problem of US deficits not only because China's surplus is not equivalent to US deficits as we discovered in previous sections, but also because the real roots of the problem is not in China if the US inflation would continue due to the loose monetary policies!

- If China can do something in this regard, that would only be to race against the US in creating inflation or printing money. But that are the things China may not want to do because China does not print international money so it has to bear all the negative consequences within its own boundary!

8. The wage-productivity factor and the need for RMB revaluation

However, if we take productivity/real wage factor into consideration too and think of the real exchange changes, the picture become more complicated and China seems not totally innocent for the current problem. The issue is that, while in the US the wages increases basically up to the level of productivity changes (about 3% per year), China's wages seems more sticky. In recent years since early 90s', China's labor productivity improved at the annual average rate of 10.41%, (see Table, also see McKinnon[1], 2005) , thanks to the reforms and technology progresses. But the wages seems increasing slower than that – it increased at an annual average rate of 9.81% in manufacturing sectors. This is indeed a factor which may cause RMB under-valued, although only by the altitude less that 1 percentage point annually.

[1] In this paper, author writes: "China's money wages had to grow in line with its rapid productivity growth. From 1994 through 2004, money wages in manufacturing increased 11.7 percent in China per year and by just 3.0 percent in the United States—see figure 5. This wage growth differential approximately reflected the differential growth of labor productivity: about 9.5 to 12 percent in China[1] versus 2.7 percent in the United States over the decade" (page 7).



Source: China's Statistic Yearbooks, various years.

But why the wages are so sticky in China than in the US? Is this because Chinese government's control? No, Chinese government seems now days so worry about the slow increase of blue-collar wages as the income disparities widening and social instability threatening. The real reason behind the wage stickiness in China is the market force in the labor market. Although about 200 million rural laborers has been reallocated from the agriculture to industries and service sectors earning about $1000 per year, there are another 200 millions or more are still in the countryside earning about $400 per year and eagerly moving out looking for better paid jobs! It is the job competition and the still infinite labor supply which keep the Chinese wages slower changed compared to the labor productivity gains (this also explains higher capital gains for foreign investment and domestic savings, and explains the enlarging income disparities during this stage of industrialization and development, just like most countries experienced in the history).

So what we are doing now at this point? We are blaming Chinese rural poor laborers for the global imbalance!

This sounds ridiculous. But this actually reveals that here comes another global issue, i.e., the poverty reduction and economic development of poor countries! We can see now these issues are related somehow to the currency problem, but they are even more important ones!

Of course this analysis shows that China has some responsibility for the imbalance and calls the revaluation of RMB, but it also shows the reasonable revaluation of RMB should not be more than the differences between the changes in wages to the extent of Chinese productivity increase. In the normal year, it may only count for less than 1%, not big enough to solve the US deficit problem! The main part of the causes of global imbalance is still in the currency asymmetry which is out of China's control.

9, Conclusion I: Why China should have some exchange rate control and not fully float its currency

The first conclusion we can draw from previous sessions is that main cause of the on-going global imbalance is the not on China's part. As long as the global currency asymmetry exists and the US keeps providing excessive liquidity to the world, the imbalance will persist and similar situation of financial turmoil will take place again and again.

China may be partially responsible for the present global imbalance because the real wages rose too slowly due to the devastate job market competition among the poor, and therefore China may need to revaluate RMB to the extent of difference of productivity/wage increases as we demonstrate in previous session. But that is the only responsibility it should take. RMB should not fully float to accommodate the total so-called "market pressures" based on the total imbalance with the total excessive liquidity. Some exchange rate control is necessary for China to limit its contribution to the re-balancing, compatible to its responsibility.

The same argument might be also legitimately applied to other government intervention in the currency market for other currencies such as JPY and Malaysia Ringgits – it just limits countries' parts of contribution to the extent of their own responsibilities for the global imbalance! In such a global monetary system, a fully floating exchange regime for a country other than the US means that countries would bear the full consequences of over liquidity provided by the US, and whatsoever the US wants to devaluate would be accommodated by fully revaluation of other currencies. This is now suggested by people as the "unilateral action" by developing country, when the US is not willing to do anything. But this is simply and obviously unfair, unfair, for instance, for the Chinese rural farmers who earn only about $400 per year!

10. Conclusion II: It is time to think of alternatives

Our analyses above shows that we should not point the figures to the developing countries like China for the current global imbalance. We may not point the figure to developed countries either, including the US. The problem is deeply rooted in the present international currency system which benefit the US the most.

And the policy implication is simple: if we do not reform the international financial system and remove the Asymmetry, the situation may just be getting worse and worse. US dollar is no longer a stable anchor in the global financial system and we need to look for alternatives.

But how?

The principles for the "ideal" alternatives may be easy to establish: in this world of globalization, we need an international currency standard which is neutral to everyone's interests, or everyone can share some value of it. It should not be an asset of any special

nation no matter how strong or how dominant it is in the world market, and it should not be used by any nation to pursue its own interests, consciously or not.

Here of course we may think of the Gold again, a gift of Mother Nature, not something any of us can print. The country with rich endowment of gold mines may benefit from it, but it is also “natural”, not economic or financial. One of the virtues of gold standard is that no one under such an arrangement can fool the public or himself by translating its problem of currency devaluation into others’ problem of revaluation!

Beside the old wisdom of gold standard, the new arrangement may be centered with an international standard of currency as a public goods provided by an international public agency – in principle at the least, it should be printed in the name or the interests of global economy, not a single country. The credibility borne by the global currency should be backed by the international economy as a whole, not a national government. Such an alternative could be complicated when we think it in practical details, but it is definitely worth more efforts.

Taking real actions is far more difficult than talking about principles. Or it may totally impossible to make any changes if the transaction costs are too high. If the vast interests would just prevent the country who is responsible for the problem and actually benefits from it, from doing nothing, we’d better prepare for the persistence of the imbalances, and the problems of trade wars, financial turmoil, (foreign) assets depreciation, and more difficulties for the developing countries in their pursuit of poverty reduction.

The current global financial imbalance actually shows the common problem in today’s world: there is serious lack of global governance in the era of globalization and the shortage of global public goods, as well as in the economic and financial areas. There could be more regional arrangements to emerge at the absence of the global system, but fundamental problem still remains. When the public goods is too expensive, it is efficient to use a private goods to serve public goals, but at the expenses of conflicts of interests.

Now it is time to think if the expensive public goods is actually cheaper than the alternatives!

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